GENERAL GUIDELINES FOR DEVELOPING AND PRESERVING THE HISTORIC OLD CITY OF "NABLUS" - WEST BANK

by

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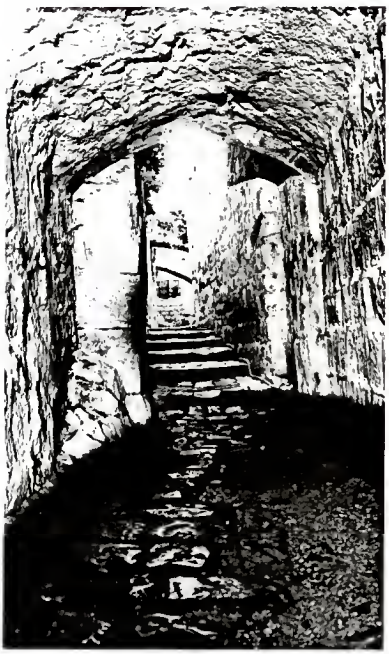
To my birthplace, Nablus, and to my parents who taught me life and love under the sky of this city.



* All the photographs in this research are the author's unless otherwise indicated.

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ABSTRACT

The old city of Nablus is one of the best preserved traditional cities on the West Bank of the Jordan river. It contains one of the greatest collections of national monuments in all the West Bank, and is considered by many to be the most attractive city in that area after Jerusalem.

Nablus is seriously threatened with the disfigurement and destruction which may cause the eradication of whole chapters of its history. The question then, is how can future architectural development in the old city of Nablus be prevented from accelerating the loss of its cultural identity.

A systematic program of preservation is recommended. This program can offer present and future generations of Nablus the opportunity to create a better community while maintaining and enhancing the best from the past.

Preservation must be integrated into the regular planning process. It must mean something to the man in the street and involve the community. Above all it must be compatible with contemporary ways of living, and with changes that are taking place. Preservation must be part of an organic process in order to assure the continued enjoyment of Nablus' special attributes embodied in its heritage. Such an approach will help to make Nablus dynamic and fascinating, as a place in which to live or to visit.

Efforts shall be made to identify the personality that the historic quarters convey, to revive past values, to regain

the architectural integrity of the historic quarters and to create a more livable environment. It is essential to maintain the charm and picturesque quality of this historic city about which an anonymous Palestinian poet once wrote "when you say fame, you mean Nablus."

CHAPTER 1

GENERAL BACKGROUND

INTRODUCTION

> "The preservation of historic districts today is widely accepted as a legitimate function of government. Not only is it justified on the basis that community appearance is important to the public welfare, but also because such areas add to our culture, education, and enjoyment by keeping history alive and visible."[1]

> "The contemporary Muslim world faces a fundamental and unique challenge in determining its future physical environment. In many Muslim countries the next two decades will see a radical large-scale transformation of the urban physical fabric, not only in economic or political terms, but in the physical environment as well."[2]

Therefore the question is how future architectural development can be prevented from accelerating the loss of its cultural identity. The world is changing, there are still many lessons to be drawn from the past. Whatever design solutions people choose should be conceived in such a manner as to allow evolution and progress to orient them toward the future, rather than retreat into the past for its own sake.

The continued existence of the Islamic cultural heritage, as represented by the historic monuments and sites constructed by that civilization, is at stake today. The Islamic historic quarters are seriously threatened with disfigurement and destruction due to a variety of both psy-

chological and economic factors. Culturally speaking, the Islamic countries suffer from an inferiority complex with regard to Western standards and values; they downgrade, disregard, and in some cases are even ashamed of their own past.

Therefore, new and unimaginative architectural styles and urban patterns have invaded the Islamic countries, without the slightest attention being paid to the specific character, customs, and habits of their people.

> "The structures and traditions of many historic cities have been destroyed in the name of progress and modernization, slum clearance traffic improvement and exploitation of rising living standards. Governments, in their quest to modernize through rapid industrialization, have encouraged the intrusion of these new values and have given scant attention to the conservation of cultural heritage. Yet the necessity of preserving - or in some cases rediscovering - the artistic and cultural heritage should be self-evident and should indeed be a high governmental priority"[3]

> "Reviewing the realm of preservation, we see that auspicious beginnings have been made in many Islamic societies which may be reoriented to expand their traditional realm of activities. Intensive campaigns are needed to sensitize the owners and administrator of many monuments, as unique products of a cultural past which retains both psychological and aesthetic validity"[4]

The principal reason for safeguarding the visual image of the past, in the form of monuments and historic quarters, is not only the intrinsic beauty and harmony of what is to be

preserved, but above all the identity and personality which these monuments and quarters convey

Notes

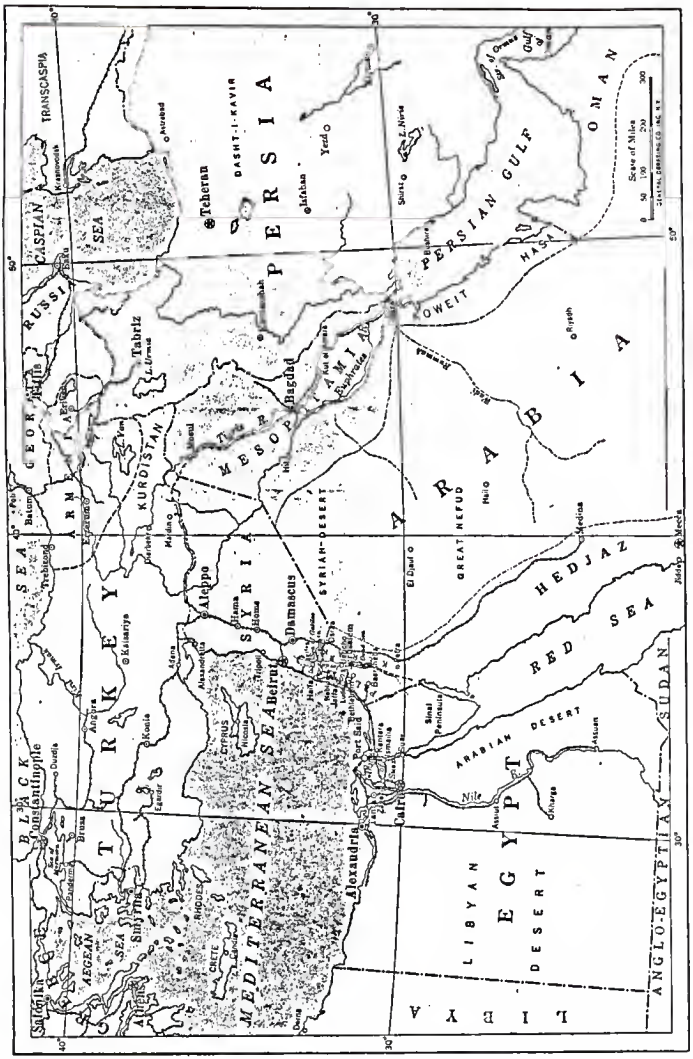
1 Godman, John - Preservation of Historic Districts by Architectural controls
2 A.K.A. Seminar Paper, 1978:XII
3 Zulficar, Said, A.K.A. Seminar Paper:XIII
4 A.K.A. Seminar Paper 1978:IX

PURPOSE OF STUDY

The aim of this study is to focus on the historic quarters of the old city of "Nablus", and to consider strategies and general urban design guidelines, which could ensure a future for those historic quarters in the rapidly changing physical and social landscape.

In a seminar held in the fall of 1978 under the name of "Conservation as Cultural Survival" Renata Holod said:

> "The nature of the future of the Islamic cities would most likely vary according to the initiatives and needs of each particular place. These environments may still play an important role in the life of contemporary Islamic societies. Some of these environments have remained a focus for the traditional elements of societies. All possess rich reserves of architectural ideas, and townscape with distinct flavor and identity."



Map shows the Holyland and Syria
Source:The Holyland and Syria, Frank, G. Carpenter, 1925

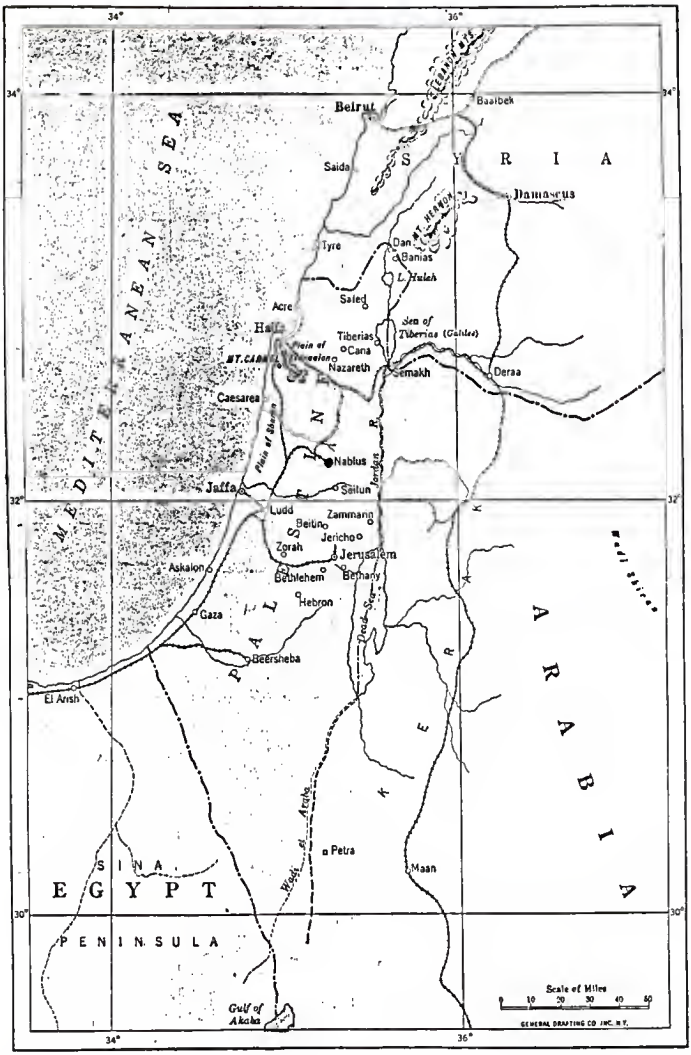
HYPOTHESIS

The thesis is based on the hypothesis that the historic quarters of Nablus are not to become a museum for tourists. The project is intended to encourage appreciation for the values of the old city. It is assumed that the historic district will be lived in, and that adaptations will be made to allow for changing needs of the residents while retaining the atmosphere, scale and streetscape of the original neighborhood.

SCOPE OF STUDY

The old city of "Nablus", one of the West Bank's most important historic cities, has undergone a drastic change in the last few decades. The process of westernization has been rapidly gaining ground, swallowing up some things worth preserving as well as others not worth holding on to.

This historic city containing one of the greatest collections of national monuments in all the West Bank of the Jordan River (part of an area historically known as Palestine) has been ruined in the cause of "progress" and the



THE HOLY LAND

Map show the location of Nablus in the Holyland
Source: The Holyland and Syria, Frank, G. Carpenter, 1925

quarters have heavily overshadowed the heritage of "Nablus" glorious past.

The old city of "Nablus" is considered by many to be the most attractive city in the West Bank after Jerusalem. The author will scrutinize the exciting problems and offer general urban design guidelines for developing and preserving the historic quarters to create a more liveable environment and maintain the charm and picturesque quality of this historic city about which a Palestinian poet once wrote "when you say fame, you mean "Nablus".

Since "the status and condition of the older historic quarters (the madina) is a shared aspect of many Islamic towns, all have been subjected to, or are still undergoing, processes of major demographic change"[1]. It is important to discuss, understand and analyze projects and issues from various regions of the Islamic world, having similar characteristics, heritage and culture.

This importance stems from the following:

1) "Lack of written information and detailed maps of the old city of Nablus"[2]

2) Many parts of the old city of Nablus have been demolished because of earthquakes, in 1903 and in 1927.

The purpose of the proposed study is to develop a program establishing development guidelines for developing and conserving the historic quarters of Nablus. These guidelines will be general without focusing on detailed design, but careful attention will be paid to the implication of each of these guidelines for the benefit of the whole society.

> "It is hoped that the old city of Nablus will embark upon a policy of conserving, preserving, and rehabilitating the traditional elements of the community"[2]

In order to develop such urban design guidelines, the author will largely draw on M. Hugh P. Roberts's book, "An Urban Profile Of The Middle East". In his book, Roberts suggested a strategy for the future planning in the Middle East - future planning strategy : a framework for action.

Summarizing this startegy Roberts said:

> "Having drawn up one final picture of development trends in Middle Eastern Urban societies, it remains to summarize the problems which have been seen to exist in the region. This summary is followed by an identification of aims, objectives and courses of action for urban planning in the future, which Middle East countries, comtemplating their individual urban situations, may see fit to

adopt or may, indeed, regard as unavoidable"[3] Ref. Appendix (1)

The other book that the author will use to support his study, is Cutler's book - "Recycling Cities For People - The Urban Design Process" - in which Cutler tried to develop a systematic technique for the planning with environmental assessment.

Defining his technique Cutler said:

> "we have tried to develop a new technique that would be a means of establishing trust and understanding in the planning process through simplified concepts. It is a systematic technique, a process that has begun to evolve out of our execution of many complex revitalization reports, downtown plans, and environmental impact studies. It can be simplified to a flow diagram, but the important components are present and clarified by Tasks. Each Task, which must be performed to complete the process, has a sequence, an action, a product, and components, and considerations that make up the Task. The Tasks occur in overlapping order and actively integrate public participation into each stage of priority and criteria development."[4] Ref. Appendix (2)

Even though these strategies did not address the specific methods for a specific place, these strategies could be applied anywhere for the developing of a successful urban design plan.

With the help of the existing data references, and the above strategies, the author will develop general urban design guidelines which will become a tool for developing and preserving the historic quarters of the old city of Nablus.

Notes

1 A.K.A. Seminar Paper 1978:IX

2 Awad, Jihad, Islamic Sougs(Bazaar) In The Urban Context, Master thesis proposal, 1988:4

3 Roberts, M. Hugh. An Urban Profile Of The Middle East, London:St. Martin, 1979

4 Cutler, Recycling Cities For People The Urban Design Process, Cahners Books International, Inc. 1976

IMPORTANCE OF STUDY

The historic quarters in the old city of Nablus are now threatened by the shifting of social and commercial activities from those quarters to new centers outside the old city. Additionally, many historic structures in those quarters have been destroyed in the name of progress and modernization. Therefore, it is important to create development and preservation guidelines which will give identity and personality to those historic quarters.

The municipality of Nablus has already started the rehabilitation of the main bazaar of the old city and other parts without study, so the proposed research will be useful to the municipality of Nablus. Furthermore, this study will be the basis for preserving cities and villages in the West Bank and Gaza strip. Also, this research will be helpful to the Department of Architecture at Al-Najah National University since it will be the foundation for further studies to be done by faculty members as well as students.

This study is going to be complementary to other studies of the old city of Nablus. One study was "Public Baths (hammamat) of Nablus", Dr. Wae'l Abu Saleh. Another was "The Urban Sprawl of Nablus", Yousof & Asi 1986. The final study was "Islamic Suqs (Bazaars) In The Urban Context", Awad, Jihad 1988.

Since Nablus is the home town of the author, this study will be the basis for continued research on the historic quarters, and for new studies useful to the universities, the municipalities and the people of the West Bank and Gaza strip. In an earlier conversation with Hafiz Tuqan, amyor of Nablus, has indicated that the proposed study will be welcomed by the municipal council.

RESEARCH METHODOLOGY

In the process of data collection for this thesis, two methods will be applied : library research and utilization of earlier field work. The latter is essential because there is not much printed material available.

Library Research

The literature that will be reviewed for the theorectical study and the development and analysis patterns mainly consists of books and articles dealing with preservation, rehabilitation and development of historic Islamic cities. A great deal about these topics is available in the Weigel Library, the Aga Khan Award program, and through interlibrary loan.

Many studies have been accomplished on different ideologies for preservation[1]. Other studies have been made on preservation problems of Fez, Lahore, Oman, Jakarta, Istanbul, Antolia, Egypt, Yemen, and Isfahan[2]. Further studies were accomplished on the uses of the past in Islamic Architecture[3]. In addition several studies have been done on the

preservation of historic districts in the Western world[4].

Even though Western and other foreign methods will not be applied directly to Islamic conditions, certain theorectical approaches may prove useful.

Notes

1 Dogan, Kuban, Conservation of Historical Environment For Cultural Survival - Seminar Paper, 1978 Ilham, Tekeli - Urban Pattern in Antolia : Organization & Evolution A.K.A. 1978

2 Stetano, Bianca, Fez - Toward the Rehabilitation of Great City. Seminar Paper Mumtaz, Kamil. K, The Walled City Of Lahore : Directions for Rehabilitation. A.K.A. 1978 Damais, S, The Development of A Conservation Program For Jakarta Kamil, Melih., Nayir, Z, & H. Sener, F. Yurekli & H. Yurekli, The Egypt Conservation Area, Seminar Paper, 1978 Elden, Nezih, Kamil, M, Yucel, A., A Plan For Istanbul's Sultanahmet - Ayasofya Area. Seminar Paper A.K.A. Ronald Lewcock - Three Problems In Conserving : Egypt, Oman, and Yemen. A.K.A. Seminar Paper, 1978

3 Aptullah Kuran - Turkish Architecture, Past, Present : A Brief Account. A.K.A. 1978 Sadad Hakki Eldem - Toward A Local Idiom : A Summary History of Contemporary Architecture in Turkey - Seminar Paper. A.K.A. 1978 Mohammad Makiya - A Practicing Architect Looks At Conservation - A.K.A. Seminar Paper 1978

4 Godman, John, Preservation of Historic Districts By Architectural Control, American Society Of Planning Officials, 1313, East 60th Street, Chicago 37, Illinois James Marstan Fitch - Historic Preservation : Curatorial Management of the Built World - McGraw-Hill Book Company Glen, Marsha, Architecture - Conservation and Restoration, Washington D.C. American Institute of Architecture, 1974

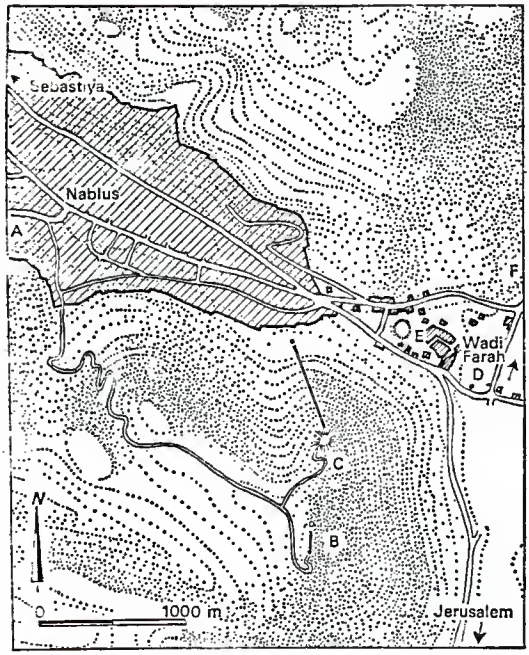
Fieldwork

Since the studies mentioned earlier are the only materials published about Nablus, the author will rely heavily on fieldwork he has already undertaken. Additional information may be sought from colleagues there.

The images of the city that have been recorded will be analyzed to arrive at an architype, a technique that has been practiced in historic preservation[1]. This method can aid the author to recall the event and also to record the information on the historic quarters. Official maps will be obtained from the municipality of "Nablus". Documentation of any part of the city is possible with the help of the Architectural Department at An-Najah National University, where the author is a member of the faculty.

Notes

1 Professor Gene Ernst - Lecture ENVD 699. Feb 1987.



Map shows antiquity sites in the vicinity of Nablus
Source: An Introduction to the Holyland, J. H. Winn Haswell, 1971

CHAPTER 2

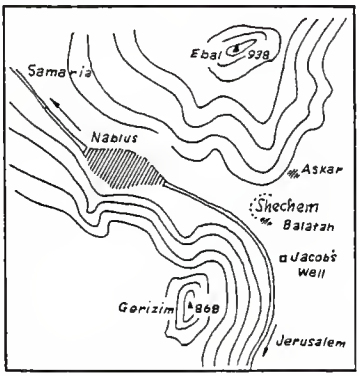
HISTORICAL DEVELOPMENT

"Nablus, is one of the oldest towns in history. It was founded long before Jerusalem was built and even before Jacob's time."[7]

- Frank G. Carpenter, 1925 -
The Holy Land and Syria Grand City

TOPOGRAPHY

Nablus is an Arab city in Central Palestine, in a pass between Mount Ebal to the north and Mount Gerizim to the south. The site of this ancient city has been continuously occupied from Bronze Age to the present day. Nablus is situated at a height of over 500 meters above sea level, 64 kilometers north of Jerusalem. The old city is characterized by its narrow streets and small houses, while the new parts of the city extend up the slopes of both mountains, and have wider streets and modern buildings.



The Valley of Nablus
Source : Land of Christ, James H. Fariely, 1968

The narrow valley of Nablus extends in a westerly direction, whereas the valley to the east widens to the plains of Beit Dajan area.

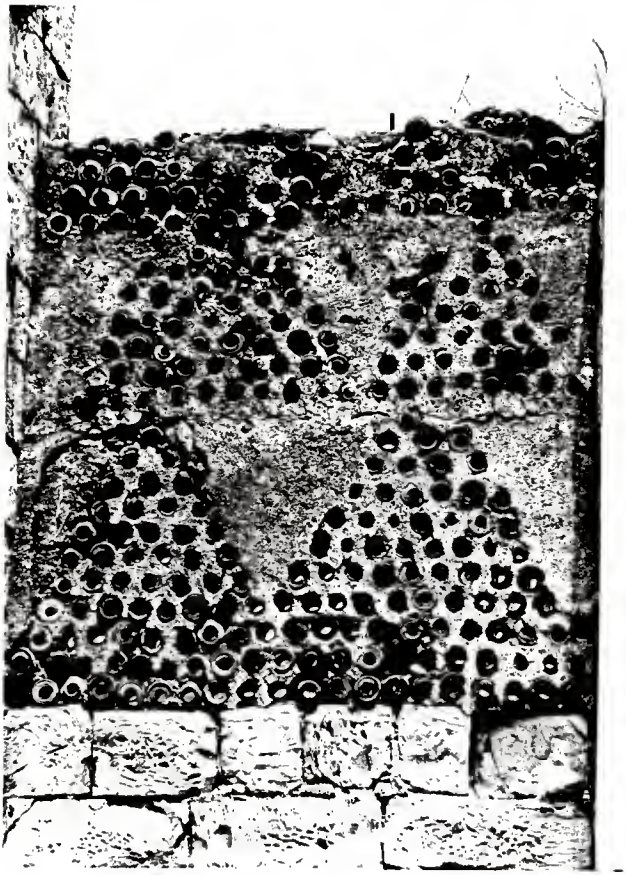
The center of the town forms a ridge that divides the flow of rainwater. The west basin of town drains to the Mediterranean, and the east basin drains to the River Jordan.

Lewis G. Leary who visited Nablus in 1911 gave the following description of its location:

> "The center of Palestine geographically, and in many respects the center historically and religiously, is the city of Shechem, which lies in the transverse valley which cuts across the highlands of Samaria from east to west between Mount Gerizim and Mount Ebal. The city is built upon a kind of ridge or "shoulder" which stretches across the narrow valley from mountain to mountain; hence its ancient name of Shechem or "the shoulder". It has been known for the last nineteen centuries as Nablus, (i.e. Neapolis or "new-town".[2]

Climate:

The average annual temperature for this area varies between 17^0 - 19^0C with an average temperature of 24^0 - 26^0 during the hottest month, August, and 3^0 - 10^0C for the coldest month, January. The maximum temperature can reach



Ventilation Holes "Keyzan"

40^{0}C in summer and a minimum of zero during the winter months.

The average rainfall varies from 600 to 700 mm. per annum with approximately 45 rainy days of more than 1 mm. per day, falling mainly during the months November to March.(see Figure 2.1)

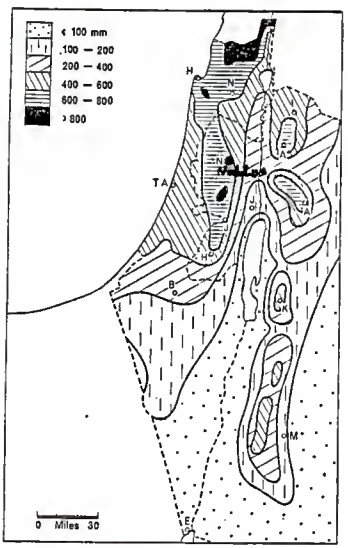
From rainfall records for 10 years, the following table was prepared showing the frequency of days for each month of the year, with different amounts of rainfall in mms per day.(see Figure 2.2)

The prevailing wind blows from the west through the narrow valley from the sea. Generally, the wind reaches its peak in the early afternoon with a wind force of over 1 degree Beaufort i.e. greater than 5 kilometers per hour.

Population Growth Since 1838:

> "Robinson estimated the number of Mohammedans in Nablus at the time of his visit - 1838 - at 8000 souls. Besides these, there were about a hundred and twenty Greek Christians, who were subjected to taxes, implying a population of at least five hundred souls, reckoning women and children. The Samaritans proper number only about thirty men who are liable to pay taxes, and the whole Samaritans population would hardly surpass a hundred and

fifty souls."[3]



ANNUAL DISTRIBUTION OF RAINFALL -

Figure 2.1
Source : Geography of the Holy Land, Raoul Blanchard and M. Du Buit, o.p. 1966

In 1866, Tristan, estimated the population of Nablus to be 9,000 souls.

"Indeed, the population of Nablus is chiefly Mussulman. Out of 9,000 souls, for it has recently

much increased, there are not more than 650 christians, not 200 Samaritans, and still fewer Jews."[4]

Thomson, visited Nablus in 1882 and wrote:

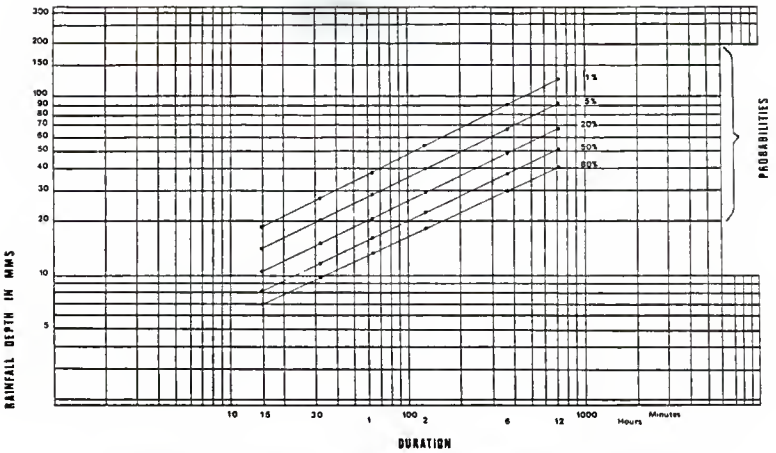
"The population has not greatly increased during the last half century. It was estimated at about ten thousand, and it does not now exceed thirteen thousand. By far the largest proportion of the inhabitants are Moslems, extremely fanatical, insolent, and turbulent. The Christians of all the sects number about seven hundred, mostly of the Orthodox Greek Church. The one hundred, Samaritans reside near their small keniseh, or synagogue, in the south-western corner of the town; and there are also a few Jews;"[5]

In 1911 Lewis Gaston, gave another number for the population of Nablus:

"The inhabitants of the modern city number some 24,000, and are all Moslems,..."[6]

"I was surprised to find that there were any Samaritans living. I had supposed that they had been swallowed up by people of other faith. I find, however, that there are about two hundred in Nablus, and that they practise the same religion as they did when Christ came"[7]

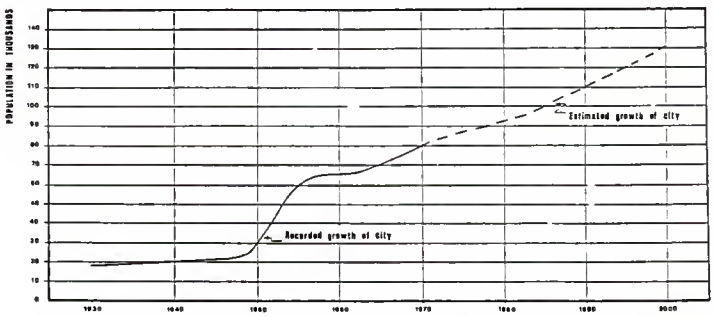
The present population of greater Nablus stands at 100,000 which includes the population in the refugee camps: Beit Elma (west Balata, Askar, east of the city.) In the year 2000, the population is anticipated to grow to 130,000



RAINFALL - DEPTH - DURATION PROBABILITY CURVES

BASED ON 24 YEARS RECORD

Fig: 2-2



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CURVE OF POPULATION GROWTH

Fig:2-3

Source : Personal Communication, Zuhir Debai, Nablus, 1988

people. This growth represents an average annual increase in the population of 2% (see curve of population growth). (see Figure 2.3)

History:

Nablus, is located both geographically and strategically on the main highways or trade routes connecting the three continents, Europe, Asia, and Africa, and thus it has made its mark in history.

The town was mentioned in ancient Egyptian writings from the period 14th to 18th century before the common era. In the Hebrew scriptures, it is mentioned that Abraham dwelled near the town and that Jacob purchased land for agricultural purposes. Through its troubled history, Nablus has seen many wars and changes of rulers.[9]

In this strategic location at the center of a pass linking the Mediterranean coastal plain in the west to the Jordan valley in the east, with an abundant water supply and a productive hinterland, the Romans founded a new town in AD 72 for veteran legionaries to settle, after they destroyed the original town. It was named Flavia Neapolis (from which

the present name derives) in honor of the Emperor Flavius Vespasian. The town acquired all the civil and religious structures of a Graeco-Roman city: agora, hippodrome, aqueducts, fountains, colonnaded streets, temples and, later, basilicas, ramparts and, on the slope of Mount Ebal, a necropolis. Traces of this Roman city have been excavated recently, and a length of aqueduct survives to the west of the town. (see Notes 1, 3, 8, & 9)

"Under the Roman emperors Neapolis became one of the most important cities in Palestine. Septimius Severus once deprived it of the 'jus civitatis' but he restored it later (spartianus, 'Vita Severi'ch.ix.) Under Zeno (474) riots occurred in Neapolis between the Samaritans and the Christians."[9] From the fourth century Neapolis became the seat of a bishop, but the early Christian had to struggle constantly against the Samaritans. The Emperor Zeno expelled the Samaritans from Mt. Gerizim and built a church on its summit in about 485. In 521 the Samaritans murdered the bishop, massacred priests and monks and burned the churched and monasteries. The Byzantine Emperor Justinian restored Zeno'z church in 531; remains of this octagonal church were excavated in 1928. After suffering several repulses from Justinian, the Samaritans eventualy took refuge to the east of the River Jordan where in a last battle they were virtually annihilated. Nowadays only a small community of about 200 Samaritans

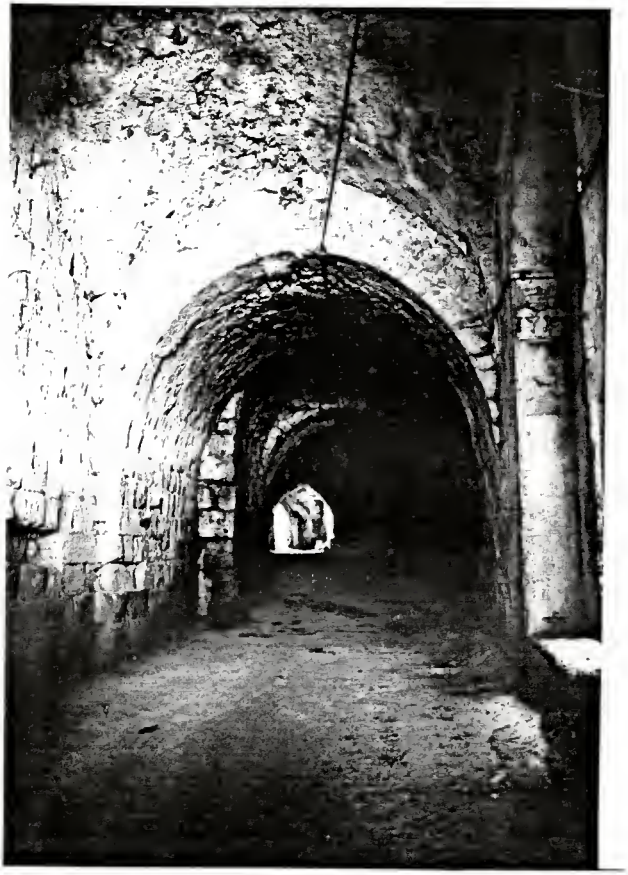
The Roman Church in El-Gharb Quarter.

lives on the lower slopes of the mountain. The present-day Samaritans celebrate their feasts of passover, Pentecost and Tabernacles on top of Gerizim.

In 636 the Arabs captured the town for Islam. the famous 10th C geographer, al-Muqaddasi, wrote that the town abounded in olives and was named "the little Damascus" and that its market place was very extensive. It had a Great Mosque, very finely paved, the houses were built of stone and a stream of running water flowed through the town.

In 1099 when the Crusaders took possession of the Holy Land, Tancred received the submission of the town, and they named it Naples. The Hospitaller Knights built churches and a royal palace, which was the residence of Queen Melisend from 1152 to 1161. In the middle of the town was a fortified tower, remains of which survive today, where the citizens sought refuge when under attack.

The town was recaptured by Saladin for Islam in 1187. Great damage was inflicted on the town by the effects of an earthquake in 1202.[12] Yet Crusader buildings remained sufficiently intact to allow the conversion of churches into mosques (Jamie al-Kadir, Jami' en-naser). A hospital built



A Vaulted Street in the Old City of Nablus.

by the Crusaders continued to be used as such. There is a possibility that these building were built on earlier settlements.

The town was again sacked in 1260, this time by invading Mongols. The period of Mamluk (1260 - 1516) was a prosperous one. Local produce was exploited in the manufacture of cotton goods, sweets and soap. Today cotton goods are no longer manufactured, but Nablus is renowned for its sweets and most of all for its soap made with pure olive oil. Several buildings survive from the Mamluk period, some attested by foundation inscriptions that are still in place. These structures include Jamie al-Khadra (the Green Mosque, which may be a converted Crusader building), the tomb of sheikh Badr, and the Baydari Hammam (Bath).

Following the arrival of Ottoman power in Palestine in 1517, Nablus became capital of a district (sanjak) under the control of a local governor in the province of Damascus. As the power of local governors increased they came to build palaces for themselves and their families. Prominent among these are the palaces of the 'Abd al-Hadi, Hashim, Nimr and Tuqan families, described by nineteenth century travellers as "fortresses with iron gates ... to be compared to the medieval family palaces in Italian cities." Many of the religious

buildings in Nablus also date from this period, as do the soap factories, of which there are no fewer than thirty by 1882. All are built of stone with vaulted roofs, for at this time timber was very scarce in Palestine.

On July 1927 the town suffered a major earthquake. Much of the consequent damage to buildings was never repaired and the ruinous condition of many of them may well have encouraged the inhabitants to move outside the old city to build their new houses.

As a result of the First World War, the town came under the British mandate in 1918, and in 1950 it was annexed by Jordan. Today, the city is under the rule of the Israeli Military Governor.

DEVELOPMENT OF THE BUILT ENVIRONMENT IN NABLUS

There are four clear stages in the development of the built environment in Nablus:[13]

First stage - the Old City until the beginning of the 20th Century. This was a crowded and compact Mediterranean city. The streets were very narrow and entrance to the city was only possible through nine gates opening to various direc-

tions.[14] (see Figure 3.5) There was no physical growth.

Second stage - the beginning of the exodus from the Old City. The first structures outside the city were public buildings built by foreigners - Europeans and Turkish, whose cultural background differs from that of the local population.

Third stage - breaking away from the Old City. The British rule brought about a surge of construction - mainly residential but also commercial - in all directions.

Fourth stage - rapid urban growth along the main traffic routes. This phenomena which began in the forties, is mainly typical of the post World War II period, and especially of the last ten years.

In accordance with historical development, one can note four construction centers in the city in terms of building concentration expansion models. [13]

- The Old City
- Highly concentrated area outside the Old City
- Regional areas of medium or low concentration
- Linear construction along main traffic routes

Monumental Staircase in a house in the old city of Nablus, 1987

Notes

1 Thomson, Willaim M., The land and the book, Central Palestine and Phcenicia, New York, Harper & Brothers, Publishers, Franklin square, 1882, p.138

2 Leary, Lewis G., The Real Palestine of Today, New York, McBride, Nast & Company, 1911, p.149

3 Ritter, Carl, The Comparative Geography of Palestine and Sinaitic Peninsula, Creenwood Press, Publishers, New York, 1968, p.311

4 Tristan, H.B., The Land of Israel or A Journal of Travels in Palestine. 2nd edition, London:Society for Promoting Christian Knowledge; 1866, p.142

5 same as [1], p.145

6 same as [2], p.151

7 Carpenter, G. Frank, The Holy Land and Syria Grand City, New York, Doubleday, Page and Company, 1925. (p.150)

8 Guide to Israel, p.404

9 The Jewish Encyclopedia, p.239

10 same as [3], p.310

11 same as [1], p.141

12 Parrot, Andre - translated by James H. Farley, Land of Christ, Fortress Press, p.86

13 Shin'ar, Amnon, "Nablus - The development of the built environment in an Arab City" in Geographic studies of Israel, Magazine #7, 1970. (Hebrew Ref.)

14 The Survey of Western Palestine, Memoris, Palestine Exploration Fund, 1882, Vol II, pp 203 - 211

CHAPTER 3

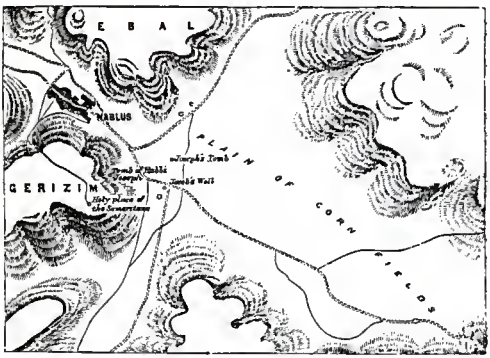
URBAN VISUAL ANALYSIS OF NABLUS

"Nablus is the most beautiful, perhaps it might be said the only very beautiful, spot in Central Palestine"

- Arthur P. Stanley -
Sinai & Palestine, 1986

URBAN VISUAL ANALYSIS OF NABLUS

Nablus, has a distinctive and rich architecture that may be described as an indigenous type of architecture. "Be it the very humble architecture of a house, or the very sophisticated and ornate architecture of some mosques, the architecture is, just the same, a direct derivation from many compelling local, indigenous factors: climate, structural limitations, sociology, building materials and local traditions."[1] Nablus, has a dynamic reason explaining why it is in this location. It possesses a definite anatomy. It has a clear-cut urban form. It has a distinct, overall structure and it has a distinct personality in relation to the regional

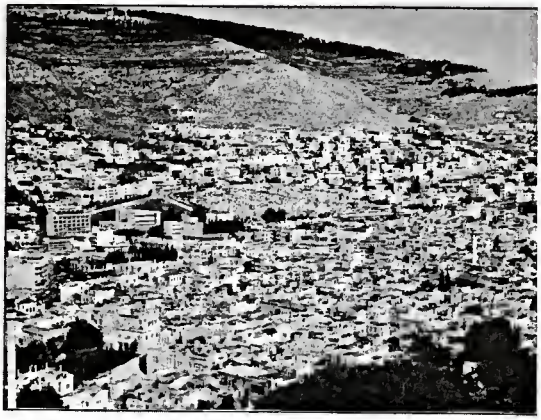


Sketch map of the situation of Nablus
Source : Sinai and Palestine, Arthur, Stanley, 1986

landscape it occupies. It has definition and boundary, and answers to very significant and distinct social, ethnic, racial, and religious patterns.

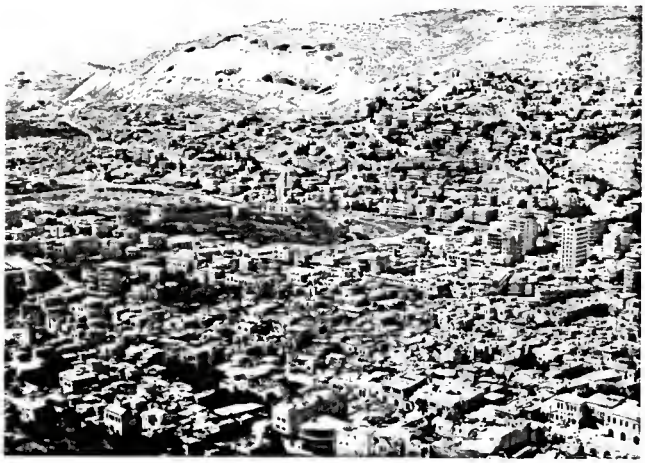
GENERAL VIEW:

To describe the comprehensive view of Nablus, one should be at the summit of either Mount Gerizim, in the south of the city, or Mount Ebal, in the north of the city. From there, the most favorite sectors of Nablus can be seen. These sectors belong to different periods of time, and thus, visually they are clearly noticeable from each other. The closer portion of the city is modern, the middle part is the valley, where the Old City of "Nablus" is located.



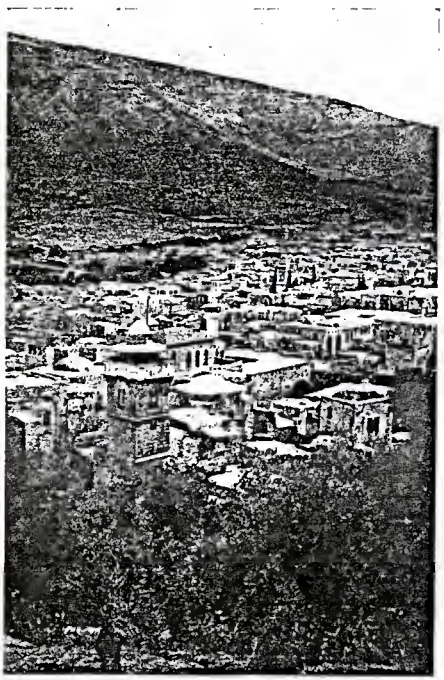
East part of Nablus and Mount Ebal

The panorama of Nablus boasts that it reigns amidst the two mountains of Gerizim and Ebal, and amidst hundreds of orange and palm trees. Among these trees, the most striking elements are bluish turquoise domes and minarets of the historic mosques. They constitute noticeable differences and perceptually they are important. Such domes and minarets catch the eye of the beholder at first sight.



West part of Nablus and Mount Ebal

Further, far from Gerizim Mountain, stone domes and minarets of different Islamic periods are apparent. Visually, the color and shape of such architectural elements are noticeable on the horizon and against the blue sky as a background.



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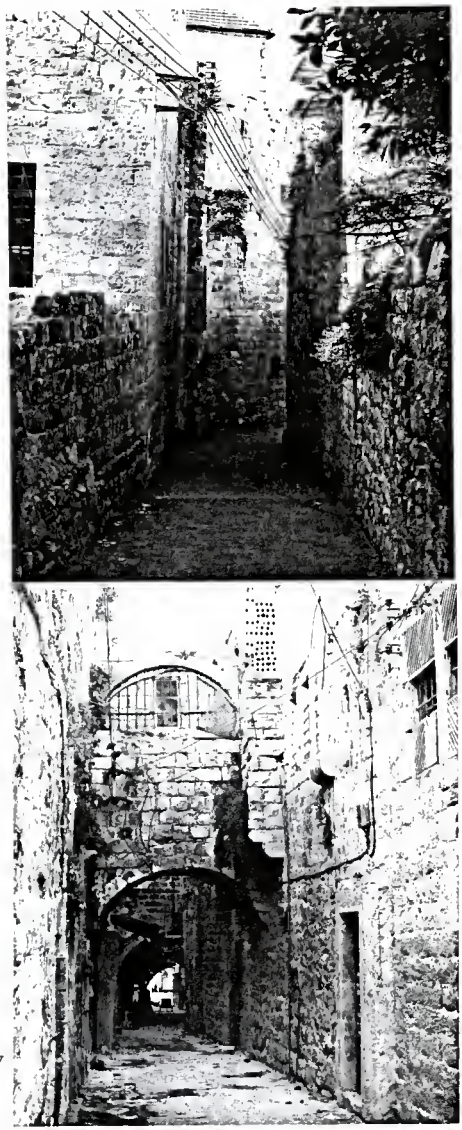
Nablus and Mount Ebal
Source : The real Palestine of today, Lewis, Leary, 1911



Winding streets, old city of Nablus

Carl Ritter, who visited Nablus in 1866 wrote,"The view from Gerizim is very extensive, and is of an entirely different character from that presented in the neighborhood of Jerusalem : all here is fresher and greener ..., the valleys are attractive and fertile and assume the form of plains and basins."[3]

Frank G. Carpenter, who was on Mount Gerizim, in 1929 said,"I am now living in my tent outside this old town of Shecheme. My camp faces Ebal, and above me is Gerizim, ... The country is in the shape of a great amphitheater of which the hills form the walls, these hills are, it is said a natural sounding board, so that one can talk on one mountain and be heard on the other ..."[4]

Another traveler who visited Nablus was H.B. Tristram, from the roof of the mausoleum on summit Gerizim he gave the following description,"On our right we could trace the trans-Jordanic range from the sea of Galilee, Bashan, Ajlun, Gilead, down to Moab, on the left, the Mediterranean formed the horizon from Carmel perhaps to Gaza; while Joppa and Caesarea could be distinctly recognized ... All Central Palestine could be taken in at a glance, and the lesson of geography could not easily be forgotten."[5] (see Figure 3.1)

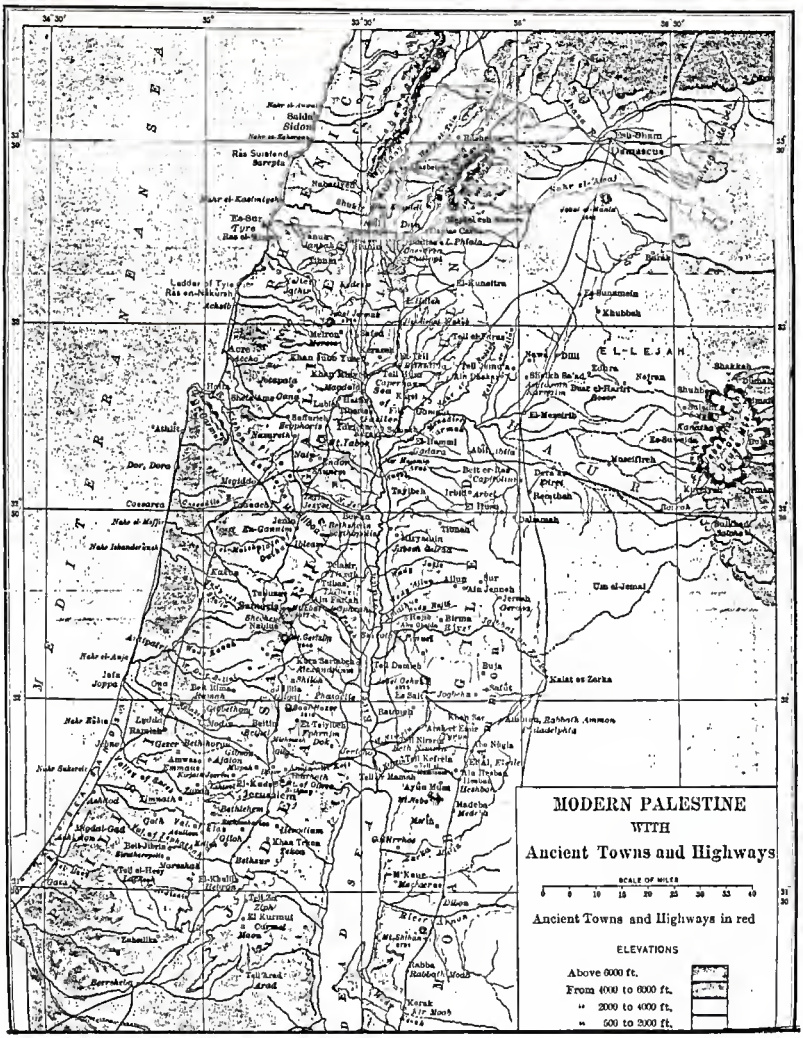


Figure 3.1
Source : Biblical Geography and History, Charles, Kent, 1911

Moving down towards the valley, the old quarters have large areas of mixed use, creating a quality which reminds one of the glorious past of the city. These quarters are crowded and packed with historic monuments and structures. Their narrow streets and alleys are congested with people. The historic areas display, to a marked degree, a quality of urban "atmosphere". the bazaars of various professions, the squares, as well as the crowded, old residential quarters of this city possess far more "soul", more atmosphere than brand-new, engineer-contractor feats of city agglomeration one may witness today. (see Figure 3.5)

A historic quarter, old city of Nablus

In Nablus, the historic quarters are still the most charming parts. These quarters, have visual and sensuous impacts and pedestrian scale.

In a general view, the historic quarters look like sculpture with many jewels consisting of the wondrous mosques, arcades, domes, and minarets, Sahat-el-Manarah - "the Minaren Square" - the greatest urban space in front of en-Naser - "the victory" - mosque, and also the bazaars through the length of the city.

En-Naser Mosque dominates the silhouette of Nablus

"By virtue of size location and distinctive architectural form, the mosque dominates the silhouette of the Arab town. Around the mosque are assembled the residential (usually very crowded), commercial and artisans quarters. The internal road system, designed primarily for pedestrian and animal purposes, did not conform to any pre-set geometric pattern but grew, in stages, forming out and ramifying very often into specialized commercial and artisan streets; often the second story of the city, when it existed, would be residential. Entrances to the houses, frequently courtyard houses, took off from the narrow streets. ...All over the Arab world cities exist possessing these basic and unmistakable characteristics : a skyline dominated by domes and minarets; a wall or vestiges of a wall; the horizontal extension of the city - unless it was on hill."[6]

Looking at the old city from the air, one is impressed by its almost lace-like cellular form. For the historic house is typified by its interior courtyard where, frequently, a fountain is placed and some trees, flowers and creepers planted. This provides shelter and a central private meeting place for the family. Looking at the city from ground level, it is generally not flat, punctuated, here and there, by the needle of the minaret and the hemisphere of the dome of the mosque. From the courtyard, one can see the blue sky - the blue that contrasts with what was often a drab brown environment. Internally, the city is busy : artisans at work; shoppers and visitors frantically occupied in merchandising; and "lazy" people filling the cafe houses - the "kahwa".

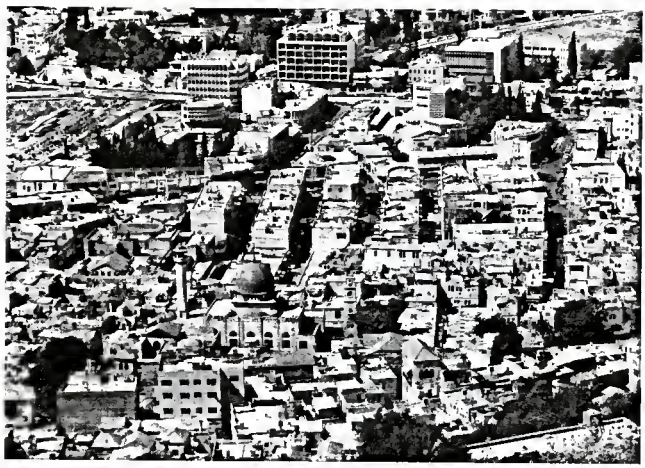
Women are at home, in the many rooms of the house, or in the courtyard "housh".

William M. Thomson, visited Nablus in 1882, and wandered through its streets:

> "This morning I spent wandering through the streets and markets of Nablus. The houses of the city are solidly built of stone, having the same sort of courts, gates, doors, windows, and roofs as those at Jerusalem. ... In this respect, I remember no place with which to compare Nablus except Brusa (Brusa?), and like that city, it has the mulberry, the orange, the pomegranate, and other trees growing amongst the houses, and wreathed and festooned with rose-bushes and grape-vine, the fragrance of whose blossoms loads the air with delicious perfume during the months of April and May. There the bulbul (bird) delights to sing, and hundreds of other birds unite to swell the chorus. the people of Nablus maintain that there is the most musical valley in Palestine nor am I disposed to contradict them."[8]

> "Nablus, is the most beautiful, perhaps it might be said the only very beautiful, spot in Central Palestine."[9]

"Sahat-el-Manarah" - the Minaret square, is still the focal point of the historic city. It is strong because of its historic surroundings, of religious, administrative and commercial buildings ("Jamie en-Naser", the Victory Mosque - to the west, - The Ottoman Government House "Dar Al-Hukoma", to the south, - The New bazaar "Khan Al-Jadid" to the east, the main bazaar "Khan-el-Kadim" to the north, beside en-Naser commercial street to the south.) Creating with the old areas



The Minaret Tower, and En-Naser Mosque

a kind of micro-city full of subtle variations and architectural surprises. Sahat-el-Manarah with its Minaret remains the focal landmark in the city. (see Figure 3.3)

Tristan, was in Nablus in 1866, he gave the following description of the city:

> "Nablus is by far the best town we had seen since we left Beyrout, and its houses are, as a rule, superior to those of Jerusalem. The streets are cleaner, and often a little millstream of purest water ripples down the cellars, quite dark, vaulted and narrow; and so low, that the passengers can

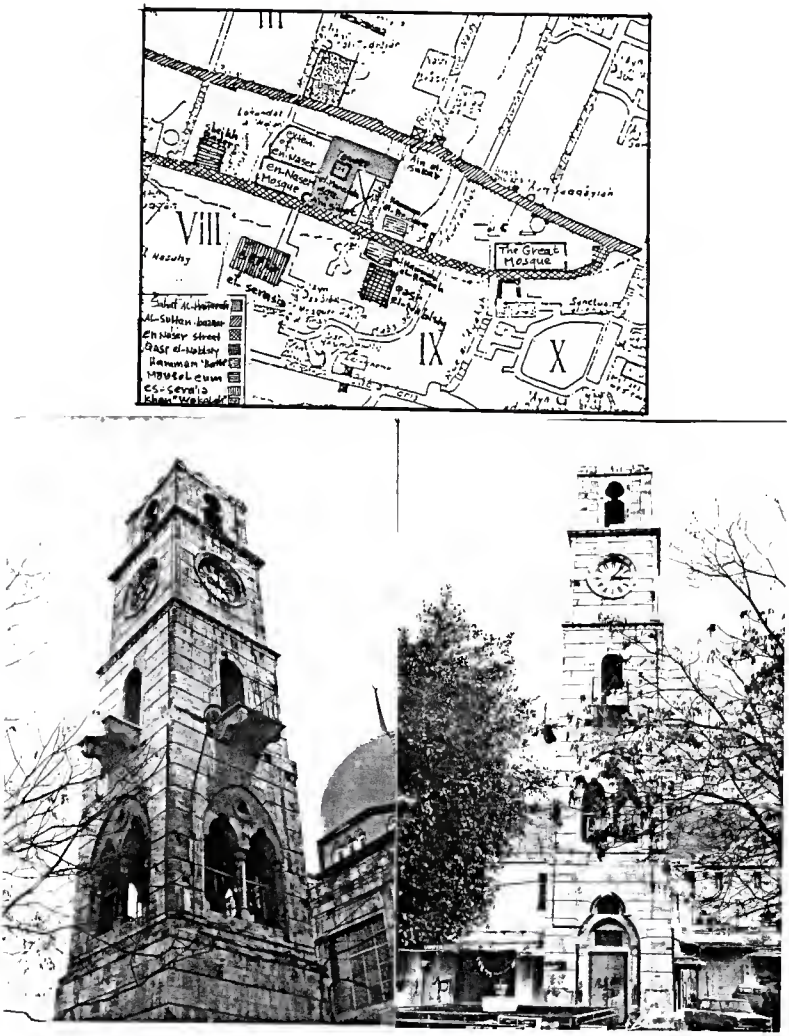


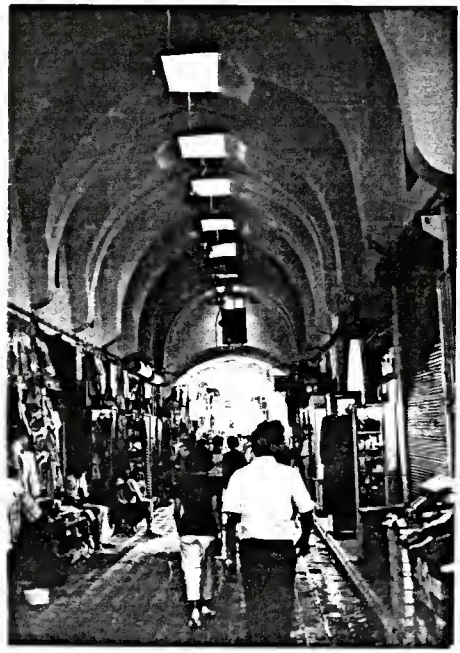
Figure 3.3
The Minaret Square and the Minaret Tower

> scarcely stand upright, except in the center of them. No windows can be seen - only the little low doors, all carefully fastened. Yet there is an incongruous but valuable importation here from the West.[10]

Concentrated on the bazaars of Nablus are all activities of an economic, handicraft - industrial, and commercial nature; these are divided into sectors - Suq el-Bassal - Suq el- Haddaden ...etc. according to various occupations. The bazaars are a legacy of the classical Arab world which, closely bound up with the economic activities, are of two types of structures. One is set aside for storing of goods to be sold later, the other is for merchandise in transit, and it is usually stored in the caravanserais.

"Nablus," writes Mukaddasi, "lies among the mountains. It abounds in olive-trees, and they even name it the 'Little Damascus'... Its market-place extends from gate to gate, and a second market goes to the center of the town."[12]

Carl Ritter, who visited Nablus in 1866 wrote "The extensive bazaars of the city show even now the magnitude of trade between Damascus and the places on the coast."[13]



Al-Sultan bazaar after renovation

"Al-Sultan bazaar has two gates on both ends, which are closed at night. The length of the bazaar from one gate to the other is about one mile. This bazaar, consists of three hundred and seventy shops on both sides, and of the street well planned and organized. Even though silk is not available in 'Al-Sultan' bazaar, anything else can be found there. In the middle of this bazaar there are one hundred shops on both sides of a cross-vaulted alley. To the north of the latter there is a great khan (known as Wakalah), looks like a citadel, in which there are one hundred and fifty, side to

side, rooms. In the middle of this 'khan', there is a mosque with a leaded dome."[14]

"The modern town is narrow and long in shape, following the formation of the ground, the houses are of stone, many of them large and well-built. A new street down the center of the town was opened in 1875, and is a considerable improvement. The bazaars are fairly good, and the place is a market for wool and cotton of surrounding districts."[15]

In 1879 Conder said, "... The town is well built, containing several fine houses and a good bazaar."[15]

"The shops were well stacked, and busy with buyers and sellers. There were small arcades especially devoted to the sale of tobacco - others were filled with the refreshing odor of lemons, oranges, and citrus. The bazaar for vegetables and prepared food were rather difficult to pass through. They were thronged with Turkish soldiers from the pasha's camp, who were seeking their mid-day rations. Some of them were carrying large metal dished, containing a medley of chopped vegetables; or deep earthen-ware plates, filled with peas- pudding garnished with slices of lemon floating in oil. Others hurried through the crowd with bowls of steaming soup before them, which very effectually cleared the way. There seemed to be no friendly feeling between the soldiers and the town-people. Angry voices and loud cries surrounded us, and in several cases blows were exchanged before a bargain was settled.

"The long, narrow bazaar, where dried fruits, olives, rice, butter, and cheese are sold, led us to the entrance of an important mosque, the exterior of which is rich in relics of Christian art of the twelfth century. After pausing before it for a few minutes, we made our way down a street almost blocked up by camels, and thence passed into the principal bazaar, the finest arcade in Palestine. Here European goods are displayed, such as Manches-

> ter prints, Sheffield cutlery, beads, and French bijouterie, very small mirrors, Bohemian glass bottles for nargilehs, Swiss head-kerchiefs, in imitation of the Constantinople mundils, crockery-ware, and china coffee-cups. But the brightest shops are those in which Damascus an Aleppo silks, and embroidered jackets and tarbushes from Stamboul, appear, with stores of Turkish pipes, amber rosaries, and bracelets from Hebron. On the low shop-counters the turbaned salesmen squat in the midst of the gay wares, and they smoke and gossip, stroke their beards, and finger their rosaries from early in the morning until sunset."[16]

In the present time the path system in the bazaars is vivid by itself, but tricycles for delivery, automobiles, and set-backs in the narrow alleys as well as formless modern buildings make it visually confusing and physically uncomfortable. There are signs of all kinds on the shops. The alleys are narrow, pot-holed and stinking; they wind impossibly and defy the markers of street plans. Fortunately, materials in the structures contribute to a sense of place, compatibility, and cohesiveness.

In general there is the hustle and bustle in the "suqs" and "bazaar", an air of informality and the feeling of integration between man and the city. Then there is the color and geometry of the building making up the city. There is the "muezzin's" call to prayer and the praying faithful in the mosque. There are the informal cafes and the Arabic smell of foods mixing with the medley of noise that pervades

the historic city. There is mystery in the "Zawareeb"- winding alleys -, "jada" - neighborhood - , and "Z'aas" - alley - that barely separate the living quarters one from the other. There is a fountain and a bit of green in the courtyard - the "haush"- of the house and the "mashrabiah" - bow window - of the house that overlooks the street.

THE CITY QUARTERS

The Old City is divided into seven quarters, which are called "Mahelat" or "Harat" by the local people. (see Figures 3.4 & 3.5)

1. Haret el Hableh, or "Division of the Terrace" on the north-east.
2. Haret el Yasmineh, on the south-west, named after the mosque "Jamie el-Yasmineh".
3. Haret el Karyun on the south-east of el Yasmineh, named after the spring, "Ain el Kayyun", and between el Karyun and el Yasmineh lies "Dal el-Hokuma" the Governor's House or (es Serai)
4. Haret el keisariyeh, in the southeast corner of the old city.
5. Haret el Sumarah, in the south-west corner

Monumental stairs,
the old city of
Nablus

6. Haret el Ghareb, on the west.
7. Haret el Hanabilieh, near Haret el Ghareb.

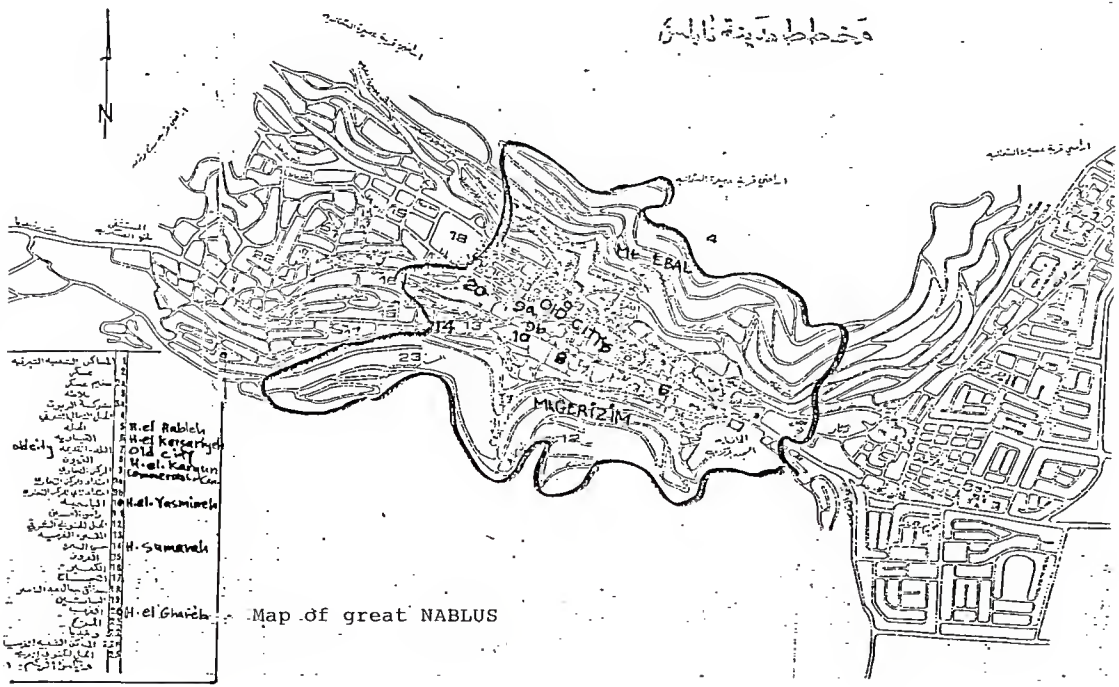
WATER SUPPLY

The water supply is extremely abundant, including the following springs (see Figure 3.5):

1. "Ain el Asl" (Spring of Honey) - In the public garden just south of Hizn Yakub.
2. "Ain el Karyun" - In the town, near Jamie et Tineh.
3. Ain Husein - Near Jamie el Beik.
4. Ain el Jamia - In the great mosque courtyard "Jamia el Kebir".
5. Ain el Kas (Spring of the Cup).
6. Ain es Sikr' (Spring of the Dam) - West of the great mosque.
7. Ain es Sekkayeh - Near the great mosque on the east.
8. Ain es Sitt (Spring of the Lady).
9. Ain es Sibat - Near Jamia en Nuser.
10. Ain es Satun - Near Jamie Al-Satun in Haret Al-Yasmineh

There are also three principal wells:

1. Bir ed Debaghah (Well of Tanning).



Map of great NABLUS

Sourse: personal communication,Zuhir Dobie, Nablus, 1988

2. Bir et Temanir.

There are also three principal wells:

1. Bir ed Debaghah (Well of Tanning)
2. Bir et Temanir
3. Bir ed Dilab (Well of Plane Trees) - In the east part of the city

There are also springs and wells outside the town, Ain Dufna on the east beneath the barracks; Ain el Kusab on the west, in the valley below the town, amidst the garden; and the beautiful Ras el Ain on the south, from which many of others are supplied. By Ain el Kusab there are mills in the valley.

Water seems to run everywhere, the sound of the streams below in the valley being audible in late summer. The most famous spring is Ras el Ain, called also el Merusrusa, or "as cold as lead", equivalent to icy cold.

When Mr. Lewis Gaston Leary visited Nablus in 1911 he wrote:

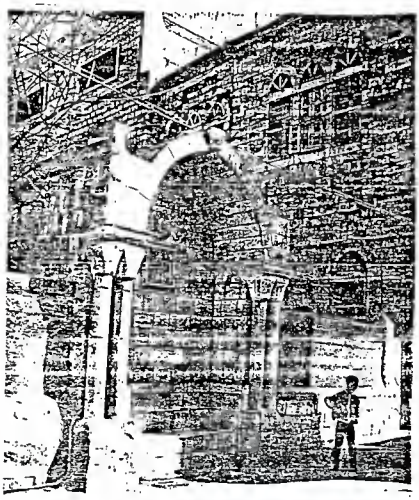
> " ... where Jerusalem has no natural springs at all, Nablus boasts of twenty-two never-failing fountains. There is an elaborate system of irrigation, but at certain seasons of the year there is such an over-supply of water that it is actually let run to waste through the city streets, which

Ain "spring" in Haret el Hableh, the old city of Nablus

are sometimes dangerous for houses, on account of the floods rushing over the slippery stones. In all my travels through Syria and Palestine I remember only three cities where there was a visible abundance of water : Damascus, Ba'albek and Shechem;..."[17]

"Here there are no impetous mountain torrents, yet there is water; water, too in more copious supplies than anywhere else in the land ... It need hardly be said that it is from abundant supply of water that this beauty is derived : twenty-seven springs, each known by its peculiar name, besides a crowd of smaller sources, pour their treasures into the valley, and have thus scured the perennial glory of its green grassy sward, its olive-groves, its orchards of fig, and vine, and pomegranate."[18]

"Falastin (Palestine) is watered by the rains and the dew, its trees and its ploughed lands do not need artificial irrigation, and it is only in Nablus that you find the running waters applied to this purpose."[19]



Ain (spring) el-Kadir
Source : Personal communication, 5th Year students, Dept of Architecture, An-Nabjah National University, 1987

MOSQUES:

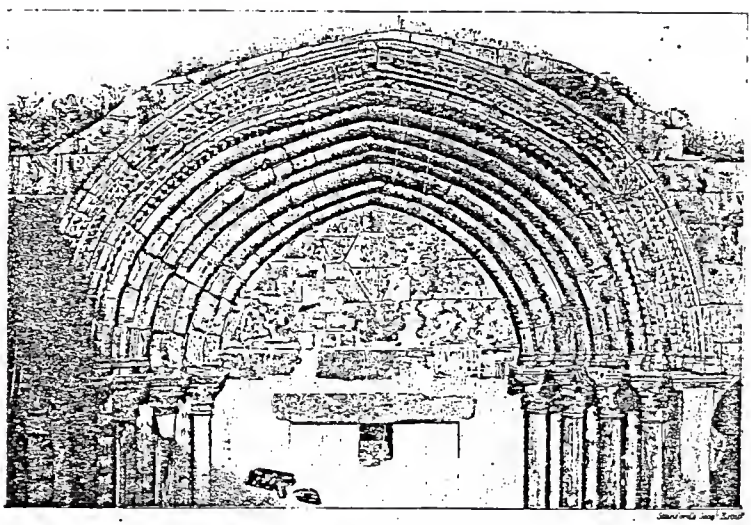
Among the Muslim Arabs the building in which communal prayer is performed is called "masgid" or "Jame". From the Arabic pronunciation of this word -masgid- the name Mosque is supposed to be derived. In practice a mosque is not merely a place for prayer, but also for listening to the Koran, to sermons, and to addresses. There is also "Masgid-El-Juma" - Friday Mosque - in which official announcements are made, and in which the Friday service is conducted.[20] (see Figure 3.5)

The Great Mosque "Jamie el Kebir" or "Al-Salahie"

The largest mosque, and an ancient church. It stands in the eastern part of the city, at the junction of two streets - Al-Naser street and Khan-Al-Sultan (main bazaar) - where is a fine Gothic portal belonging to the surrounding enclosure and facing east. This gateway is painted red, blue, and white, and it consists of five arches within each other, but because of the earthquake in 1927 most of this gateway was destroyed.

The church within is probably one of those erected by Justinian in the sixth century. It was rebuilt by the crusaders in the year 1167, then, it was changed to a mosque by

Saladin.[14]



GATEWAY OF MOSQUE, NABLUS

Source : The survey of Western Palestine

Inside the town is the "Jamie el-Kebir", which is thus described by Major Wilson, R.E., in 1866:

> "The interior is irregular, and shows several additions and rebuilding; the western portion seems to be a remnant of the old basilica, as all the columns except one at that end have Corinthian capitals of perhaps a little earlier date than the

one found in the church on Gerizim; the columns are of marble and serpentine; one capital has long lotus shaped leaves which gives it an Egyptian look. The eastern portion of the mosque is irregular in shape, and in addition to the piers there are several columns without capital, and some small columns with capitals of a later date; at the eastern end is a handsome gateway built by the Crusaders, which seems to have opened into a courtyard surrounding the church; it is now closed, except a small opening in the middle. Over the present entrance to the mosque facing the street (on the north), but half-covered with mortar, is the old lintel of the basilica; there are numbers of stones with marginal drafts built into the walls of the mosque; the Corinthian capitals in the Turkish bath close by are the same age as those in the mosque."

The mosque was visited by Lieutenant Conder, R.E., in 1881:

"It has two small courtyards, one leading from the Gothic portal on the east, and in this is a tank fed by a spring; the other narrow and long, also with a tank leading from the street on the north. There are three bays of the old basilica on the west, the pillars about 2 feet in diameter, and 20 feet from center to center. The capitals on five of the shafts resemble those of the basilica at Bethlehem; the sixth has long narrow lotus leaves and no volutes. These capitals have been painted red and green. Further east is a capital with drilled work; like the Byzantine work of the sixth or seventh century. The eastern portion would seem to have been rebuilt by the Crusaders, who found the basilica in ruins. The old shafts have been arranged in clusters of two, some without capitals. In one case a double marble capital cut out of one block, with details of Gothic character, has been placed above two shafts standing close together north and south. The rough white-washed piers probably conceal similar double pillars in other cases. The apses have been destroyed, and an open entrance is thus obtained from the east court and the Gothic gateway. This east gateway to the

Interior of the Great Mosque

court is now painted in various colors, the columns being ornamented with bands of white, blue, and red. Four cluster columns each side, the slender dimensions, support the pointed archway."[21]

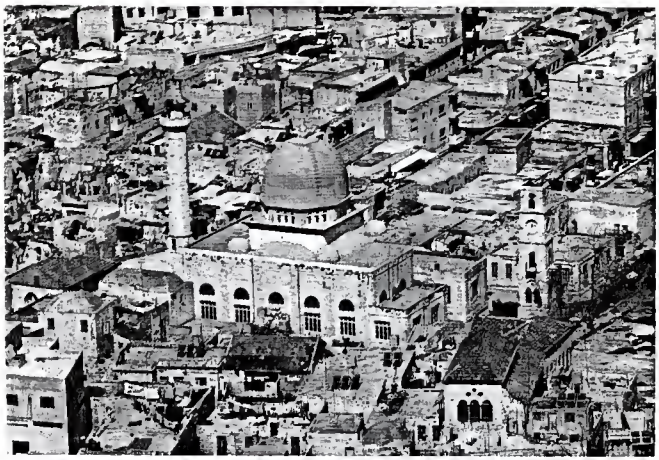
Jamie en Naser - (the "Mosque of Victory", in memory of the victory of Omar Ibn Khatab). Near the center of the city, north en Naser street "the second main bazaar of the city", this mosque is an ancient Byzantine Church, was rebuilt in the second century. In 1927 most parts of it were destroyed because of an earthquake. In 1935 the mosque was rebuilt again by the Muslims' highest council. Shops were built in its place, and a new mosque was built above the shops. "Jamie en Naser" - is the most beautiful mosque in the city, and the most dominant landmark in the area with its minaret and dome higher than any other building in the surrounding environment.

"This mosque is an ancient church with three aisles, regularly oriented and in a good state of preservation. The whole of the interior is covered with a thick coating of mortar, which prevent the dressing of the stones from being seen, and fills up all the architectural details. The present entrance is by the central apse, where the Arabs have made a new door which opens to the street, and from which you go down into the mosque by a flight of six steps. The arches are painted. The walls of the aisles are each pierced with five narrow windows with wide reveals. ... The middle aisle, which is higher than the side aisles, is separated from them by two rows of square pillars and of columns surmounted by capitals of the Doric style. The columns C, D, E, F (see plan), are of red granite, and are in two pieces. Under the columns E, F, (see plan), are circular discs, one of

a

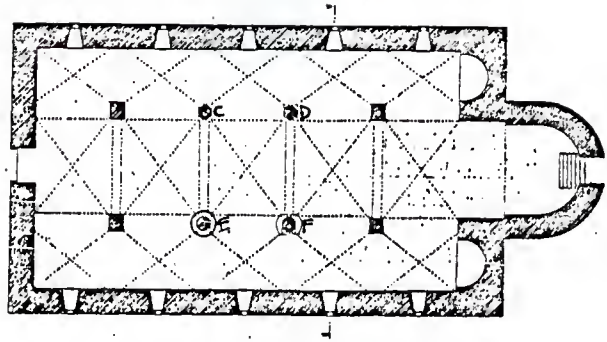
b

a - The Great Mosque
b - En-Naser Mosque



En-Naser Mosque - The Most dominant landmark in the old city of Nablus.

ordinary stone, the other of marble. A moulded string - course runs completely round the inside of the building on a level with the spring of the higher arches. The primitive door was on the west side. On the flags that cover the ground I noticed in several places the medieval tool marks, as also on the steps of a staircase leading to a high gallery set up to meet the requirements of Mussulman worship in the north aisle. The church in its final form must have been built by the Crusaders, but the depth of the Central apse, as well as the character of certain features, would incline me to the belief that they erected it on the ruins of an ancient Byzantine church, and were guided by its previous arrangement."[22a]
(see Appendix 3)



PLAN OF JÂMI' EN NASÎR, NÂBLUS. Scale 1/100.

Jamie el Beik:

Also called Jamie el Ain. It lies in the middle of the city in Haretel-Karyun. It is named after the Beiks of the Tagan family, whose palace is near it. This mosque was built 1158 (Muslim Calender) by Ibrahim Toquah.

Jamie el Yasmineh:

North of Jamie el Beik in Haret el-Yasmineh

Jamie Hizn Sidna Yakub (also called el khadrah)

A small building in Haret el Yasmineh - near Ain el Asl, immediately outside the city on the Southwest. It was a chapel, traditionally the site of Jacob's mourning when the coat of Joseph was brought him. "At the entrance, stones with ogive bays with moulded archivolts. The arch of the mihrab is adorned with handsome carvings. There is an Arabic inscription in so - called Carmathic characters. To the right of the great chamber where the mihrab is they show a small room where Jacob wept for the loss of Joseph, whence the name of the sanctuary, 'The Sadness of our Lord Jacob'."

The Samaritans say, that there was a church that belonged to them in the mosque place, then this church was destroyed by Muslims during Al-Mutasim period, and a mosque was built in its place. When the Crusaders came they destroyed the mosque and built a church on its place. Finally, the church was destroyed again and a mosque was built on its place by Sultan Qalawoon (1279 - 1290).

Jamie et Tineh:

In Haret el-Karyun, south of Jamie en Naser. The

a

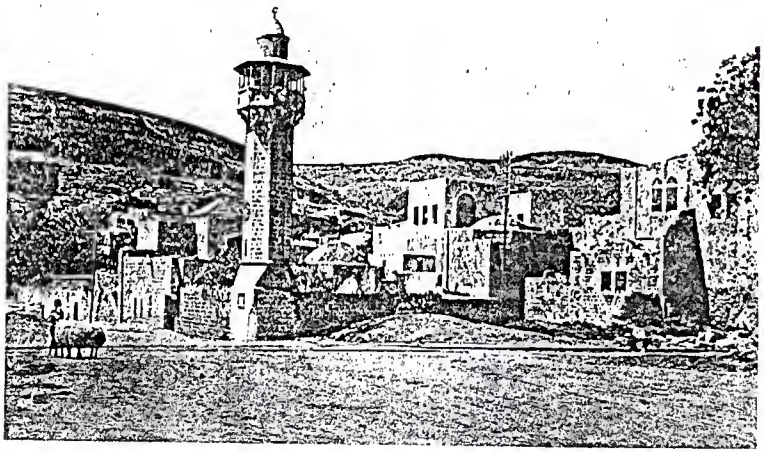
b

a - Al-Tineh Mosque

b - Al-Kharah Mosque

mosque and its "minbar" was rebuilt in 1310 (Muslim calend er).

Jamie Al Unbia:



Source : Palestine and das ostjordan land, Press, Ludwig, 1925.

Called also Jamie Oulad Ya'kub el Asherah. A modern mosque, in the north-east corner of the city in Haret el-Habaleh, near the railway station, opposite Buwab el Unbia ("the gateway of prophets"). The mosque is marking the spot, according to Mussulman legend, where the ten sons of Jacob are buried. This mosque, is apparently quite modern, and small, with two chambers, and a court on the north-east. The

northern chamber contains a large cenotaph. In the courtyard are some small marble - pillar - shafts, one with an Arab inscription containing the name of Caliph Omar and the date 6 22 A.H. (M.C. - thirteenth century)

Jamie el Hanbaleh:

called also el-Jamie el-Garbi, because it was in the west part of the city. This mosque is north-west of Jamie en Naser. It was rebuilt in 1330 A.H. (Muslim calender)

Jamie Al-Satun:

In Hart Al-Yasmineh near Ain Al-Satun

Jamie el Masakin (The Lepers' Mosque):

It is in Haret el-Habaleh, near Jamie Al-Unbia. It is in an ancient structure with large arches seemingly medieval. A vault about 25 feet wide north and south, and with walls 12 feet in all, the roof and all the walls but that on the east remaining almost perfect. On the east the building is broken down, and appears to have extended further. The roof is groined, with pointed arches. Many stones in the walls have rustic bosses. The building looks like a crusading structure; the lepers' houses are built in and around it. This

possibly was the site of the hospital of the Templars.

PUBLIC BATHS (hAMMAMS):

There are at Nablus a great number of baths, several of them of ancient construction. Of the many hammams of Nablus only eight are listed by many visitors to the city who gave the following list of baths (see Figure 3.5):

Hammam es Summarah:

It is in the southern part of Haret Al-Yasmineh, near the road to Ras el-Ain. It was built in the Islamic period. "The Turkish period".

Hammam el Kadhy:

It is in the middle of Haret Al-Yeasmineh, near the Old Rawddah School. It was built by a judge "kadhy" from "Al-Khamash" family as a gift to his wife, and from there it got its name. Most probably it was built in the Turkish period.

Hammam el Jedideh:

It is to the south of Jamie' el-Beik, in Haret el-Karyun. It was built in 1532 A.D., and it belongs to the

Tuqan family.

Hamman el-Resheh:

It is in Saret el-Manarah "the minaret square", to the south of en Naser street, in the distance between Jamie en-Naser and Jamie' en-Kiber. It was built at the end of the 8th Century (M.C.), or the beginning of the 9th Century (M.C.) It belongs to en-Nimr family.

Hammam el Beidara:

It is in the same location as Hammam el-Resheh, but it is to the north of en-Naser street. The inscriptions on the bath and its columns indicates that it belongs to the Roman period.

Hammam ed Derejeh:

It is behind "Jamie' el-Kiber" from the south, in Haret el-Kesarriyeh. The foundations of the bath are pre-Islamic, while the bath itself is Islamic and it belonto the Makluk period (709 - 741 A.H. (M.C.)). It was maintained during the Ottoman period.

Hammam et Temimy:

It is at the end of Khan el-Sultan - the main bazaar -

from the east. It belongs to the Ottoman period. It was built at the same time with el-Sultan bazaar. It belongs to Al-Temimy family.

Hammam el Khalil:

It is to the east of Jamie' el-Kebir in Haret el-Hableh. It belongs to the Roman period. It was rebuilt during the Islamic period.

Public baths are institutions for the promotion of health and cleanliness.[22b] The location of the baths (hammams) was carefully considered. To suit the needs of the population, one was placed near Jamie el Beikm, one in the center of commercial district, and another between Jamie en Naser and Jamie el Kebir. A bath was both a complex structure and an expensive enterprise, so it is not surprising to find that most of the baths, were built by governors and wealthy families. The regular visit to the baths was one of the city's most typical national habits (hamman el Balad). Two kinds of hammans developed : the Thermal Bath, and the Public Bath. Architecturally, the two types are similar. The order of rooms is the same, although the thermal baths differ in that they have a pool in the center of the last room. Single baths were the only type in the city. Single baths were reserved for three days a week for women only. Double baths,

were separated for women and men, and so allowed women to visit the baths at any time during the day are not found in the city. Not much attention was given to the exteriors of the hammams as to mosques. Many city hammams are not even detached buildings. Tucked away between houses, they are only recognizable by their entrance. Detached hammams have no windows, their interiors being lit by means of glass "eyes" inserted in the dome.

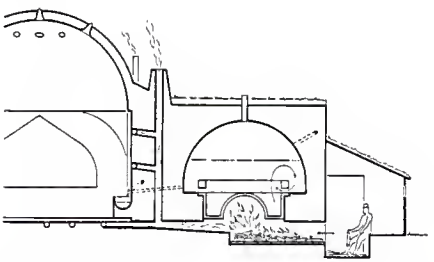
The use of various rooms

> "The entrance hall was used for receiving clients, for changing, and was the largest room in the building. It equaled the size of the whole site, and could consist of one or more inter-connecting rooms. Along the walls were slightly raised (5 to 8 feet) board balconies, covered with mats and carpets, where clients could rest after their baths and acclimatize themselves to the cooler atmosphere.."[23]

The Tepidarium

> "The second room, the tepidarium, was moderately heated so that the visitor could get used to the heat. In accordance with Islamic beliefs, toilets and depilatory were to be found off this intermediate room."[23]

> "The third room was the hot-room. It was a domed octagonal hall, around which were open recesses containing water basis. Along the walls were low marble benches. A stone table of the same height served as a massage table. Immediately behind the hot-room was the boiler-room."[23]



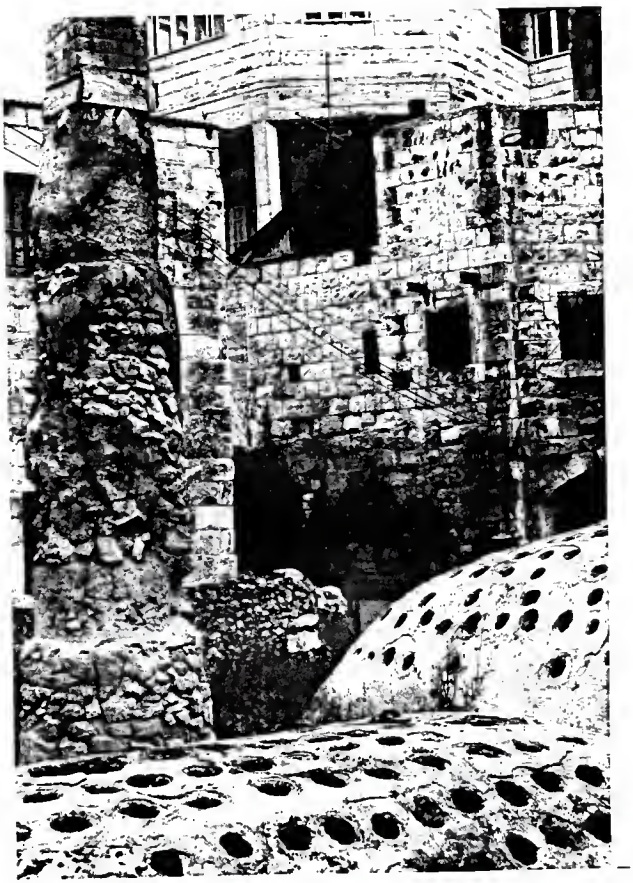
The heating system in the Turkish Bath
Source : Ottoman Architecture, Ulya, Vogt-Goknil, 1966

The Heating Arrangements

"The boiler-room was the rear of the building. The intermediate and hot-rooms were heated by hot air which circulated under the floor's stone tiles. The fireplace in the boiler-room was at a lower level than the floors of the other rooms. The fire heated water in a huge kettle and steam was distributed to the other rooms by means of channels. The temperature of the hottest room fluctuated between 86^0F and 104^0F but in private cubicles next to the boiler room it was much hotter."[23]

Hammam el Jedideh:

El-Jedideh hammam has remained the largest and most important hammam in the city. It is the only one that is still functioning today after some hundreds of years of

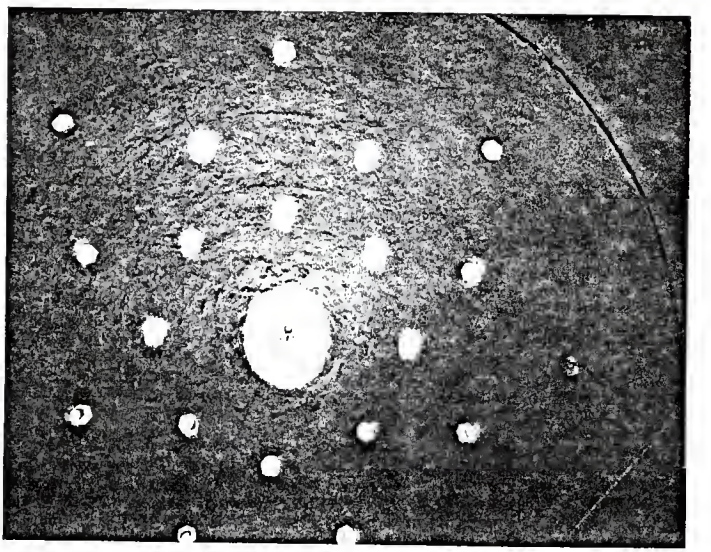


The roof of "Hammam" el-Jedideh

continuous use. It has inscriptions on its entrance. For the practical purpose of saving and keeping heat, "el Jedideh", like most hammams is surrounded by building and is hardly visible from the outside, as was also customary, the facade was kept plain.

The hammam has a single entrance, at the end of a long corridor, to the south of "en-Naser" street, south "Jamie el Beik". The entrance leads indirectly to the hammam both to provide privacy and to avoid drafts. This entrance leads into a large square room with three raised iwans, an octagonal pool in the center, and a high raised dome with two skylights, all typical and necessary elements of the room known as the "mashlah" or changing room. There the bather disrobes leaving his clothes in drawers provided, and there also he rests after the bath on the couches along the walls of the iwan. This is the only area of the hammam that is free of heat and steam, so whatever furniture is needed has to be kept there.

From the "mashlah" one proceeds to the actual bathing area. In all three areas - cold, warm and hot - steam and heat must be controlled, so every effort is made to avoid drafts; hence there are no windows in the bath. Light is provided by small glass openings studding the domes, which allow a small amount of light to filter through.



The cold room (A) (see Figure 3.7) known as the "Wasta-ni Barrani" (outer central), is the first room, to the right, of the bath proper and acts as a transition between the cold mashlah and the heated area. The warm room (B) known as the "Wastani Juwwani" (inner-central), is the room where beauty treatments take place. This area consists of one room, known as "maqsurah", opening off from it.

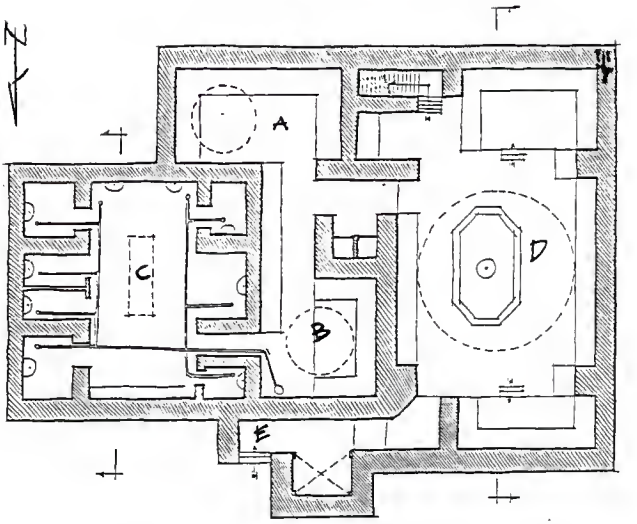


Figure 3.7

Plan of Hammam el-Jedideh

A - The gold room

B - The warm room

C - The hot room

D - Summer, changing room

E - Entry

Source : Personal Communication, 5th Year students, Dept of Architecture, An-Najah National University, Nablus, 1987

The hot room (C) known as the "Juwwani Hararah" (Inner-heat) is where the actual bathing takes place. The clients sit on built-in benches until they perspire, and then they wash. Here again the central area has one room only.

From the inscriptions on the main entrance we see that hammam el Jedideh was built in 1532 A.D., and it belongs to the Tuqan family.

KHANS:

In Nablus, guest - houses were available for every class of people. The buildings erected to afford a night's lodging to travelers, merchants and postal convoys are called "khans" or "wakalahs". (see Figure 3.5)

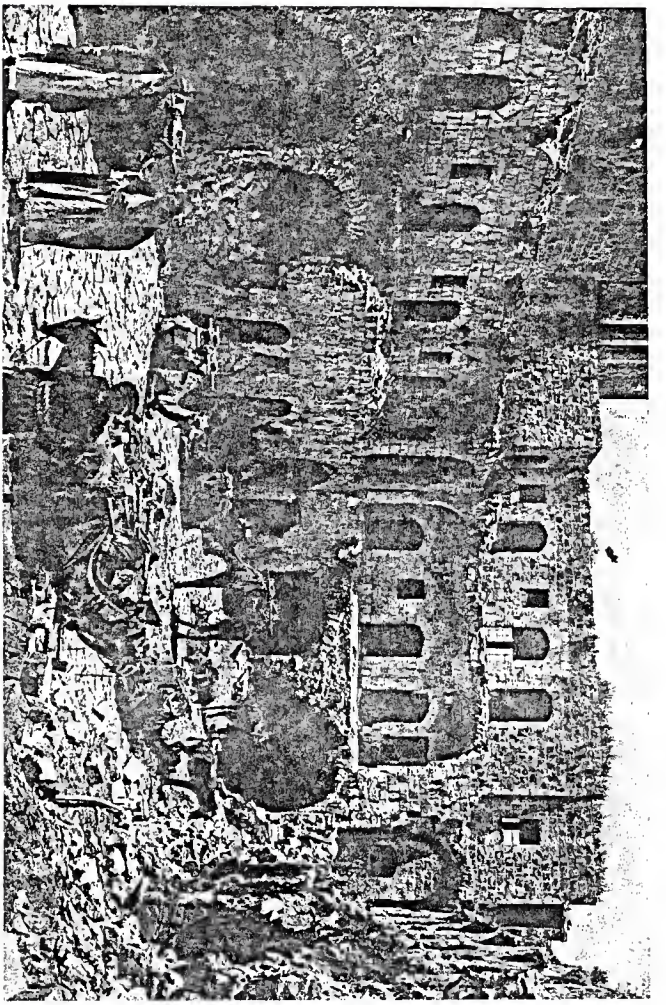
> "In the khans the traveling merchant would attend to the safety of his goods and wares, to repairs of his vehicles and the needs of his camels and horses, do his buying and selling, perform his ablutions and devotions and a day or so later, pursue his journey. In the time of war these buildings were also used for storing food and ammunitions. These were the requirements which the architect's plans were devised to meet."[24]

Wakalalet el Gharb:

Called also Al-Farokheyeh, after Farokh Ibn Abdullah who built it in 1620 A.C. It is in the west part of Khan al Jujar, to the south near Bab el Gharb "The West Gate."[25] This complex opens through a monumental portal, into an open court with two-story arches behind which are rooms; the lower level is occupied by shops and store rooms, and the upper by living rooms. Each room can be reached from open arcaded galleries set around the rectangular courtyard. These rooms are brightly lit and equipped with hearths and shelves.

In the center of the courtyard was a large fountain used for washing before prayer (as in mosque courtyards). The direction of Mecca was indicated by a simple stone. Old people say that there was a small one-roomed mosque in the courtyard. In 1927 most parts of the khan were destroyed as a result of the earthquake.

> "In the larger khans, however, the gateway leads into an open courtyard. Around this are arched and vaulted storerooms for baggage, hay and oats, separate private rooms with hearth, dormitories, bathroom and lavatory, as well as the gateway rooms for the innkeeper and janitor, a coffee-room, repair-shops for the vehicles, a smithy, and stables for the animals. In hot regions a stairway also leads up from one side of the courtyard to the flat roof for the evening assembly."[26]



Wakalelet el Gharb (Al-Farokheyeh)

Source : Palestina and das ostjordanland, Press, Ludwig, 1925

Khan Tujar:

It is in the center of "Al-Sultan" bazaar to the north. The best description for this khan was given by Miss Rogers who was a resident of Nablus for some years in the 1880's:

> "An opening in the middle of this arcade leads us into an extensive khan, well-planned, but so out of repair as to be almost useless. It is an uncovered square space, enclosed by a two-storied range of buildings. The ground floor is well adapted for lodging camels and other beasts of burden, but the upper chambers are so dilapidated that they afford but little shelter. We mounted a broken stone stairway, and with difficulty reached the terraced roof, which commands a good view of the town."[27]

AL-ZAWAYAH "MAUSOLEUM"

These buildings were constructed to house sufis, mainly Derwishes or other mystics. Such monuments, have filled specific needs and are an important aspect of the townscape, in modern time, mausolea have become chief national monuments to the memory of the founder.[26b] People, still visit these monuments from time to time, pray to God and light candle. (see Figure 3.6)

Beshr el Haffi:

In Haret el Hableh west of Jamie el Unbia. A large room with a mausoleum inside. People say that, el Haffi was buried there, while historians say that el Haffi was buried in Bagdad in the year 227 A.H. (M.C.)

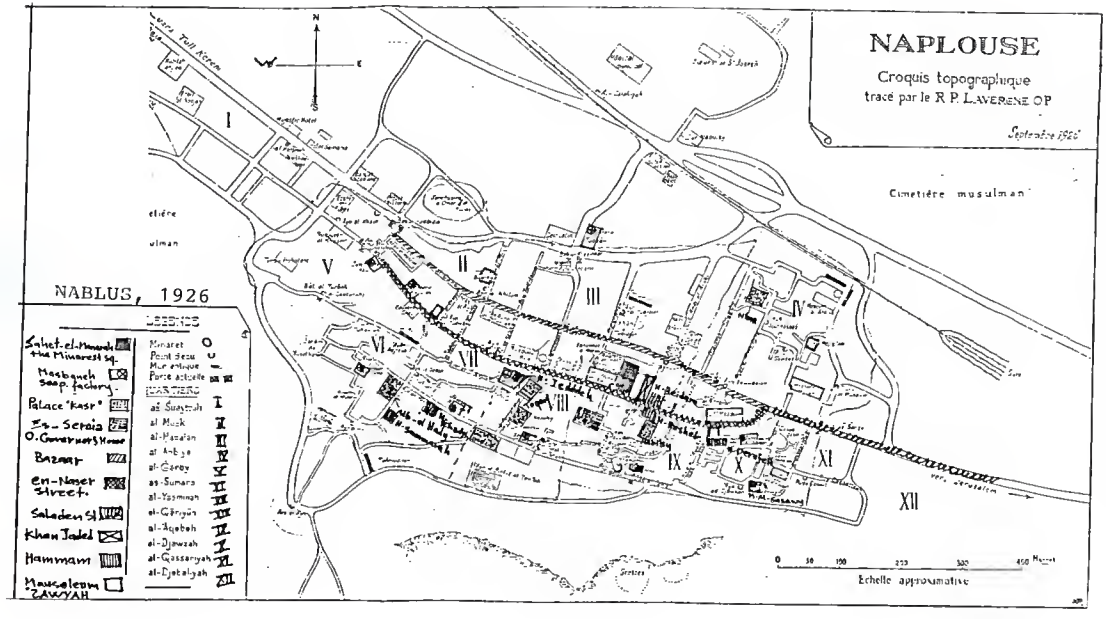
Derwishiyeh:

A small mosque near Jamie et Tineh, in Haret el Karyun. In this area there are the tombs of "Darwish Murad" and his brother "Sheikh Ahmed". Today Al-Bustami fmaily is taking care of this Zaweyah.

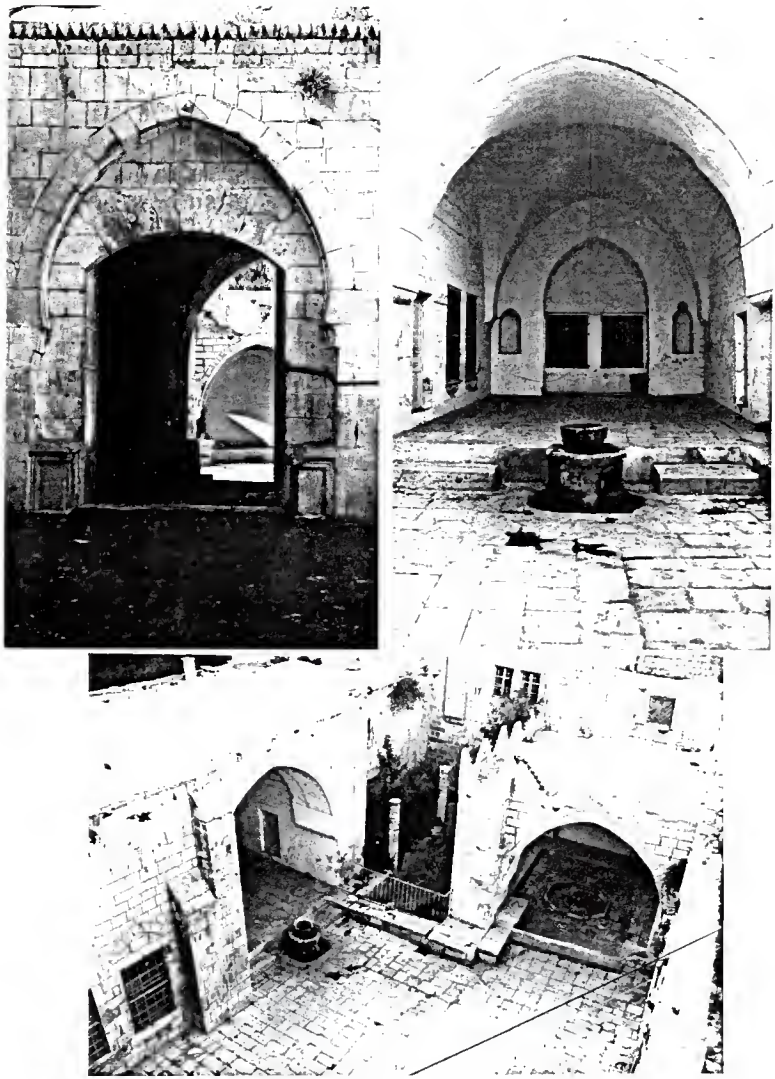
Sheikh Badran:

It is in the center of the town, north of the Seraia (the Governor's house). The mausoleum of Sheikh Badran is to the west of el Saraia, near the school named after him. Recently this school was changed into shops. Sheikh Badran lived in the seventeenth century.

The remaining buildings in the old city include the Governor's House (es Seraia) in the center of the city, to the south of Jamie en Naser. Near it, on the south, is the palace of the Beik "sheikh" of the Tuqan family, which is the largest building in Nablus, and said to be capable of containing 1,000 soldiers, with a stable for their horses. It



Source: zuhir Dobie, Nablus, 1988

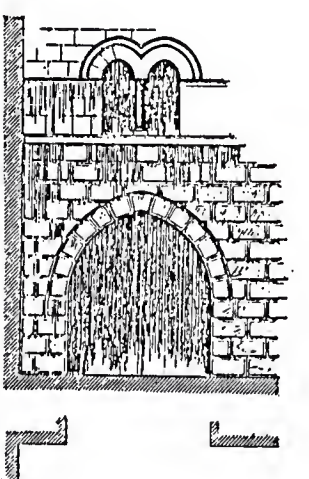


Views of Al-Nimer Palace

consists of three main courtyards, the entrance courtyard, the southern courtyard, and the northern courtyard. (see Appendix 4 for plans section and elevations).

Other large houses of Abd el Hadi and Al-Habulsi families are to be found in the same quarter (Haret el Yasmineh). Al Nimer palace is another large palace in Haret el Hableh.

Habs ed Dam



PLAN AND ELEVATION OF HABS ED DAM.

Source : Archaeological Researches in Palestine, C. G., 1896.

"The prison or cell of blood" Two pointed arches arranged at right angles, one open, the other blocked up. The stones of the arches and the blocks on the facade have flat bossages, and are pock-marked, with small delicate tool marks, not diagonal, round the edges. Above the two arcades is a twin ogive bay, the two archivolts of which rest on a small column with capital and base, and on a cornice which is extended right and left along the facade. in one of the angles is a small spring of water. [28]

Khan Ezbib:

In the north-east angle of Nablus is a ruin called Khan Ezbib (The Raisin Mart). It has on its south side a fine pointed archway, the keystone and voussoirs of stones carefully crafted, the bosses well worked. It looks like crusading work, but has neither masons' marks nor the distinctive medieval dressing. The wall is of masonry similar to that of the arch, perhaps a fine specimen of Arab work. The Khan has a lofty ogive arch in the middle of a wall of bossed stones, and exactly resembling in style at Habs ed Dam.[29]

SOAP MANUFACTURING:

The manufacturing of soap was the chief industry of Nablus. (see Figure 3.6) The soap was made from the pure olive oil favored by Muslims, coming mostly from local groves and being processed with an alkali in a vat, as seen in Figure 3.8.

Thomson, who visited Nablus in 1882, wrote:

> "There are at least twenty of those factories, so called, and this number is accounted for by the fact that the surrounding country abounds in olive-orchards, which furnish more oil than is needed for ordinary use, and the ordinary disposition of this surplus oil is converted into soap. The people of Nablus carry on considerable trade with the seaport towns from Jaffa to Beirut, and with the Arab east of Jordan, not only in soap, but also in grain, wool, sheep, and oxen."[30]

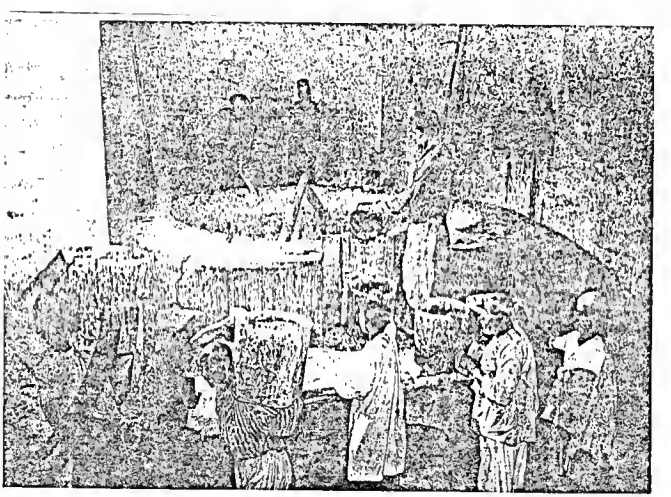


Figure 3.8 Soap Manufacturing - Nablus

Source : Palestinians and their society, Sarah Brown, 1980.

Lewis Leary visited the city in 1911 and said :

> "In the town itself there are a number of manufacturers of olive oil soap. It is the only place in Palestine where I have been awakened at five o'clock in the morning by the shrill blast of a factory whistle."[31]

In 1927 there were 24 such factories in Nablus, employing an average of 5 to 6 workers each. Labor was hired on a contract basis by a ra'is or supervisor who also controlled production. The soap industry of Nablus, provided the most important manufactured export from Palestine in the nineteenth and early twentieth centuries. The soap industry declined in the 1930's for two main reasons. First, Egypt, which had previously provided a market for almost half the annual production of Nablus soap, followed a world-wide trend in the recession and raised high tariff barriers against imported soap to protect its own industries. Second, the possibility of selling the resulting surplus on the home market was diminished by the appearance of a competitor in the form of a large new Jewish-owned soap and oil factory in Haifa. [32]

The Nablus soap industry was mostly in the hands of the traditional notable families there - such as al-Masri, al-Nabulsi, Tugan, Shak'a, and Abd al-Hadi (see Appendix 5 for plans of Sabanet Abd al-Hadi).

One of the ancient soap factories is Masbanet el Ghazzawy - a building of medieval origin made into a soap-works, as is shown by the name ("the soap-works of the man of Gaza"). The medieval tool-marks appear on the whole of the lower part of the door and the part of the arch that surmounts it, which has a moulded torus and rabbeted edges. The threshold is formed of two stones of the pillars of hewn stone, with moulded cornices. At the back is an orientated apse. All the stones display medieval tool-marks.[33]

Ancient Masbaneh:

Another soap-works, now the oven of Salim Beik. It has a door like that of khan ez z'bib. In the (modern) wall opposite, on the other side of the street, there is a fragment of medieval cornice built in, which extends over several yards.[33]

DECORATION:

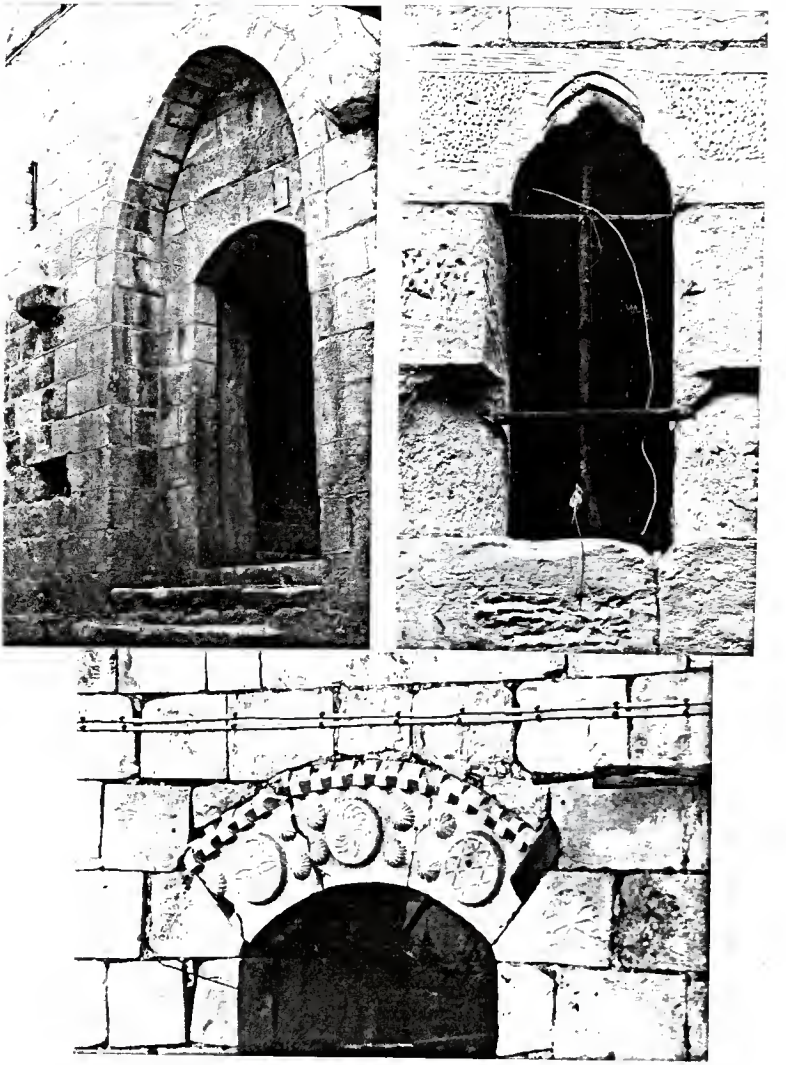
Once a building was planned and endowed, the next important consideration was its decoration. Decoration could be either simple or complex part of the structure or applied to it, in monochrome or in polychrome. It was always indicative of the patron's wealth as well as of a desire to beautify the building. The areas of a monument most apt to be decorated are, therefore, its most conspicuous parts.[34] On the outside of the buildings, the minaret (if there is one), portal, and windows are three elements where decoration tends to be concentrated. Minarets are the landmark of a mosque (en-Naser Mosque, el-Kiber Mosque, Al-Khadrah). The minaret's most visible upper part is the most elaborately decorated, whether a cube over a square shaft (Al-Khadrah) or a cylinder over a round one (Al-Naser), or a cylinder over an octagonal one (Al-Unbia). In the case of square minarets the upper cube is larger than the shaft, and rests on a decorative "muqarnas" arranged in a continuous band or in corner motifs or over a band of triangular elements, it is opened by decorative single or double windows and is topped bya conical roof over a short shaft. The circular minaret have a side cylindrical flattened-out muqarnas which in turn carries another cylindrical unit topped by a conical roof. In some cases the decoration is evenly distributed on the entire height of the shaft.[35]

Portals are another common recipient of decoration (bawabet el-Beik, Abdul Hadi).

Most buildings of the old city of Nablus, no matter how large or small, have some developed unit for an entrance, and quite often gates are their most elaborate and decorated element. The mosques, the palaces, the soap factories, ... etc., all have their decorative elements concentrated on their gateways. The portal through which the monument is entered becomes the single most ambitious element of those buildings. In other cases the portal reflects the beauty and decoration of the interior. As in en-Nimer - Tuqan palaces or the simplicity and minimal decoration of the building inside. Rarely does the old city of Nablus have a portalless decorated than an interior. The gateways were regarded as the show pieces of the monuments, to which they were attached and hence received as much decoration as the founder could afford to commission. (see Appendix 6)

Finally, a third element which was apt to be decorated are windows. Windows are always topped by a course of joggled stone. The lintel above the windows, or the course of stone above the lintel is always of joggled stone forming a decorative pattern of varying complexity. Occasionally a relieving arch above the lintel of a window, is built of

Portal with original wooden door, old city of Nablus



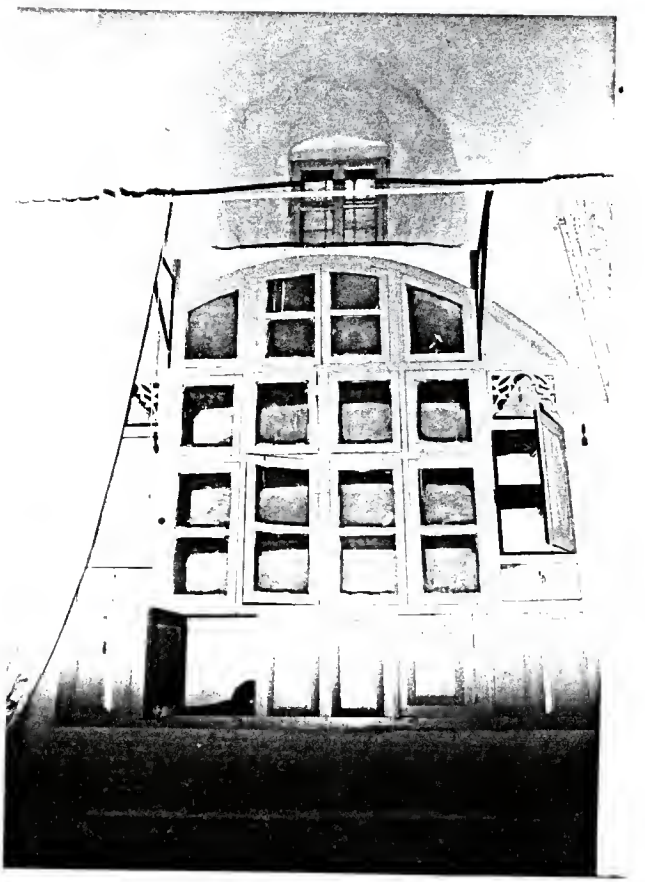
Stone decoration, old city of Nablus

joggled stone in quite elaborate pattern which is believed to be of Turkish origin. (see Appendix 6)

Interior Decoration

Inside the mosque, areas most commonly decorated are the mihrab wall toward which people turn in prayer, the mihrab itself, and occasionally the floors in the most important areas. As is always the case in the old city of Nablus, and elsewhere in the Muslim world, the mihrab will be identifiable by some sort of decorative feature, as a cushion arch, or simple columns with capitals, etc. In elaborate interiors, the mihrab is correspondingly the most elaborate element.[36]

A final interior element that is commonly decorated is the floor. In the areas of important buildings, where people pray or perform ablutions, the floors have extensive marble of tile decoration in organized square patterns even though the floors of the praying hall are usually covered with carpets. In the case of a palace the same attention was paid to the floors, and in some cases to the ceiling.



Interior view, in a house, old city of Nablus

Techniques

Decoration in the old city of Nablus falls into two categories, it is either part of the architecture, or it is applied to the architecture.[37]

Structural decoration is most often to be found on the outside of a building, and it can be an integral part of the medium of construction itself. Applied decoration is almost entirely confined to the interior.

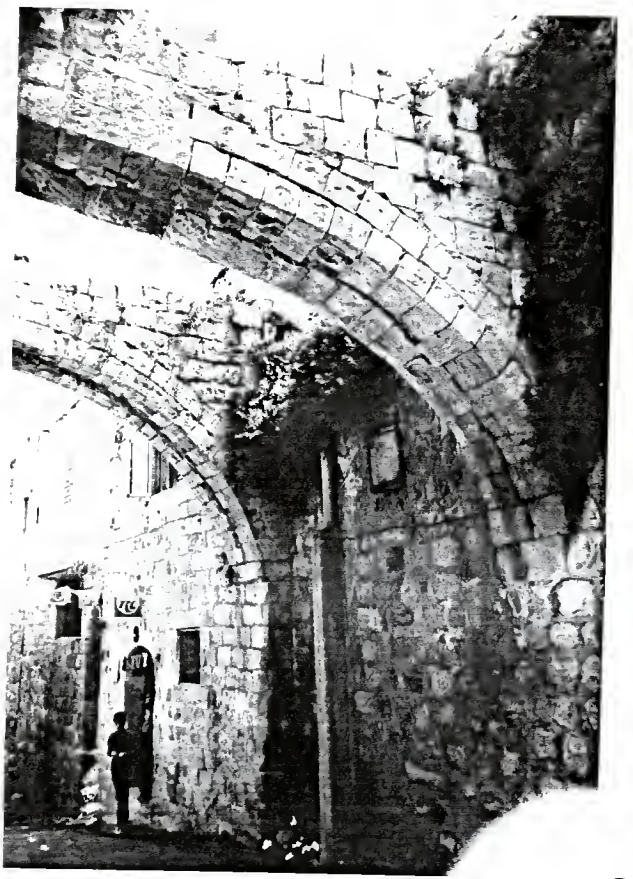
A very different kind of decoration, but one that can also be considered part of the architecture and is sometimes used as a decorative motif, is the inscriptions. In most of the buildings the inscriptions perform a utilitarian function - they are only there for the message they contain - but in a few cases, the inscriptions, given a prominent place on the facade, have a definite decorative function as well. The inscription between lintels and relieving arches also have a decorative function.(see Appendix 7) "Many of the Mussulman houses in Nablus have over their doors long inscriptions painted in red, nearly all containing the same formula, and design to inform the passer-by that the owner has performed the pilgrimage to Mecca."[38]

There is current capability of a stone masons to maintain and reproduce the stone bearing wall construction and decoration techniques.

Methods and Materials of Construction

The buildings of Nablus use local limestone almost exclusively, both inside and outside, for the walls, piers, and vaults, and in all types of structures. The local white stone was commonly used to construct modest buildings; commercial buildings - like khans - and functional structures - like Ains "fountains".[39]

Well-cut and sometimes well-dressed stone is a medium of construction that provides an air of solidity, sobriety, and grandeur to a building. We can see this in the facade of "Tugan" or en-Nimer palaces, the entrance to Jamie-el Kebir. When it follows the lines of the architecture, carefully executed masonry can make even the functional elements of a building look powerful and impressive, as it does in some of the stone domes of the city, and the gates of the palaces. Stone was also used for decorative motifs on walls, arches, and openings. Visual effects were also produced by a mixture of stones on facades, and around openings. (see Appendix 6 &



Buttresses in the old city of Nablus

7)

SUPPORTS:

Columns, mainly of reused granite or stone with either reused classical or contemporary capitals, are occasionally found as supports, but the instances are rare; columnar buildings were not common in Nablus, and when they were used, it was only in mosques, Jamie en-Naser has eight reused classical columns, with capitals of Doric style, dividing the prayer hall into a three-aisled area. Piers are another kind of support not commonly used, and then only in mosques. Columns and piers are probably encountered in the prayer halls of mosques because they provide a support for the roof that leaves space for large gatherings and they lend a sense of unity to large areas.

The most common support was either a plain, simple wall, or a wall pierced by arches and bays. Since most of the buildings involved are already small and are broken up into a series of smaller areas, the wall was the most appropriate choice, since it could act as both divider and supporter. The choice of support for buildings is also directly related to the super structure the supports have to carry. Vaults and domes usually require walls.

Vaults and cross vaults are the main supporting system in the old city of Nablus.

SUPER STRUCTURE

Vaulting and domed structures commonly cover square and rectangular areas. Occasionally, they are simple barrel vaults, especially in khans and corridors, but the simple cross-vaults cover the bays created by pillars in prayer halls, the galleries around courtyards, entrance bays, square and rectangular rooms, the series of rooms in khans - in short, practically every area in need of roofing.

In typical "Nablus" vaulting the lines of the cross-vault have a concave groove which starts from the corner of the wall "rukba" or arch and widens toward the center, the four grooves usually meet in a central concave rosette - the concave rosette is also encountered as a decorative motif in the ceiling of some buildings.[40]

In addition to vaulting, domes in a great variety of sizes and shapes were a common means of roofing. The areas covered by domes are invariable the most important, conspicuous, and sacred parts of a building. All tomb chambers, for instance, are domed, so are most areas in front of the mihrab. Some of those domes are extremely well built, and very

logical in their arrangement, others are awkward in both conception and execution.[41]

Today, people prefer to use flat roofs for economic and time factors, and because they like to keep with the modern styles of construction and architecture.

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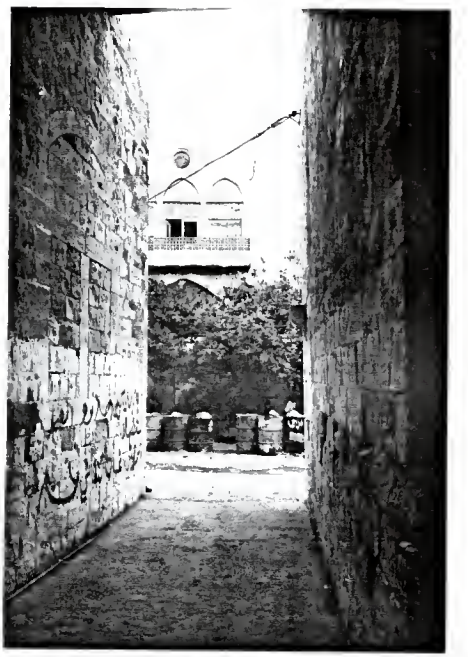
CHAPTER 4

PLANNING AND URBAN DESIGN ISSUES



PLANNING AND URBAN DESIGN ISSUES

The social, physical and ecological environment of the historic quarters of Nablus are in a state of crisis and confusion resulting from decades of piecemeal and even rapacious exploitation of resources and short sighted incremental and non-comprehensive planning.

Most of the streets of today's old quarters of Nablus are designed for pedestrians. The quarters have been planned as self-contained communities in which every activity took place through pedestrian-scale narrow streets and alleys.

Cars in al-Karyun quarter, 1987

> "The narrow, winding streets were, accordingly, a sort of built in system of traffic control, inhibiting the movement of men, animals, and commodities through areas where it was preferable that they be barred or at least limited. It all added up to an informal, but nevertheless, effective zoning plan. Certain areas were deliberately given narrow streets and relatively less accessible locations. Others, responding to the needs of bulky or heavy exchange, were situated where this could be achieved with a minimum of confusion, usually close to or just beyond the city's outer walls. Still other city activities were located in conformity to their industrial needs."[1]

With the arrival of the automobile at the beginning of the 20th Century, the street pattern was found to be inefficient and sometimes totally unsuitable. Therefore, Nablus underwent a drastic physical change primarily for transportation on the legal basis of a "Street widening Act".

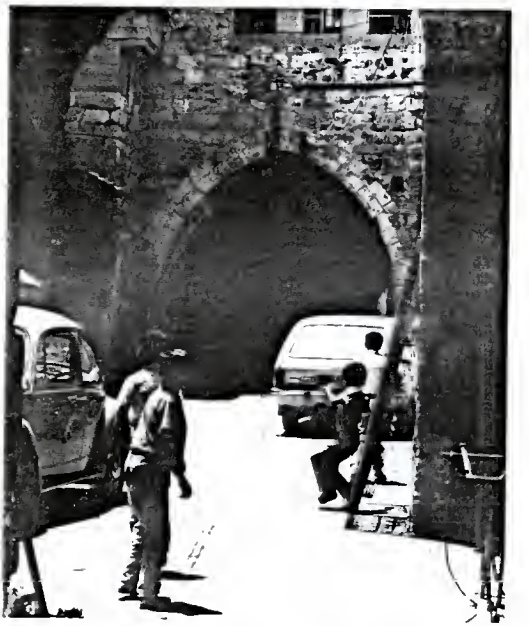
> "At present, therefore, Middle Eastern cities are expanding rapidly but in a piecemeal uncoordinated fashion, with growing car ownership amongst the new middle classes."[2]

> "Naturally, it is inevitable that we build wide streets in order to accommodate motor cars. However, there are better means to provide for cars than to widen the existing streets in the historical quarters and ruin their character. One proposal is to surround the old quarter with a ring road from which cul-de-sac streets could penetrate inward. This would allow easy access for ambulances and fire-engines and other emergency vehicles."[3]

In addition to street widening, stone was replaced by asphalt as a paving material in many streets in the historic quarters of the Old City of Nablus.

This replacement of stone with asphalt along with the widened streets had several negative impacts on the urban design fabric of the old city of Nablus:

There was no comprehensive zoning plan to create harmony and rationality to assure appropriate use of preserve open space, in short balancing all the essential supporting facilities of new environments. There existed no rationale to preserve the human-scale for the benefit of man.



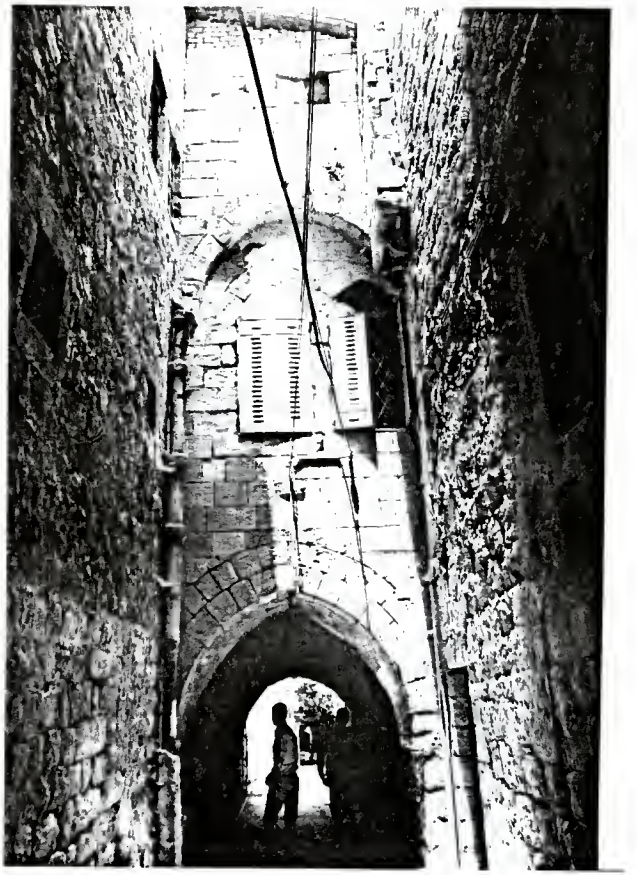
Narrow streets became parking lots for cars in the old city, 1987

Janet Abu-Lughod suggests that many Middle Eastern countries, when compared with developed countries in the nineteenth century, are

> "developing under very different circumstances of transportation and communication. They appear to be moving into the new larger scale of urban hierarchy, by passing that intermediate stage that gave rise to what we have mistakenly called 'normal' or 'balanced' urban hierarchies ... it would be foolhardy to aim at the creation of a hierarchy scaled to a now defunct technological situation simply because it conforms to norm."[4]

Narrow streets in the historic quarters became parking lots and neighborhoods lost their natural human scale and started to suffer from the intrusion of the machine.

With the increased number of automobiles in the second half of the twentieth century, traffic in the historic quarters of Nablus became a considerable problem, especially during the rush hours which paralyzed all the streets of the historic areas. New areas were provided with adequately designed streets. Human activities and land uses had to be rearranged in order to fit with the modern travel methods.



Street in the old city of Nablus, 1987

En-Naser street was not designed for cars

In addition to the problems created by automobiles, several other inadequacies for sound urban planning for the historic quarters of Nablus resulted from the following:

The municipality is not equipped as adequately as it should be to collect, collate and analyze information needed for synthesis and design. Municipal engineers are so underpaid that they are often forced to resort to unorthodox means to supplement their meager wages. Such means like concentrating on private practice that usually becomes more important than their civic responsibilities. The municipality is usually so busy with routine and time consuming paper work, with granting building licenses, with paving roads and sidewalks, with contractual work and supervision, that no time is left for actual planning.

Hassan Fathy suggests that;

> "when Middle-Eastern countries changed to the so called modern style, two factors continued to be virulently active in prohibiting design in the traditional style:
>
> 1)The municipal laws, which are based on the assumption that all buildings are extroverted, and
>
> 2)training given to architects at the universities.
>
> 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 and widespread of examples of the most inappropriate designs - witnessed in almost all cities of the Middle East."[5]

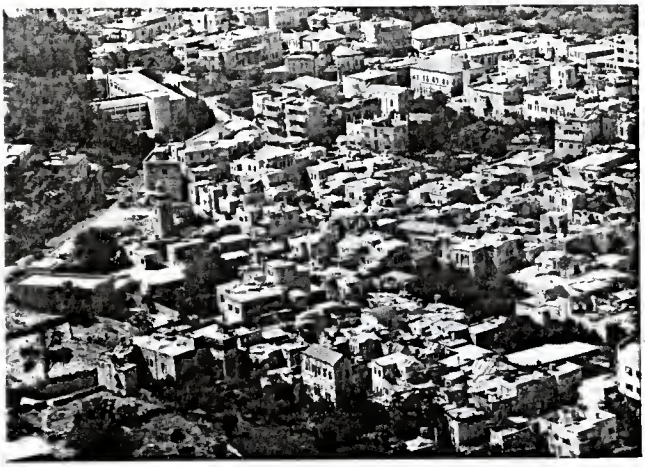
Due to the present political situation, the city of Nablus as a piece of urban creation, is a sad example of the twentieth century's missed opportunities in architecture.

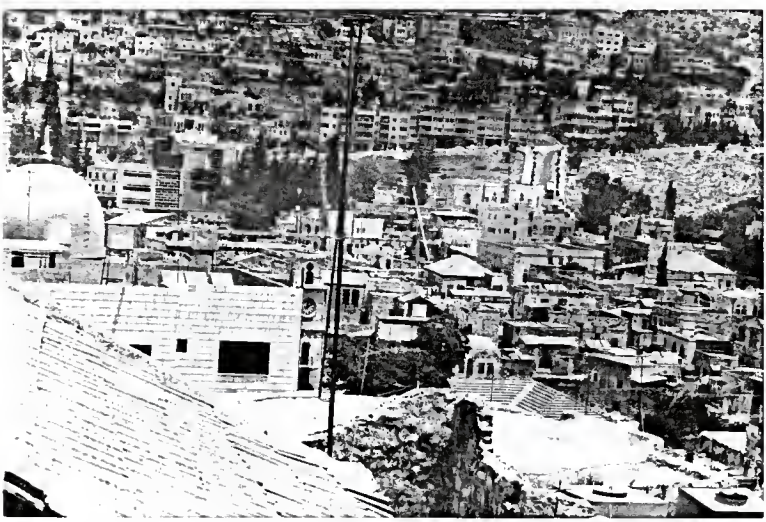
In many cases, it is the absence of a sense of integration into a comprehensive urban fabric, and not so much the lack of quality in architecture itself, that produces architectural failures. Or, to put it in another way, the architectural design may be excellent when judged on its own terms, but disastrous in terms of its surroundings because it has been conceived in isolation. New construction has failed to respond to Arab tradition. There is no further need to imitate Western culture.

Abdulla Y. Bokhari looks to this problem as:

> its "in the beginning, lack of integration of new and old could be attributed to the speed at which modernization had to take place, and especially to the need to provide for the numerous newly introduced automobiles with adequately wide avenues. But as the taste and the life of the people changed, it simply became too late to attempt any physical or even functional integration of the old with the new ways of doing things."[6]

> "In the contemporary Arab-Muslim city, the process of relying on customs of use for generation and control of change has been replaced by another process which relies on preconceived, prescriptive conventions of form. ... most of these conventions developed in different social context.





Modern sturctures in the historic quarters, 1987

> As a result of borrowing physical conventions from other contexts and applying them in the Arab-Muslim city a duality has developed in the system as a whole and more specifically in its regulatory mechanism. On the regulatory level this duality has resulted in confusion and contradiction... on the physical level, we have the old and new environments distinctly apart from each other. This, on the social level, has encouraged the segregation of the city's inhabitants into poor or rich respectively."[7]

Absence of statistical method and comprehensiveness, accurate population data, demographic information, and necessary surveys in the planning process of the historic quarters resulting from occupation and lack of financial support, created social injustices. Only rough estimate existed that could not be depended on for serious analysis to introduce and implement sound planning. Moreover, the role of planners and architects are limited in the large-scale programs.

> "one factor which encouraged and probably reinforced the development of the contemporary rather than the traditional environment concerns the field of architecture and urbanization on both the intellectual and the practical level. The field of urban studies is an outcome of modern social science which itself grew out of and is based on the idea of urbanization in the west."[8]

> "Another factor which certainly helped this process is the almost complete lack of analytic studies on the traditional Arab-Muslim city. Most of the studies on the traditional physical environment tend to rely on descriptive methods which one barely, if at all, informative in understanding the process of physical development."[8]

A long history of foreign intervention - Ottoman rule, the British mandate, Jordanian rule and Israeli occupation - as well as the absence of professional civil service, have miligated strongly against the introduction and application of sound city and regional planning.

In the past, time pressures have forced decisions to be made without reference to a long range vision.

> "Modern developments are often conceived in isolated blocks and use the historic fabric as the quarry, so to speak, out of which open spaces are cut. Because the topology of block development is not compatible with the contiguous cellular structure of the traditional urban fabric, problems crop up at the border between old and new that remain unresolved, leaving open scars in the structure of the old city which will eventually provoke further destruction. This mutual rejection by two incompatible types of tissue makes transplantation of new elements extremely difficult or impossible to accomplish."[9]

> "By implementing large-scale projects of huge dimensions all at once, no time is allowed for an evolutionary process. The old city is given no chance to adapt the intervention or to recover from the surgery; mistakes cannot be corrected; lessons cannot be learned; and a genuine local tradition has no time to develop."[9]

Large scale modern building in the old city of Nablus

In most areas of the old city of Nablus the original dwellers have moved away to the suburban areas and have been replaced by rural immigrants. Social changes have made families much smaller than they used to be, nuclear families replaces extended families, and this, combined with the in-

creasing population density caused by rural migrants, often means that the existing housing stock is totally inadequate.

Most parts of the old city were not preserved after the 1927's earthquake, 1987

"changes were also apparent in the residential districts. .. The rich were beginning to move to the suburbs that were opening up to settlement as transportation improved."[10]

"The overcrowding of the madina soon caused population movement outwards to other parts of the city. The families who found it easiest to relocate were those linked to the alien power structure. ... Their places were taken by newer and poorer arrivals to the city..."

"The effects on the physical fabric of the old cities was devastating - as the more affluent residents moved away their houses were increasingly subdivided in a process of 'taudification'."[11]

To date no significant move toward gentrification has taken place in the city. The traditional houses, even those still in the hands of a single family, are half-deserted, ill-maintained, and often crumbling, or split into small apartments, gathering several independent units around a single courtyard, which is then divided up to provide privacy for each tenant family. In some of the disintegrating old houses, top stories are starting to crumble even as people work or live on the floors below. (see Figure 4.1) The owners neglect the decoration and woodwork, because maintenance is too expensive or because the craftsmen available no longer know how to do the work. (see Figure 4.2)

Figure 4.1
New additions were added at the expense of the narrow streets

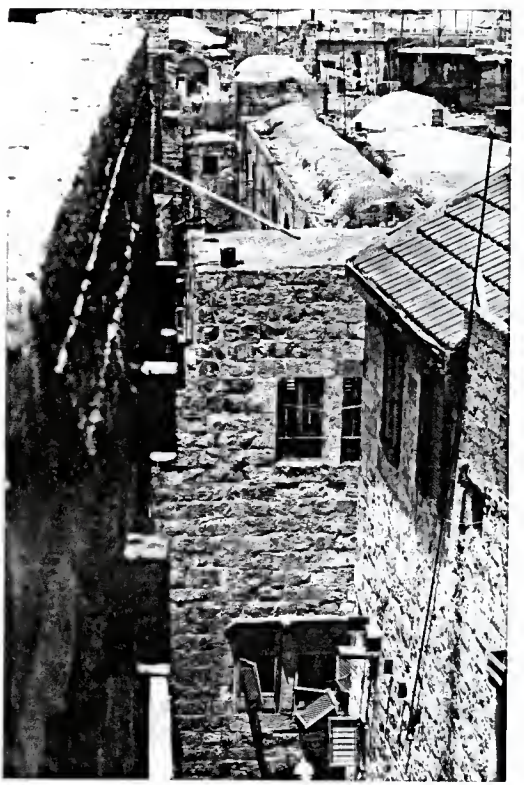
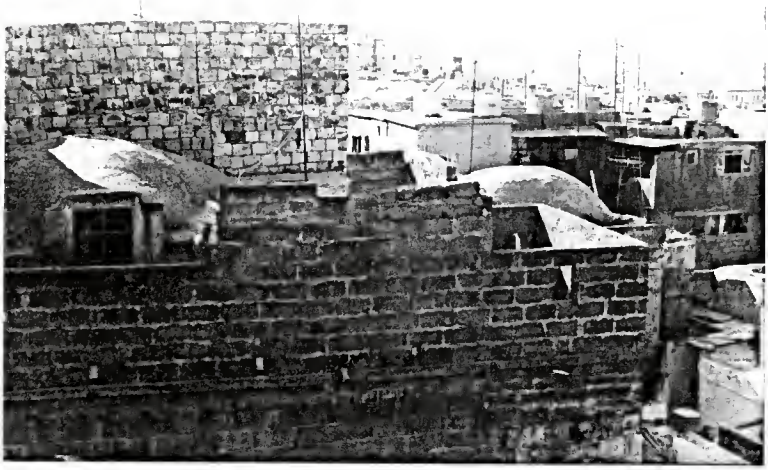


Figure 4.2
Old windows are neglected in the old city of Nablus

"Social segregation now threatens to turn the madina into a quarter for the poor and destitute, because living in the new areas of the city has become a symbol of success. Buildings are deteriorating as the old dwellings are sold or turned into rooming houses for immigrants unable to maintain them, further jeopardizing the architectural patrimony of the city ... Existing public facilities are not maintained because the municipality prefers to spend its revenues in the new areas of the city."[12]

Some of the owners demolish houses because they no longer suit their needs, and because they wish to build new structures that will generate higher profits.

Concrete became a major construction element, 1987



New construction materials are introduced to the old city, 1987

Figure 4.3
Concrete wall in the main open space of Al-Karyun quarter, 1987

Figure 4.4
New window materials are introduced to the old city, 1987

New elements such as corrugated iron sheets and concrete pillars and walls, are also appearing in the urban landscape as materials for renovation and repair. If people apply paint, the color they use can threaten the harmony of the street.[13](see Figure 4.3 and Figure 4.4)

Many tenants in the old city of Nablus are trying to improve their residential units by using new materials and adding new openings and balconies. They see these changes as improvements, but in the process of making them they are destroying the harmony of the old city. (see Figure 4.5) Introducing sanitation facilitates, while necessary, also can often damage the streetscape, as can be seen in most parts of the historic quarters, where plastic pipes are introduced. "Where modern air-cooling devices compete with "mashrabiyyas", - bow windows - comparable esthetic consequences result."[14](see Figure 4.6)

New stories are added on the top of original buildings, 1987

Figure 4.5
New additions on the top of the old building, 1987

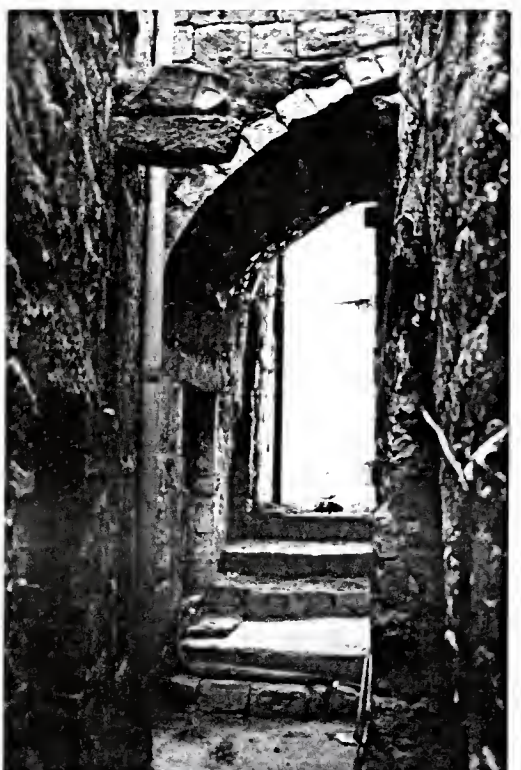


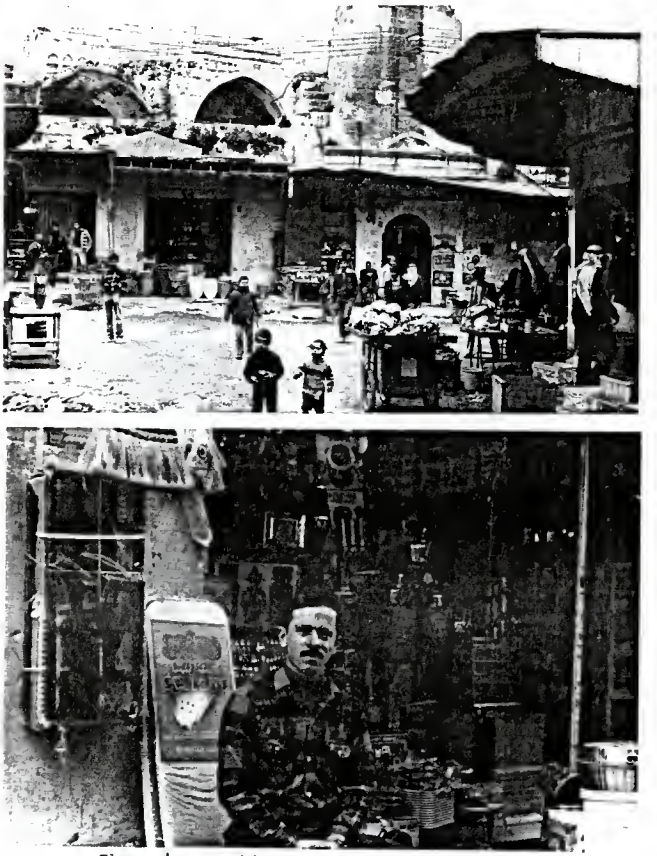
Figure 4.6
Plastic sewage pipes damage the streetscape, 1987

Additions built on the top buildings are changing the architectural character of the structure and the city scope as new materials, new proportions, and quite different styles are introduced in them. These additions can be explained in economic terms, but they can be esthetically displeasing as well as structurally dangerous, since the buildings were not designed to carry them.[15]

Very little effort has been made to equip the old city with modern facilities, or to adapt the facilities it has to its special cultural needs. One elementary school has been built inside the walls, in al-Qaicariya quarter, using up what was once open space. Not only does it add to the crowding of the madina, but it is in no way integrated into its surrounding. Worst of all, many traditional facilities which originally had very important functions and which had provided a certain climate of humanity, were neglected, abandoned, or transferred to the new city. They include old schools (the old Najah school), Hammams, Khans, springs, etc.

Shopping patterns have also changed. The bazaars are now almost always deserted. Juice is bought in cans instead of using natural fruit. Shops need to have display windows and lighted signs, which changed the entire character of the bazaars. These improvements spoiled the whole image of the

bazaars since the bazaars were designed to accommodate many activities, and not to be treated as museums.



Shopping patterns are changed, 1987

"In many cities separate commercial centers have appeared outside the historic core, and these new

central business districts have begun to absorb most of the evolving modern retailing facilities and banking functions. Nevertheless the old town remains the most powerful low-income commercial center of the city, serving an increasingly dense, poor residential population as well as traditional provincial customers. However, intrusion of foreign manufactured goods, changing demands and aspirations of the people, and in some cases the influence of international tourism, have greatly modified the 'suqs'. Production patterns have also altered. Many of the small workshops located in and around the bazaar complex have disappeared and declined through competition from both imported and local mass-produced factory goods. The large, modern factories established in recent years are located outside the old city where cheap land is available for building."[16]

Khans (inns), wakalas, and funduqs (hotels), were meant to be used simultaneously for people, goods, animals, and even some crafts, storage, and shops. They were important places in the economic life of the historic quarters of Nablus. Most of them have been turned into warehouses or housing units for the poor. Still others have offices or other structures built in the middle of their courtyards, with a small passage left between them and the peripheral galleries.

An infrastructure has to be introduced into the old areas to provide the same living and health standards as residents of the newer areas of the city enjoy. Bringing water to each house has a profound effect on the streetscape, which by providing running water pipes in the streets, with

Figure 4.7
Plastic pipes, electric cables damage the image of the old city.

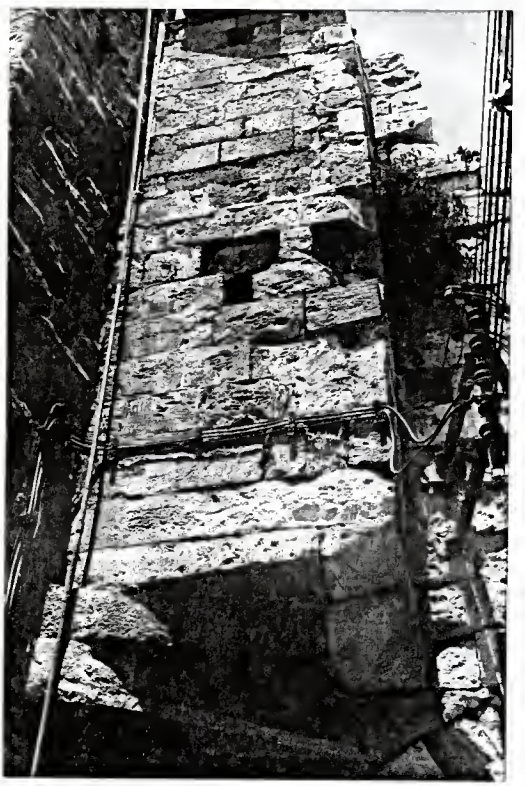


Figure 4.8
Electric cables spoiled the facades of the buildings, 1987

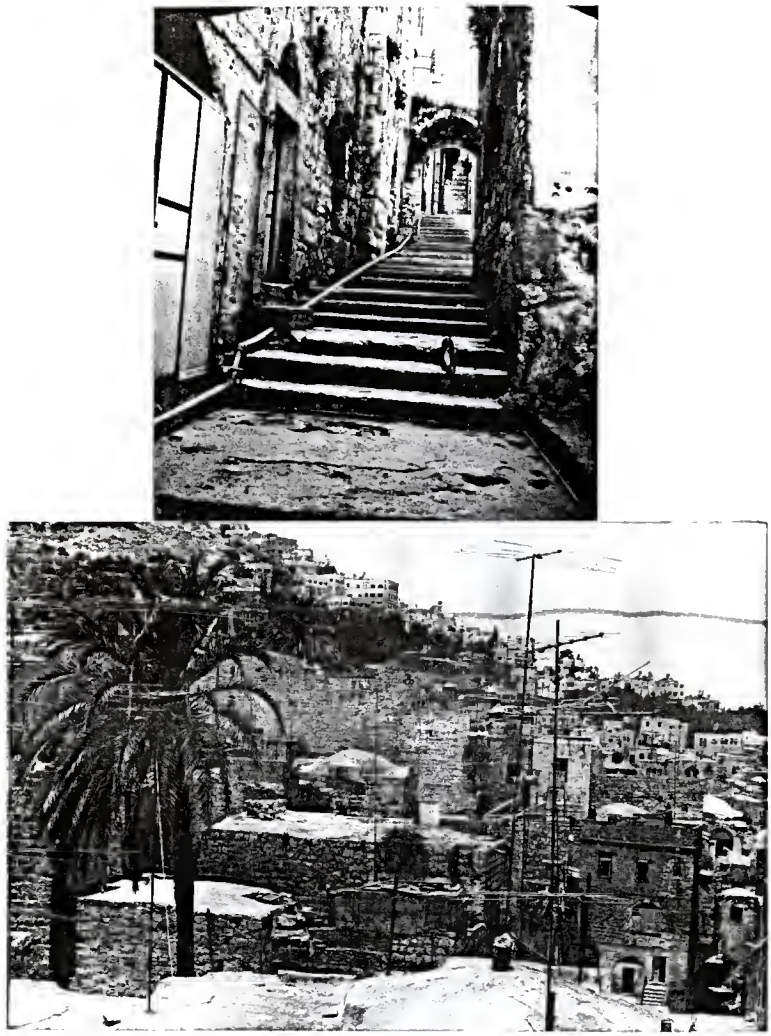


Figure 4.9
T.V. Antenna, water pipes cause many problems to the landscape of the old city, 1987

concrete boxes to fix them to the ground, spoiled the appearance of the streets. Garbage disposal, asphalt covering ancient cobble stones, graffiti, television antenna, and the introduction of telephones and electricity, with their wires, cables, and transformers, pose similar problems for the traditional urban landscape.[2] (see Figure 4.7, Figure 4.8, and Figure 4.9)

In contrast to the lack of concern for the old city of Nablus as a whole, some care has always been shown on the part of rulers for the large monuments, especially the great mosques. Their maintenance has ensured their preservation as cultural symbols up to the present time.

Although much damage has been done to the historic quarters of Nablus, the opportunity still exists to salvage what remains, and restore it to become a glorious Palestinian city as it used to be in the past.

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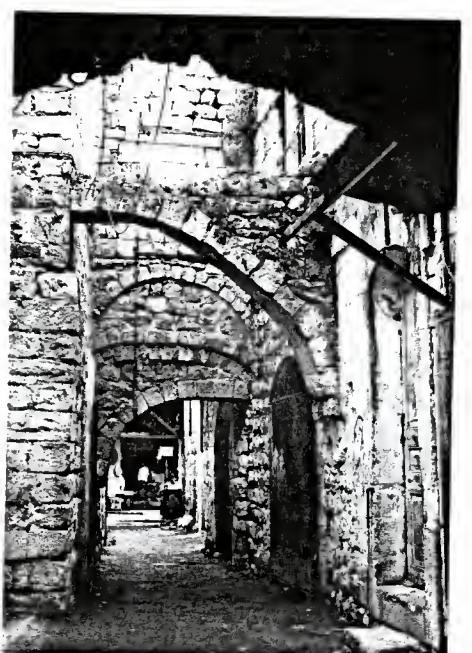
CHAPTER 5

Recommendations & General Guidelines for Developing & Preserving the old city of Nablus



General Urban Design and Preservation Guidelines

Now that some of the urban design and planning issues of the historic quarters of the old city of Nablus have been discussed, it is clear that the old city of Nablus needs a systematic program of preservation to maintain its buildings and to protect its historic quarters.

The following urban design and preservation guidelines are recommended as the basis for any kind of preservation and development in the historic quarters of the old city of Nablus.

General Goals: *1

1 - To preserve, protect and enhance cultural resources for the benefit of the city and for future generation.

2 - To encourage appreciation of cultural resources through preservation activities, education, and public awareness programs, in order to strengthen the sense of community and identity of place.

3 - To create mechanisms for managing and maintaining the built environment, and to coordinate these mechanisms with existing programs and procedures at the city and

the national levels.

4 - To establish an integrated system for developing, promulgating and evaluating preservation standards involving public and private interest groups at all levels.

5 - To assure that preservation considerations are integrated into the continuing planning process.

6 - To identify ways and means of translating the above goals into constructive and economically realistic projects and programs.

NABLUS PRESERVATION COMMISSION:

It is strongly recommended that the city of Nablus formulate and adopt an ordinance which will establish a preservation commission - Nablus Preserrvation Commission - to develop and administer support programs for the preservation of cultural resources.

> "The ordinance is central to the implementation of a program for preservation. ... Decisions will frequently require detailed documentation and in depth analysis of individual resources beyond the more general scope of the inventory. Value judgements must be made which involve the relative practicality of protecting or enhancing particular resources. New programs for cultural resources will require and benefit from the input of skilled professionals and community leaders. In particular, the coordination of identified resources and values with the on-going programs, city departments, other governmental agencies, and

private local interests is necessary. The preservation commission is constructed to respond to all of these needs"[2]

The preservation commission shall include archaeologists, local historians, architects, architectural historians, urban planners, and engineers. Other members shall represent business, developers and private preservation groups. All members should possess a demonstrated interest in the preservation of the city's cultural and historic resources.

It is recommended that the Commission have nine members, and three of them shall be elected every year. Three member shall be urban planner, an architect or architectural historian and the third shall be either an archaeologist or engineer. Three members shall be historians, and the other three shall be general people.

The Role of the Preservation Commission

The general role of the Commission is to develop and promote preservation activities within the Old City of Nablus. There are several specific concerns which the Commission should be prepared to address:

1 - The Commission shall concern itself with all aspects of

preservation of all historic buildings in order to protect the rapidly vanishing historic environment that gives distinction, variety and definition to the surviving historic quarters.

2 - The policy of the Commission shall be to preserve and protect the city's historical and aesthetic resources and their environment.

3* - The Commission shall review the inventory of cultural and historic resources included in any project and commence to adopt an official cultural and historical resource list.

4 - The Commission shall establish a system for maintaining the inventory files with provisions for adding research data, making changes in status, and adding resources deemed to be significant. Such files should be accessible to the general public for easy reference. To be effective as a planning tool, the archives must be updated continually.

5 - A detailed archaeological survey of the Old City of Nablus shall be completed. The Commission shall assist in obtaining funding for this cataloging activity.

6 - The Commission will be responsible for formulating a precise plan for the historic preservation element in the general plan for Nablus.

7 - The Commission shall be intrinsic to the City's role in preparing or reviewing environmental impact statements

which are required when national projects affect cultural and historical resources. This may mean providing assistance to formulate a statement when it is the city's responsiblity to do so, or commenting on statements developed by other agencies.

8 - The Commission shall assist in refining the urban impact statement procedure outlined in the general plan in order to incorporate and integrate cultural and historical resources.

9 - The Commission shall promote community preservation by acting as an information source for other city departments, boards, and agencies in matters concerning the historic quarters, and by generating new ideas and support concepts for programs which will enable the historic quarters to remain viable elements in the city.

10 - The Commission shall promote and endorse educational and cultural activities in schools and throughout the city which will assist citizens to recognize, understand and appreciate their environment. This role will require significant coordination with educational institutions, universities, public interest groups, clubs, and, in particular, with private preservation groups.

11 - The Commission administer system shall promote communi-

ty preservation by:

* approval of proposed actions
* conduct public hearings
* make recommendations
* support.

The effect of light and dark in the historic quarters

Comprehensive Survey and Evaluation:

a. Survey

The ordinance shall require the Preservation Commission to carry out as soon as possible a comprehensive survey and evaluation of natural features, structures of historical or architectural significance. Based on such an inventory, specific sites and buildings may be designated for protection.

> "The survey or comprehensive inventory and evaluation", lists all structures of historical, architectural or cultural importance in a community or historic district. Preferably it includes elements which enhance the environment surroundings structures, too.... For each eligible structure or element, detailed information is collected and systematic records established, included descriptive materials, photographs, and, if possible, measured drawings or plans. The information collected must be sufficient to allow the Preservation Commission and city council to determine the significance of a particular structure and to judge the merit of designating it for protection. This information also assists the Commission in reviewing proposals to alter protected buildings and spaces."[4]

As Ziegler, Alder and Kidney note in Revolving Funds for Historic Preservation, this is "the inventory type of survey that evaluates all the properties of a city or neighborhood to determine which are of no interest, which must be

saved, and which it is more or less desirable to save. With such a survey, the preservationist establishes his goals objectively, while his findings in a published form lend authority to his pleas for preservation"[5]

Marsha Gelenn suggests that a given structure or site can be studied and recorded through:

"-measured drawings

- photographs
- photogrammetry
- historic research - to discover the history of the element being studied, the architects, the dwellers, their times, lives, and possessions.
- architectural research - to study the existing structure and materials to determines the original structure and subsequent changes, present condition, type of materials, dates, and to record all findings and place in architectural history.
- archaeological research - to discover the historic and architectural details not obtainable from documents or architectural research, i.e., foundations, outbuildings, probable uses and verification existing information.
- planning research - to study the element in

relation to the site, the environment and the community."[6]

In a recent research - A New Documentation Methodology : Videographic Architectural Analysis - C. Barrett Kennedy, Dennis B. Jones, Robert P. Schubert, Michael G. Yamarik, developed a new method for documenting architectural resources by using contemporary videographic and computer processing technology to enhance traditional recording procedure. Techniques for the architectural analysis of video images have been developed by merging computer hardware and software systems with principles of photographic and photogrammetric interpretation. By applying these technologies to the survey process, a multifaceted document can be created that comprehensively describes the built environment. The survey process is facilitated by the ability to extract dimensionable images of buildings from video recording without resorting to costly and time consuming hand-measuring techniques.

"The key component of the documentation system in VCAD, the Videographic Computer Assisted Designer software package developed by Videocad, Inc., as an interactive videographic data base manager. ...it serves the user as four fundamental data management tools:

1 - an audio-visual archival document that combines dimensionable video images, environmental sounds, and verbal commentary.

2 - an analytical device for extracting quantifiable data from the multifaceted context of the built environment.

3 - an interactive simulation program that depicts historical change, demonstrating the contextual evolution of a site and visually promoting an understanding of the essential character and integrity of cultural resources.

4 - a planning device that prescribes appropriate material treatments, maintenance routines, development schemes, or monitoring activities."[7] (see Appendix 8)

b. Study of the Socio-economic Context

"In order to gain some idea about the purpose which historic buildings and sites could fulfill in the future, an in depth socio-economic study needs to be carried out. The aim of such study, embracing the disciplines of city and physical planning, should be to assess the viability of the area surrounding the buildings or sites which are deemed worthy of preservation. An indication could be given in the

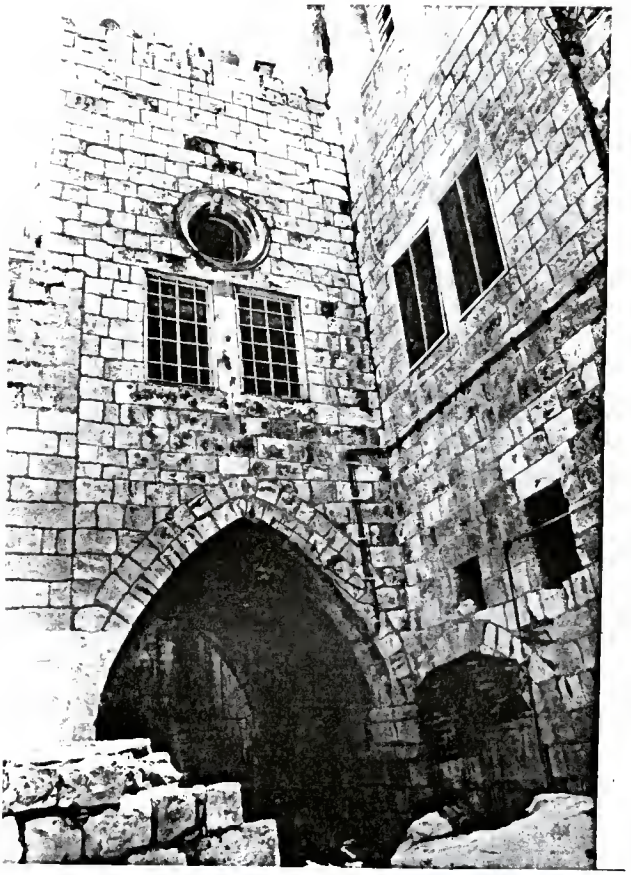
form of an analysis of strengths and weaknesses of the purposes for which each individual historic feature would be suited."[32] (see Appendix 9)

c. Evaluation

Having listed all structures and sites the next recommended step is to evaluate their relative significance for community preservation. Structures may then be grouped according to preservation priorities. This information may be recorded on a map indicating the location and concentration of significant structures and sites where future developments may take place without destroying the historic integrity of the district. Such information may also be compiled in a ready reference form.

The criteria for the evaluation of each structure or feature shall be determined as follows (see Appendix 10):

1. ARCHITECTURAL SIGNIFICANCE
   a. Exceptional
   b. Excellent
   c. Good
   d. Fair
   e. Poor



A building in the old city of Nablus, 1987

2. ENVIRONMENTAL SIGNIFICANCE

   a. Exceptional

   b. Major

   c. Contributing

   d. Non-contributing

3. ALTERATION OF ORIGINAL DESIGN

   a. None or Little

   b. Moderate

   c. Considerable

4. HISTORICAL/CULTURAL SIGNIFICANCE

   a. Exceptional

   b. Major

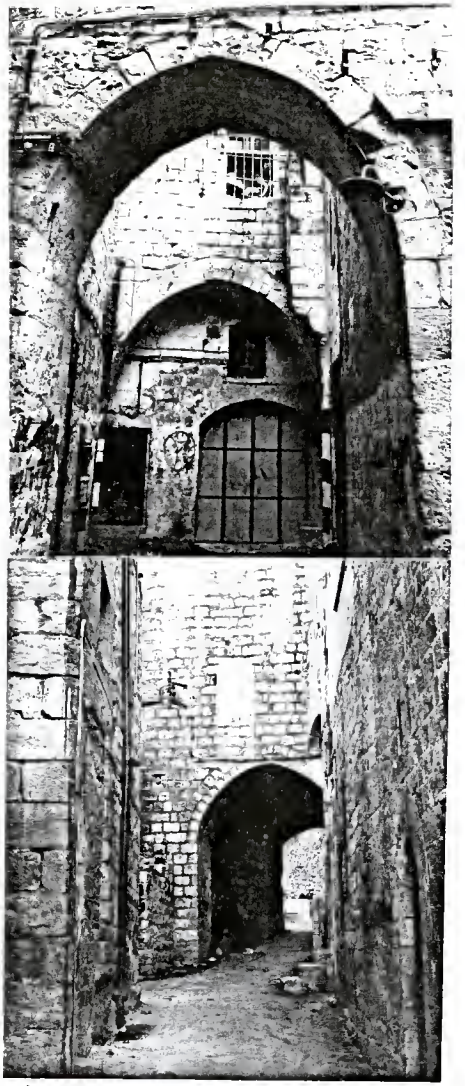
   c. Moderate

   d. Minor

The evaluation of individual structures might be categorized as follows:

"Exceptional: Resources which are of National, State, and Local significance.

Excellent: Resources that add unique forms and texture to the environment or are part of the historical consciousness of the community, and are of particular local significance.



Two views from the historic quarters, 1987

Good: Resources which are individually significant. Consideration should be given on a case by case basis to their local significance and protective status.

A large number of resources fall into a fourth category:

Background Buildings: resources which individually are not significant but in clusters, or in relationship to more significant features, become so. Such resources help define general community or neighborhood identity.

The purpose of identifying such resources is primarily on a local level for planning purposes. These resources should be considered as supportive, positive elements to the urban fabric surrounding them. Loss of all or many such resources can destroy a neighborhood or leave the city with a handfull of monuments rather than a full community identity inherited from its past."[8]

NON-DESTRUCTIVE EVALUATION

There are several general classes of deterioration problems. These include defective building materials, loss of protective surface layers, accelerated weathering due to

air pollution, attack by soluble salts, and interactions between materials, especially the corrosion and expansion of iron reinforcements.[9]

A variety of methods have been used to study deterioration. These fall into two classes : visual inspection on site and instrument analysis in the laboratory on samples taken from the building.[10] Neither of these two classes is the complete answer.

What is needed are non-destructive methods that can be applied in the field and that provide information about building condition, both at the surface and at depth within walls or other parts of the structure.

There have been several reviews of the possible non-destructive methods that could be applied to building diagnostics. Research has been done recently by Richard A. Livingston, University of Maryland, and Roberto Franssetto of the National Research Council, Italy on Nondestructive Diagnosis of Building Condition. He maintains that there is no one method that does everything, and that the most appropriate methods include:

"A. Infra-red Thermography - The infra-red radiation given

off by a building is recorded by a device like a television camera. The resulting image shows warm and dark parts of the walls. These areas can be related to such things as variations in building materials composition or the presence of moisture. However this technique cannot effectively penetrate below the surface.

B. X-Ray Flouresence - This is also a technique limited to the surface. It beams x-ray from a portable source on the surface and measures the energy of the emitted x-rays. This gives information on building materials, paint pigments, and contaminants like salt.

C. Neutron Probe - Unlike the previous two methods, this one uses a portable neutron source to measure the distribution of elements within a wall. It can identify materials composition, the presence of contaminants such as salt or moisture, and the occurence of voids or reinforcements within the structure.

D. Radar - Portable radar sets can be used to identify metal structural elements or moisture within walls.

E. Magnetic Surveys - Proton magnitometers are portable instruments that are very sensitive to changes in

magnetic fields and thus can be used to detect iron reinforcements.

F. Neutron Radiography - Neutrons from a portable source could be used to make images of the interiors of the structures in a process like taking x-ray images. The advantage of neutrons over other types of radiation like gamma or x-rays is that they are much more sensitive to variation within building materials.

G. Acoustic Emission - The infinitesimal movements of building materials as a result of wind loads or thermal expansion and contraction will emit sound at points of stress or micro-cracking. These acoustic emission can be picked up by arrows of microphones and used to locate areas of structural problems within walls.

H. Piezoelectric Hammer - A specially instrumented hammer is used to generate sound pulses at point on the structure. The pulse is then picked up by microphones at other points on the structure. The changes in the waves form of pulse between the hammer and the pick can be used to identify structural problems.

I. Pneumatic Gauge - The roughness of a surface can be

determined non-destructively by measuring the resistance to air flow across the surface. The increase in surface roughness over time is an indication of material weathering.

J. Acetate Peels - A very simple way to measure surface roughness and cohesion of building material surfaces is to take an impression of the surface using a sheet of plastic acetate. The roughness of this surface replica can then be measured in the laboratory."[11]

PRESERVATION PLAN

The preservation plan is a basic document summarizing the results of the comprehensive inventory and evaluation, stating the goals of the preservation program, and identifying strategies for accomplishing these goals. The plan allows communities to integrate preservation of historic resources with processes of growth and change, by indicating how and where new development can take place without sacrificing the area's historic character.

The plan should be completed as quickly as is feasible without neglecting thoroughness and careful consideration of alternative courses of action with regard to program elements

and recommendations. Though it is the preservation commission's duty to see that the plan is made, it is best prepared by professionals in consultation with the commission.

"Most plans include such elements as these:

(1) History of the growth and development of the area under consideration.

(2) Analysis of the architectural styles represented in the area.

(3) An area description, including population, land use, and data on building conditions.

(4) Survey of all significant structures and environmental features, along with a statement of the criteria for inclusion.

(5) Report.

(6) Map of the resources surveyed.

(7) Statement of historic preservation philosophy and goals.

(8) Designation criteria, to be used in selecting sites and districts to be provided.

(9) Recommendations for sites and districts to be designated for protection.

(10) Criteria to govern the Commission in determining if proposed alterations to protected landmarks are appropriate.

(11) Recommendations for other legal controls needed,

such as a sign ordinance or easement program.

(12) Proposals for revision of any existing community, county, regional or other masterplan, program, zoning ordinance, landmarks.

(13) Program proposal stating roles of various private organizations and public agencies in preserving historic landmarks.

(14) Planning recommendations for improving land use patterns, parking and traffic circulation, and other systems.

(15) Estimates of costs of rehabilitation and recommendations for financing mechanisms for carrying out historic preservation objectives."[12]

The preservation plan, once completed, should be revised regularly to include new information and adapt to changing circumstances.

COMPREHENSIVE PLAN:

Comprehensiveness means that all aspects of a city must be studied and carefully considered. It means the proper, wise and studied relationship of different issues. Comprehensiveness means application of balance and unity, of priority programming and flexibility. The community's various collective goals can somehow be measured at least roughly as to the importance and welded into a single hierarchy of community objectives for future evolution of all important economic and social patterns.

For a comprehensive plan, all the environmental assets and liabilities, both physical and social, should be surveyed, analyzed and evaluated. In addition to that, local processes for planning and designing environmental preservation, change and management, shall make use of the existing professional, scientific, cultural and technical personnel by organizing a new and more productive relationship.

If the planners are truly to think comprehensively, they must consider not only the goals of society, but also the framework within which these goals can be pursued. The important functions of any comprehensive plan are:

"(1) To evaluate proposals in the light of the master plan.

(2) To coordinate all the proposals to reinforce each other to further the public interests.

Each of these functions requires ideal performance for the comprehensive planners:

(a) understand the overall public interests, at least in connection with the subject matter of their plans.

(b) they possess casual knowledge which enables them to gauge the approximate net effect of proposed actions on the public interests."[13]

Certainly all the problems cannot be solved easily, the important thing is that all improvements in the historic quarters add up to a comprehensive whole with meaning. Once a comprehensive plan is evolved, it is necessary to work out a schedule of priorities.

The four principles of Ekistics give good clues to a comprehensive whole, these are as follows:

"1 Unity of purpose. In order for our environments to be successful, they have to satisfy us economically, socially, politically, technically, culturally, and aesthetically.

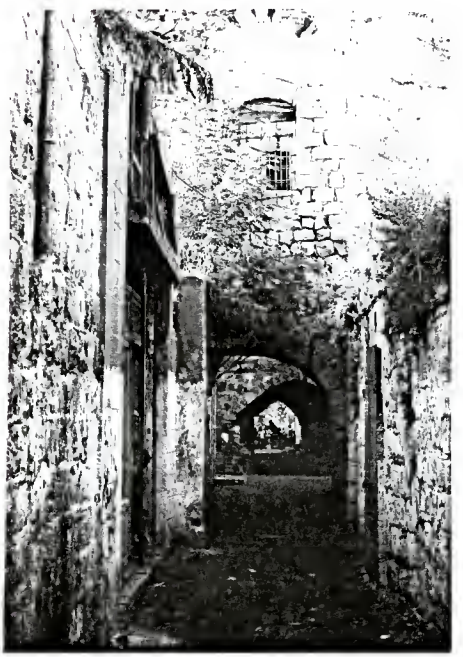
2 Hierarchy of functions. We shall achieve the best type of organization through a hierarchical distribution of functions and their expression.

3 Respect for four dimensions. We need to develop programs that will include the fourth dimension of time (change and growth) and that will respect it as much as the other dimensions - and sometimes even more.

4 Different scale for different masters. Man should remain the main master of the city. Instead of permitting machines to become masters that control the whole city, as the car does at present, we must make machines the masters only within their appropriate spheres : the car on the highway, the plane in the air, the rocket in space. All have to be incorporated in a rational way into the overall plan of Ecumenopolis."[14]

Essentially, the basic aim of planning is to produce a functional, pleasant and beautiful environment for human habitation. If any opportunity is given to the old historic

quarters of Nablus to remedy the situation, it should deal comprehensively with growth, rehabilitation and redevelopment.



CITIZEN PARTICIPATION

Ideally the process of democratic decision-making shall take into account the views of all those who have a legislative interest in the matter at issue. Of course, few issues are "strategic", and these tend to capture the attention of existing interest groups who feel threatened.

Members of the public involved in planning need to feel tha they are participating in something that is likely to have tangible results. Public participation must be an integral part of the planning procedure being adopted in Nablus.

> "Absolute necessities of a Moslem community must be determined through anthropological and sociological considerations and by open meetings or consultation. It is essential that people of all social and ethnic groups be consulted equally, and, in accordance with the Quran."[15]

In order to make design reviews more constructive, "architects should learn to listen to professionals from other fields and to the public. Many persons are sensitive to their environment although they cannot discuss projects in architectural jargon. The person who says, "I know what I like" should not be discounted. Nonarchitects are often astute observers who are sensitive to the scale of the urban

environment perhaps more so then architects who tend to look only at the problem of the architectural statement and seldom at urban context."[16]

> "The design process and criteria should not be cloaked in mystery for this will only drive away the public or create misunderstandings. Public opposition will prevent preservationists from getting to first base while blind acceptance will last only for the short term. The only satisfactory solution is public knowledge and acceptance."[17]

The public shall be entitled to be "informed" of planning proposals and must be given an opportunity to make representations on such matters.

Community participation shall be encouraged in the preservation planning process, in order to achieve public understanding and support of preservation concepts and the value of cultural resources to the community.

INTEGRATION OF OLD AND NEW ARCHITECTURE AND PLANNING

The design of new buildings in the old quarters is among the most controversial issues of urban design and historic preservation. Efforts shall be made to achieve harmony between the old and the new structures as well as historic compatibility.

The designer must not be heedless to the responsibility to the past and not compromise it. Texture, materials, scale, and other considerations for harmonizing with the old must not be ignored to the detriment of both the old and the new. There is no excuse for indifference to historic values.

The contemporary architect or planner shall saturate himself with the personality of an area and became truly involved with the architectural qualities which make the area worth preserving. These qualities would involve the component parts of the street scene, the appearance of the historic area from every vantage point, inside as well as outside the area. This requires moving from place to place in order to understand its structural form, its topography, and its skyline.

Within the historic quarters of Nablus, the new structures to be considered should embody architectural elements which are sympathetic to the street scene and to the immediately surrounding buildings. In doing that, building scale, height, surface materials, textures, color and apertures must be considered in detail.

In a meeting in 1967 in Braunschweig the city's stand-

ing committee on Historic Urban Affairs passed the following resolution:

> "Wherever old structures are visible elements in the present city picture - particularly where buildings and groups are of architectural merit or lend historic significance to the structure of the city and present the unique, individual image - efforts should be made to preserve the structural inheritance and to adapt it meaningfully to the needs of our time.
>
> "To this end, one should, above all, preserve the old scale and proportion in height, width, and structural detail in new buildings and alterations in historically significant districts.
>
> "To the same end, new additions that disrupt the old city pattern should be avoided as far as possible. Original street and building lines should not be changed. The narrow streets of the old quarters can often contribute as pedestrian malls to a meaningful traffic system. Public and private parking spaces and parking garages should be installed outside the historic areas to the greatest extent possible. Much effort should be done to gain the spirit of the era which such structures and buildings were erected to serve specific functions."[18]

Good new architectural design and planning can feasibly be harmonized with existing structures without damaging the historical values or disrupt their soul. Integrity of old and new elements can be done through sensitive considerations and a great deal of professional knowledge.

TRAFFIC

Transportation is a vital fact of any dynamic city and it plays an important role in its political, economic, and physical fabric. Obviously the problem of traffic and parking has been generated by the motor vehicle, and is rendered extremely complex by their consistently growing number.vehicles.

Motor traffic was unknown until the beginning of the twentieth century, and even horse driven wheeled traffic did not enter the historic city of Nablus until then. Street patterns of the historic city of Nablus obviously were designed for pedestrians and not for modern traffic. Any adaption to its requirements means far-reaching alterations in the road pattern and consequently in the whole character and fabric of the old city. Cutting through of a single thoroughfare, or substantial widening of two or three of its main streets, and opening of its interior to traffic has already destroyed its specific character and visual coherence.

Eliezer Brutzkuz, looks to the problem of traffic improvements in the old city more seriously when he says:

Car traffic is a major problem in the old city.

"even minor improvements in traffic conditions and in traffic accessibility like partial widening of roads, multiplying of access possibilities or providing of parking facilities within the old quarters, have similar effects on a similar scale and at a somewhat slower pace than the major ones. They initiate a process of transformation and deterioration of the typical environment of the old city. Under present conditions of a high level of motor ownership, the number of private cars which are willing to enter the old city, even for tourist and sightseeing purposes only, is enormous. Consequently, any partial action for improvement of traffic conditions would be a palliative, requiring shortly after its execution additional actions, the combined effect of which would be similar to that of major interventions and complete disintegration of specific environment would be in most cases the final results."[19]

In order to decrease the physical and visual confusion produced by motor vehicles, there are several recommendations to deal with the problems of traffic in the historic quarters:

(1) There should be restrictions on vehicualr traffic inside the bazaars and the narrow alleys of the old city, in order to stop breaking the continuity and scale of the closely knit, pedestrian-scale quarters along with creating an atmosphere for people to feel secure from automobile dangers.

(2) The best conditions for the preservation of a

historical area prevail when the old city can be completely separated from the modern one by a belt of open land. This condition is difficult to achieve. One proposal is to surround the old quarters with a ring road from which cul-de-sac streets could penetrate inwards. This would allow easy access for ambulances and fire-engines, beside other emergency vehicles.[20]

(3) The historic quarters should be considered as a compact entity accessible only to pedestrians. Exception will be granted to deliveries to be made to shops, ambulance, fire-engines, waste-removal, and emergency vehicles.

(4) Only vehicles under a certain size shall be allowed into the old city and only during restricted hours, the streets would be kept free of vehicles during the hours of maximum pedestrian use.

James Fitch sees that historic areas can be enjoyed only on foot, and he suggests that:

> "a policy of permitting no wheeled traffic in such areas (except for fire, ambulance, waste removal, and so on) is the correct one. Though merchants in such areas are offen initially skeptical of the impact of such measures on retail trade, they have

proved to be successful in certain cities (Piazza Navona in Rome, the New Precinct in Coventry). ..., parking facilities should be provided around the peripheral - preferably underground and in small, dispersed units to avoid peak-hour traffic jams."[21]

(5) Open car parks can be acceptable, at the edge and in the backlands of the historic quarters, provided paths defined with them and they are broken up into small units with local trees.[22]

The issue of parking places and seclusion of the historic quarters from motor traffic are discussed by Eliezer Brutzkus, where he suggests:

"seclusion of preservation areas from motor traffic makes only the quick superficial visit of a touring visitor more difficult. A certain walking distance through the old quarter from a parking ground outside of the preservation area only adds to the depth and intensitivity of the tourist's impression, and incidentally his somewhat prolonged stay in the town, to the income which the community derives from his visit. Income balance of a city assessing losses resulting from reduction of number of tourists in consequence of increased distance between road and amenities versus gains obtained due to a more prolonged stay in the city of smaller number of tourists seems to be in most cases positive when the second alternative is chosen. At any rate, only this way, the "lode" of tourist trade may be conserved in the long range."[23]

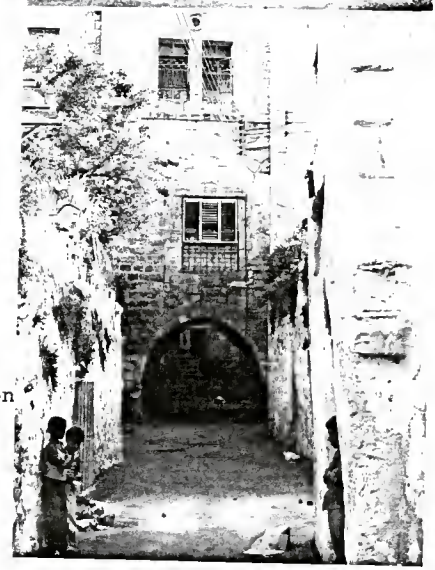
PEDESTRIAN ZONES

It is tragic to observe that at a time when western countries are introducing pedestrian zones, especially in their historic districts, the old city of Nablus with its incomparably rich and pedestrian-oriented fabric, is subject to congestion and dissection by automobile routes.

Excclusively pedestrian movement in the old city would again provide easy access to the shops, public baths, mosques and schools. The value of pedestrian streets that are entirely separate from vehicular traffic needs to be rediscovered for its intrinsic values as well as for the survival of the qualities of the historic district.

As a conservation measure, traffic-free zones in the historic quarters should be introduced to restore the unity and homogeneity of the historic urban fabric. The historic quarters of the old city of Nablus should experience a revival in pedestrian modes in order to affect not only their appearance, but their functions and relations to the historical monuments and other physical settings.

> "the rapid acceptance of traffic-free zoning is based, primarily, on its capacity to achieve four major goals in the process of urban revitalization: reducing traffic congestion, halting environmental



The historic quarters were car traffic free before the introduction of cars

deterioration, improving retail conditions, and strengthening the role of the core as a focus for community activities."[24]

The social needs of pedestrians are also of great importance. These needs shall be emphasized in schools, bazaars, mosques, and other social institutions. In the populated historic centers, there is always a chance of conflict between people and cars. Pedestrian districts allow the interaction of people without the pressure of automobile traffic, and the danger of traffic accidents.

It is sad to see that "Sahet el-Manaral" - the Minaret Square - which is still the focal point of the old city is changed into an outdoor garage. This magnificent square which for generations was the main open space in the old city, has been changed almost completely to fit traffic needs. These physical changes have ruined the imagability and homogeneity of "Saheh el-Manarah".

It will be wise to change the design of "Sahet el-Manarah" - the Minaret Square - to what it was and pedestrianize the existing streets not only for beautification but:

- to eliminate conflict between pedestrians and cars
- to gain unity between the architectural elements

of the square

- to create social interaction for people who are walking and appreciating historic building values and cultural heritage. Walking from one historic building to another may be considered recreation and more importantly, an educational experience.

> "Driving is not only fast but it also demands concentration, leaving no time or channel capacity to appreciate the environment. Thus pedestrians have a much better awareness of places and clear ideas of the significance, measuring and activities in the city than either drivers or users of public transport. Because of the lower speed adn lower criticality of their movement, pedestrians can perceive many more differences in form and activity."[25]

RETAILING

Business in the old historic quarters of Nablus is scattered. These quarters are really a commercial area. The old city has never lost its function as principal center for the whole city - even people living in the new city often go there to shop. Modern articles are indeed to be found there, and at cheaper prices. Merchants and bazaar owners often violate the traditional order of suqs by occupying the most prestigious and frequented spots in the center, turning the old houses there into storerooms or workshops. Old bazaars

are a solid string of shops where most of the heads of households run a shop of some sort or another. These shop quarters are romantic, packed with "atmosphere" and mystery. Shopkeeping is a noble enterprise, without which Nablus would never have risen to the heights of craftsmanship fame as well as economic welfare.

Today, the idea of creating supermarkets in the old city of Nablus is growing which would inevitably affect the tradition of free enterprise. Socioeconomic elements of planning should be considered to make retailing effective. Revitalization of local retailing facilities is only required inside the bazaars. Private enterprises must be encouraged to provide long term job opportunities throughout the historic district for low-income segments of the population in order to stop social decay and slum generation.

The progressive mechanization of branches of production and the need for more space generated by manufacturing workshops should not be ignored. Because they are incompatible with traditional morphology, however, their transfer out of the historical quarters is necessary.

> "The most important fact about commercial functions is - in the architect's eye - that they give the essential link between a township and its people. A visitor, and a resident too, communicates with the town through its commercial facilities. If you

> are a visitor, you won't always be able to enjoy other people's homes, the offices won't serve your needs. But you will always enjoy its commercial facilities, through them you can gain access to the city's products its specialities - food, ..., crafts - and its people's minds too."[26]

Shopping by tourists also plays an important role in these quarters where local handicrafts and folk arts, are offered by retailers. These activities can have a genuine place in the lifestyles of an area. Not only tourists, but the town's own residents need to be attracted to the center. The way to do this is to have small specialists' shops that sell things not available in a supermarket. Actually these kind of places attract tourists too, and motivate them to buy. Gimmicky souvenir shops, should be carefully avoided.

In order to revive a city, and its historic center, Szalay, suggests that decision-makers should avoid these common mistakes:

> "Avoid commercializing the area, overloading it with too many single-sided commercial functions thus turning it (e.g.) into a singular tourist attraction. In this case hoards of tourists will be pouring out of their coaches day-by-day,/but mostly in high season/eating up and buying up everything, while town residents will hide away in the comparative silence of their homes. Out of season the same shops will be closing down, because the merchandise they sell is only bought by tourists, and the city will be sleeping until the next season.

"Under commercializing an area is committed by decision makers when they use too few commercial elements - this is generally due to a strong preference towards some other special field - many time this being too many cultural features. Too many museums or archaeological sights, could be disastrous in a town center, where visitors, after seeing one or two of the sights, will want to sit down and eat or have an ice-cream and relax."[26]

Another important factor to be considered in establishing a sequence of functions in our historic center, is time.

"people using the city must be given time to enjoy the atmosphere, whether sightseeing or shopping they should be able to sit back in a setting that is part of the town's traditional values to recover sipping on their drinks or eating a good meal. Let's give them a chance to wonder about finding their way to the sights themselves, mix tourists with the residents in the center, and do not hurry them with an arrow showing them the way to the one and only ancient ruin to see."[26]

NEW USES

It is obvious that a historic quarter is not a suitable site for big business, banks, offices, and supermarkets, large fashionable shops, or big cinemas and other enterprises of mass entertainment. New uses of this kind, especially those requiring large-scale facilities such as secondary schools and hospitals which cannot be integrated easily into the fabric of the old city, should be forbidden within the

historic quarters by zoning regulations, and they should be placed either on the periphery or completely outside the historic quarters. Even administrative functions, as far as they are connected with substantial circulation of the public, should be located elsewhere.

This obligation to locate modern functions outside the preservation area does not condemn it to become dead, since their relationship to the daily life of the historic quarters is only partial, and there is a sufficient range of uses which can be retained within the historic quarters.

ADAPTIVE USE

Adaptive use: is often the oly economic way in which old buildings can be saved, by adapting them to the requirements of new tenants. This can sometimes involve fairly radical interventions, especially in the external organization of space.[27]

The goal is not to convert the old city of Nablus into a museum. It is recommended that historic structures be used as much as possible for their original purposes, but when this ceases to be feasible, new uses must be found. The city preservation program must encourage adaptive use while

protecting the public's interest in maintaining the traditional character of the site and its surroundings.

Reuse of historic buildings is accepted as a normal, attractive, way to provide space and save historic buildings and areas. This is true for many reasons such as:

"1. old buildings are usually energy-saving in operation, while the materials in them already represent the use of much energy in their manufacture and delivery.

2. Inflation has now made the use of old buildings economically advantageous.

3. The reuse of old buildings helps to revitalize decayed downtown areas.

4. Adaptation of old buildings is labor-intensive and creates jobs rather then waste of resources.

5. Adapted buildings tend to offer special amenities, have good quality, and handmade features, while the average new construction tends to avoid handmade details and uses the cheapest materials.

6. Old buildings adapted to modern conditions are frequently in areas already supplied with utilities and will not require new utility installation."[28]

The selection of a new use for a building must be made with care and attention. It is the most important decision to be made if preservation is going to be an expression of cultural maturity.

> "In delineating the visual effects of adaptive use, different facets of a structure are examined. The building as a whole is evaluated : the exterior, the interior, the appearance of the structure from the street booth by day and by night. This evaluation leads to decisions on those visual architectural features to be preserved, enhanced or altered : the material, massing, fenestration, lighting, ornamentation, orientation to site and interior layout.
>
> "Once an appropriate use has been selected, the building itself is examined in depth to identify its unique characteristics.
>
> "In designing an adaptive use project, one is continually interpreting existing architecture and responding to it. The success of the design process depends first on adequately interpreting the old structure and its content. The economic, social and visual history of a place should be well understood before a response is formulated. Each detail that has an impact on the project then should be considered."[29]

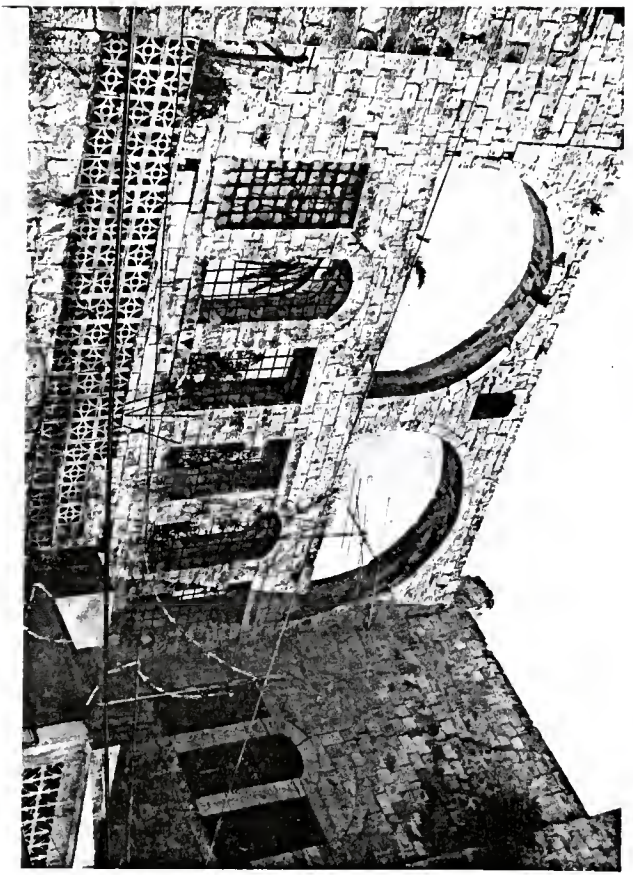
EARTHQUAKES

Earthquakes are frequent in the Holy Land. There were earthquakes in AD 551, AD 748, AD 808, AD 1202, AD 1837. There was one in 1903 and one on July 11, 1927 whose shock waves were felt in Syria. Nablus, Lyda and Es-salt were damaged.[30]

> "Earthquakes are different in degree from most other disasters in their capacity to kill almost instantaneously due to lack of warning and in their extensive damage to cultural property often augented by fire, looting and water damage.
>
> "Administrators, by taking steps for disaster prepareness can reduce the damage that occurs in an earthquake and this means saving lives."[21]

A policy of upgrading building combined with their regular maintenance is strongly recommended.

A brief summary of the administrative actions before, during and after a seismic disaster to be used as a check list, is suggested by Sir Bernard Feilden (see Appendix 11). He suggested that this summary should be applied to the local situation working within the administrative methods, planning procedures, patterns of ownership and cultural attitudes of each country.[31]



A building in the old city as left after the earthquake of 1927

STONE

In the old city of Nablus, the basic construction material is local limestone, built into masonry wall with a mortar of lime, sand and earth.

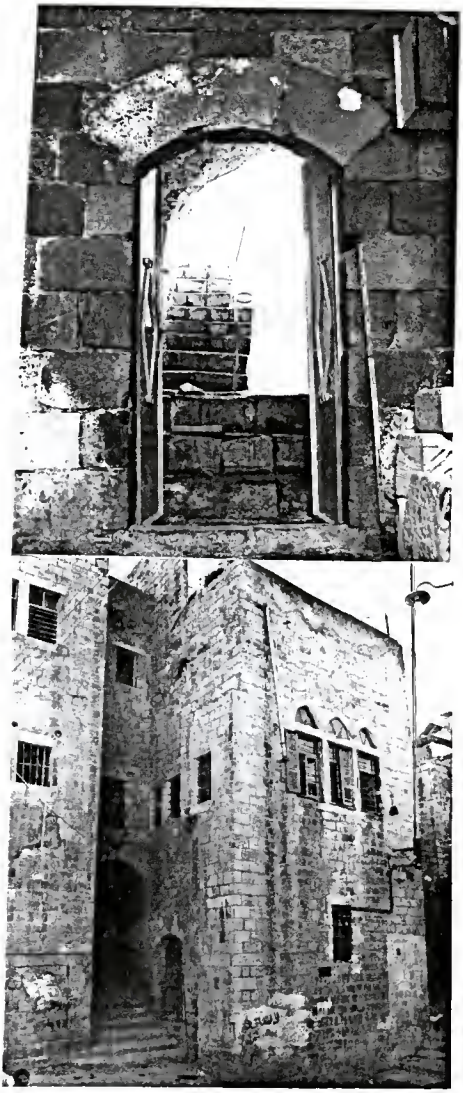
To retain the exterior surface of the stone that throughout the centuries has acquired a beautiful and irreplaceable patina, is strongly recommended. The patina is sometimes produced by the alteration of the stone. Unfortunately, layers of dirt, soot, and gas fumes lie on the original facades and gnaw into the stone. In such cases, cleaning becomes imperative, but on conditions, of course, that the methods employed do not attack the surface or the delicately sculptured elements.

Cleaning methods generally are divided into three major groups: water, chemical, and mechanical (abrasive). Water methods soften the dirt and rinse the deposits from the surface. Chemical cleaners react with dirt and/or masonry to hasten the removal process; the deposits, reaction products and excess chemicals then are rinsed away with water. Mechanical methods include grit blasting (usually sand blasting), grinders, and sanding discs, which remove the dirt by abrassion and usually are followed by a water rinse.[33]

The surface cleaning of structure shall be undertaken with the gentlest means possible. The simplest and least dangerous methods shall be used. A low pressure water is effective, safe, and least expensive. Sometimes gentle brushing maybe necessary. Water of slightly higher pressure or with a mild non-ionic detergent additive may be neede. When chemicals are used, complete rinsing is essential, and it is important to make certain that the run-off does not cause any damage. These methods shall be tested prior to considering harsher methods; they are safer for building, safer for the environment, and less expensive.

"The level of cleanliness desired also should be determined prior to selection of a cleaning method. Obviously, the intent of cleaning is to remove most of the dirt. A 'brand new' appearance, however, may be inappropriate for an older building, and may require an overly harsh cleaning method. It may be wise, therefore, to determine a lower level of acceptable cleaning."[33]

Sandblasting and other harsh cleaning methods that will damage the historic building materials shall not be undertaken, but under extreme conditions may be unavoidable in which case they require prior permission from the commission.



Local limestone is the basic construction material in the old city

Stone by its nature is one of the most durable of building materials, and in favorable environment it may last hundreds or even thousands of years with little visible change.

Research in stone preservation is rapidly expanding, and what must be remembered is that while stone may no longer be considered as "maintenance-free" material, preservation treatment itself imposes a cycle of inspection and maintenance.

Chemical concsolidation becomes the least evil, a less drastic intervention than replacement, and less drastic ultimately, than no action at all.[34] (see Appendix 12)

GENERAL PRESERVING & DEVELOPING GUIDELINES

Preservation and development in historic areas shall be tackled as a combined effort. Preservation shall involve a full range of interventions, such as restoration, functional rehabilitation, renovation, and replacement or infill, according to strict typologic criteria. The decision regarding the type of intervention to be applied shall come from a plot-by-plot analysis of architectural values and physical

conditions. For new development areas, the constraints need to be as strict, but new buildings shall be correlated to the historic fabric in terms of function, typology, scale, and materials to make them compatible with it. The goal shall be to establish consistency and coherence within the whole urban structure, while allowing for the necessary differentiations between the various components.[35]

The way a community preservation ordinance protects important structures is to require that all alterations - renovation, demolition and new construction - proposed for such structures be reviewed by the Historic Preservation Commission. It is important that any ordinance designating a historic area as a protected area include guidelines to assist the review board in approving or denying a proposed change, and the owner in explaining how to prepare the plans.

Such guidelines are difficult to draw, but they are crucial. They must be unique for each district in accordance with each historic area's particular qualities.

Ralph Miner, in Conservation of Historic and Cultural Resources, suggests four premises on which guidelines for review may be based.

"(1) Guidelines for determining appropriateness must be as objective as possible so as not to favor one particular arrchitectural style over another. A well-designed comtemporary structure should have just as much chance to "past the test" as an old structure.

(2) The existing structures in any historic district have certain basic visual elements and relationships in common which can be considered as the unique "design vocabulary" of that district.

(3) This essential design vocabulary can be identified for any district and can be abstracted and documented as basis for judging the appropriateness of new construction proposals without reference to architectural style.

(4) The question of whether a new proposal will be compatible can be viewed in terms of a fit or misfit with the basic design vocabulary of the district. A proposal incorporating the same essential vocabulary, regardless of style, will fit and should be judged appropriate. On the other hand, a proposal reflecting a different design vocabulary (even if it offers some stylistic similarities to other structures in the district) would be considered a misfit which would not be appropriate within the district."[36]

The following considerations and guidelines are recommended for the development and preservation of the historic quarters of the old city of Nablus.

In a report on principles and guidelines for Historic Preservation, the National Trust for Historic Preservation suggests a set of restoration principles which may be summarized as follows:

"(1) The restoration of historic buildings requires the professional knowlegde and special skill of architectural historians, architects, historians, archeologists, landscape architects, museulogists, and experienced craftsmen.

(2) No final decision should be taken as to a course of action before reasonable efforts have been made to exhaust the archeological and documentary evidence as to the form and successive transformations of the monument. Complete records of such evidence, by drawings, photographs, notes and transcripts should be kept, and originals or copies made available to students in appropriate central libraries and, where possible, also published. In no case should evidence offered by the monument itself be destroyed or covered

up before it has been fully recorded. Sample specimens of physical evidence should also be preserved. All changes proposed should be studied in drawings and specification form to ensure thorough communication between the commissionand contractors.

(3) Generally speaking, in treating surviving old buildings, it is better to preserve than repair, better to repair than restore, better to restore than reconstruct.' It is also well, before initiating a project, to consider carefully the possibility that once started it may lead to 'creeping restoration' - the tendency for repair to lead to restoration and for restoration to become, by degrees, total reconstruction.

(4) It is ordinarily better to retain genuine old work of several periods, rather than arbitrarily to 'restore' the whole to a single period. In no case should our own artistic preferences or prejudices lead us to modify, on aesthetic grounds, work of a bygone period representing other tastes. Truth is not only stranger than fiction, but more varied and more interesting. It should be recognized, however, that sometimes it is essential to remove later work in order to obtain evidence of the structure pertaining to an earlier and

more important period. No surviving old work should be removed or rebuilt for structural reasons if any reasonable additional trouble and expense would suffice to preserve it.

(5) Every reasonable additional care and expense are justified to approximate in new work the materials, methods and quality of old construction, but new work should be permanently identified and great discretion should be used in simulating ol materials with modern materials. If old material from other buildings are used in a restoration, their source and use should be permanently recorded. The use in an appropriate manner of old materials and details of the period and character is commendable when such materials are otherwise doomed to loss or destruction and their use in itself is an act of preservation. In securing materials for restoration work there should be no demolition or removal of buildings where there is a reasonable prospect that they will persist intact or as historic ruins on their own site. Where missing features are to be replaced without sufficient evidence as to their own original form, careful study should be made of other surviving examples of the period and region and precedents found for the replacement.

(6) The nature of preservation and restoration work is such that it generally involves more time than would be expected in new construction. Many of the most important problems are unsuspected until the fabric is opened up.

(7) When for educational or preservation purposes it is deemed necessary to move a building to a new setting, its restoration should be guided by sound restoration principles as indicated above.

(8) Complete reconstruction for educational purposes should also follow the same principles thatgovern restoration.

(9) When a historic building survives into modern times fortunately in its original use, it is important to retain all its principal features with only minor modification for modern use. When a historic building ceases to be used for its original purpose other uses should be sought in order to perpetuate its life. Only modern uses should be adopted which are consistent with preservation of the building's outstanding values. In such cases, limited compromise with restoration standards may be justified, especially in the interior, to obtain desired conveniences. Since our needs and

capabilities are always growing, important or interesting features that cannot be restored for the moment should be covered over and protected to await future treatment. Only a limited number of exceptional buildings are important enough to be preserved solely for exhibition. These buildings must be cared for and restored with utmost fidelity to the highest restoration standards.

(10) Prior to the start of work, a complete photographic record of the existing fabric should be made using black and white film for archival purposes.

(11) Detailed working drawings and specifications should be prepared by an architect.

(12) All new work should be marked with the date, preferably with a branding iron.

(13) Particular care shall be taken that access, parking and service buildings are not injurious to the character of the historic building and its environs."[37]

The following standards for rehabilitation, developed

by Technical Preservation Services, U.S. Department of the Interior, apply to the rehabilitation of all historic and other old buildings.

"(14) Every reasonable effort shall be made to provide a compatible use for a property that requires minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.

(15) The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic materials or distinctive architectural feature should be avoided when possible.

(16) All buildings, structures, and sites shall be recognized as products of their own time. Alterations, which have no historical basis and which seek to create an earlier appearance shall be discouraged.

(17) Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and

respected.

(18) Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.

(19) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications features substantiated by historical, physical, or pictorial evidence rather than on conjuctural designs or the availability of different architectural elements from other buildings or structures.

(20) Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any acquisition, protection, stabilization, preservation, rehabilitation, restoration, or construction projects.

New materials and additions should be removed from the old city

(21) Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.

(22) Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired."[38]

The following guidelines are recommended particularly for developing and preserving the old city of Nablus.

(23) The historic quarters shall be isolated from vehicular traffic no improvement of traffic conditions within the historic quarters shall be sought, but to the contrary, limitation of possibilities for vehicles to penetrate into the old city of Nablus.

(24) The entrances to the old city shall be limited rigorously to the few old gates, this will serve as an

efficient bulwark against the impact of modern traffic and this will contribute to a more complete and better preservation of the traditional environment within the old city of Nablus.

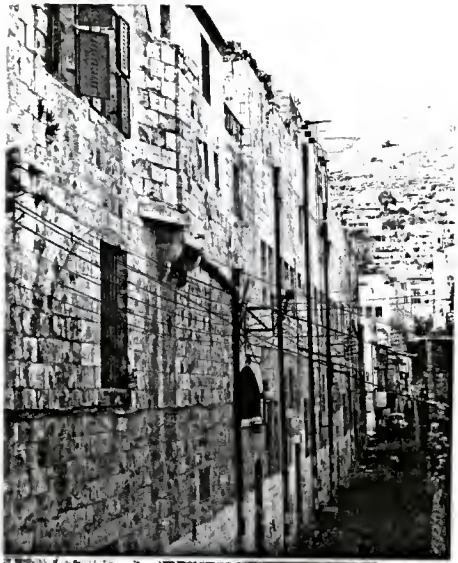
(25) Traffic inside bazaars shall be banned except for delivering at specified times so that shoppers and tourists will be secure.

(26) No wheeled traffic shall be permitted in the old city. Exception will be grant only to fire-engines, ambulances, waste removal trucks, and deliveries during certain hours, and not exceeding a certain size.

(27) All public open spaces within the historic quarters shall be maintained for the enjoyment of all and no structure, temporary or otherwise unless for brief uses for special occasions shall be permitted in them.

(28) All street furniture shall be carefully designed.

(29) All roads shall be examined, to establish original surface naterial. The stone lined drains, especially in the bazaars, shall be reset to the historic levels. The road system shall not be expanded but maintained at the present level.



Necessary tubes and wires shall be buried or hidden within the fabric of the buildings

(30) External plumbing, unsightly additions and new uncompatible materials shall be removed from the historic quarters.

(31) Trees shall be preserved in order to have better landscaping, and to keep the environmental quality of the historic quarters. The elimination of the overhead distribution system of wires for electricity and telephone will allow the tree planting campaign to progress unhampered.

(32) All electricity and telephone services should be carried to the historic quarters in an underground duct, to be brought up as and when required for servicing the houses. The use of a community aerial will remove the necessity for the introduction of an aerial per unit.

(33) Necessary tubes and wires, ducts and reinforcement shall be buried or hidden within the fabric of buildings so that the aesthetic integrity of the district is distributed as little as possible.

(34) An overall street light system and a system to flood light the ramparts shall be designed and implemented. The style of the light fixtures shall not be in con-

flict with the character of the district.

(35) Main feed-in lines and inside systems must be the shortest possible and hidden but in the remotest areas.

(36) In restoring a building, its entire setting shall also be considered.

(37) In case of adaptive use, ensure that the function selected for the old building will not suppress its original characteristics and does not unduly exploit it.

(38) Original parts should be freed from later additions, and conserved and harmoniously incorporated into a new architectural structure.

(39) The general standards of protection, stabilization, preservation, rehabilitation, restoration, and reconstruction shall apply. (see Appendix 13)

(40) Proper maintenance of public facilities is a prerequisite for preservation, as well as for pleasant appearance and tolerable living conditions within the historic quarters to be preserved.

(41) In any case of development in the historic quarters the following guidelines should be considered:

"a. All new structures shall be constructed to a height visually compatible with the buildings and surroundings with which they are visually related.

b. The gross volume of any new structure shall be visually compatible with the buildings and surroundings with which it is visually related.

c. The proportion between the width and height of facades shall be visually compatible with the buildings and surroundings with which it is visually related.

d. The proportions and relationships between the doors and the windows which are visible from public way shall be visually compatible with the buildings and surroundings with which it is visually related.

e. The rhythm of solids to voids, created by openings in the facades, shall be visually compatible with the buildings and surroundings with which they are visually related.

f. The existing rhythm created by existing building masses and spaces between them shall be preserved.

g. The materials used in the final facades shall be visually compatible with the buildings and surroundings, with which they are visually related.

h. The texture inherent in the facades shall be visually compatible with the buildings and surroundings with which they are visually related.

i. The design of roofs shall be visually compatible with the buildings and environment with which they are visually related.

j. The landscape plan should be sensitive to the individual building, its occupants and their need. Further, the landscape treatment should be visually compatible with the buildings and environment with which it is visually related.

k. Directional expression (horizontal or vertical dominance) of nearby structures shall be considered.

(42) In the case of facades visible from the public way:

- original overall proportions of the building shall be retained, stories shall not be added or removed from the original building. Portions of the original facades shall not be demolished.
- existing original openings shall be retained. New openings should not be created unless specifically authorized by the commission.
- existing architectural details are to be restored and repaired when possible."[40]

(43) Since there is a tradition not to have signs in the bazaars, it shall be followed. When signs may be needed elsewhere in the quarters, they shall be integrated with the overall design of the building. They shall complement the architectural character of the buildings. No large signs are allowed then shall be inscale with their surroundings.

(44) Colors should not be disturbed, black and white and colors which are visually compatible with the building and the surrounding with which they are visually related are only allowed.

(45) Prepare materials for use in teaching about historic

preservation concepts at all school levels.

CONCLUSION

The old city of Nablus is one of the best preserved traditional cities on the West-Bank of the Jordan river. It contains one of the greatest collections of national monuments in all the West Bank, and is considered by many to be the most attractive city in that area after Jerusalem.

Nablus is seriously threatened with the disfigurement and destruction, which may cause the eradication of whole chapters of its history. The question then, is how can future architectural development in the old city of Nablus be prevented from accelerating the loss of its cultural identity.

A systematic program of preservation is recommended. This program can offer present and future generations Nablus the opportunity to create a better community while maintaining and enhancing the best from the past.

Preservation must be integrated into the regular planning process. It must mean something to the man in the street and involve the community. Above all it must be

compatible with contemporary ways of living, and with changes that are taking place. Preservation must be part of an organic process in order to assure the continued enjoyment of Nablus' special attributes embodied in its heritage. Such an approach will help to make Nablus dynamic and fascinating, as a place in which to live or to visit.

Efforts shall be made to identify the personality that the historic quarters convey, to revive past values, to regain the architectural integrity of the historic quarters and to create a more liveable environment. It is essential to maintain the charm and picturesque quality of this historic city about which an anonymous Palestinian poet once wrote "when you say fame, you mean Nablus."

NOTES

1 These goals through the end of goal (3) are derived from : Historic Preservation Inventory & Planning Guidelines : City of Las Vegas prepared by Charles Hall Page and Associates, Inc, San Francisco, May 31, 1978. pp 165

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APPENDIX 1

Future Planning Strategy : A Framework of Action
Source : An Urban Profile of the Middle East, M. Hugh P. Roberts, St. Martin's, New York, 1979.

Future Planning Strategy: a Framework for Action

Having drawn up one final picture of developing trends in Middle Eastern urban societies, it remains to summarise the problems which have been seen to exist in the region. This summary is followed by an identification of aims, objectives and courses of action for urban planning in the future, which Middle East countries, contemplating their individual urban situations, may see fit to adopt or may, indeed, regard as unavoidable.

Problems

(1) *Growth*
- (a) Forecasts of continued large population increase for the future.
- (b) Forecasts of populations getting younger, with resultant expansion of potential labour forces, often ahead of an individual national economy's ability to generate job opportunities for this labour force.
- (c) Forecasts of continued population increase in urban areas ahead of overall national rates of growth, owing to the combined pressures of high natural increase and large in-migration movements from rural or peripheral areas.
- (d) Development of new settlements in marginal locations or based on currently expanding economies, the justification for which will, in the long term, be temporary, with consequent threat to the continued survival of such settlements, once these economies return to more conventional patterns of growth.

(2) *National Inadequacies*
- (a) Forecasts of the inability of national building industries, public or private, to cater for housing demands of the future.
- (b) Forecasts of overloading of, and overconcentration on, urban facilities, such as transport systems, shopping facilities, public open space and office space, etc.
- (c) Forecasts of overloading of, and overconcentration on domestic utilities in housing areas, such as electricity, water supply, sewers, telephones, etc.
- (d) Forecasts of inadequate growth performance to generate sufficient investment capital in the private or public sector which can be allocated to eradicate poverty traps, malnutrition, illiteracy, poor education in general and low health standards.

(3) *Change*
- (a) Observations of change, growth and speculative development threatening much of what remains of elements of the traditional built environment of the Middle East, both in overall urban planning and more specifically architectural terms.
- (b) Widespread adoption of foreign (mostly Western) building practices, materials and planning techniques, creating a built environment which is superimposed on the region with frequent unsuitable long term effects. One of these in particular is the temporary nature of the suitability of such practices, materials and techniques.
- (c) Breakdown of existing community structures as a result of greater psychological and physical mobility and widespread adoption of foreign (usually Western) values. These lead to bewilderment and disassociation among populations where change is taking place ahead of assimilation processes, resulting in social instability and possible eventual destructive reaction by underprivileged or even only mildly affected groups.
- (d) Observation of bewilderment and disassociation not only with the symptoms of change but the very existence of change itself as a further component of instability with possible similar responses to those of (3)(a).

(4) *Neglect*
- (a) Disappearance of traditional urban flavour and architectural beauty as areas and buildings possessing such qualities decline or decay in the context of, or are regarded as irrelevant to, new directions of economic growth.
- (b) Loss of building and design skills built up and evolved in the past to provide special environmental requirements in an area where these were crucial, to be replaced with modern artificial methods of environmental control.
- (c) Decline of traditional economies, craft industries and farming practices in competition with more modern processes, despite components of real value which such traditional practices offer for many modern problems.

Having made an identification of the major urban areas and classified them in four groups, it is now necessary to draw up a framework of planning action which may alleviate or partly solve all the identified problems before they become so profound as to become irrevocable. This framework for action is drawn up by identifying an overall aim which may be realised through certain objectives in turn achievable with certain courses of action. Each of the identified courses of action refers to one or more of the specific problems which it is seeking to solve.

Solutions

Aim:

To create for societies of the future Middle East, hospitable, comfortable, meaningful, and where possible beautiful urban environments, which promote modern standards of living but cushion the people from the worst byproducts of the change which will variously be needed to bring this about. The result to be an easy assimilation of populations into their urban environments enabling identification with it to the extent of feeling that they are part of a community.

Objective 1:

Cut off at source as many as possible of the problems besetting successful evolution of change and development for the better.

Courses of action:
- (a) *Implement* family planning policies to include birth control and fiscal/financial incentives to encourage smaller families.
  Long term solution to problems (1)(a) and (1)(b).
  Partial solution to problems (1)(c), (2)(a), (2)(b), (2)(c), (2)(d).
- (b) *Adopt* policies to reduce levels of differentiation between rich and poor regions and between economic core areas, and peripheries.
  Invest particularly in employment generating projects and in the provision of urban and domestic facilities in poor and peripheral regions to make their standards of living in some way comparable with rich and core areas.
  Long term solution to problem (1)(c).
  Partial solution to problems (2)(b), (2)(c), (2)(d), (3)(c), (3)(d), (4)(c).
- (c) *Reduce* economic discrepancies between rich and poor areas, (as in course of action (1)(b) by policies of decentralisation. *Encourage* industrial and commercial investment of all kinds in migration source areas not only to halt inward movement from the peripheries but to encourage 'back migration'.
  Long term solution to problem (1)(c).
  Partial solution to problems (2)(b), (2)(c), (2)(e), (3)(c), (3)(d), (4)(c).

Objective 2:

Promote and encourage where possible selfhelp philosophy notably in the areas of house building and small scale business and economic activity.

Courses of action:
- (a) *Allocate* funds for site and service schemes.
  Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (2)(d), (3)(a), (3)(b), (3)(c), (4)(a), (4)(b), (4)(c).
- (b) *Set up* organisations to make building materials supplies available to self-

help builders.
Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (2)(d), (3)(a), (3)(b), (3)(e), (4)(a), (4)(b), (4)(c).

(c) *Initiate* research into low technology solutions to building practices and make available resources for implementation of these.
Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (2)(e), (3)(a), (3)(b), (3)(c), (3)(d), (4)(a), (4)(b), (4)(c).

(d) *Make available* more widespread grants/no interest loans/low interest loan schemes to promote house building or business creation at the individual level.
Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (2)(d), (3)(a), (3)(b), (3)(c), (3)(d), (4)(a), (4)(b), (4)(c).

Objective 3:

Develop new town planning and design practices to be made to fit more suitably into the social, economic and physical requirements of future communities.

Courses of action:

(a) *Carry out* further investigation into design and planning techniques of the type described in Chapter 7.
Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (3)(a), (3)(b), (4)(a), (4)(b), (4)(c).

(b) *Implement* pilot projects for new town designs of the type described and illustrated in Chapter 7.
Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (3)(a), (3)(b), (4)(a), (4)(b), (4)(c).

(c) *Monitor and measure* social and economic reactions to change in existing and new communities and particularly those of (b) above to build up knowledge of how to improve future town planning specifications.
Partial solution to problems (1)(d), (2)(a), (2)(b), (2)(c), (3)(a), (3)(b), (4)(a), (4)(b), (4)(c).

Objective 4:

Re-emphasise the importance of the Middle East's urban traditions in the solution of its present problems.

Courses of action:

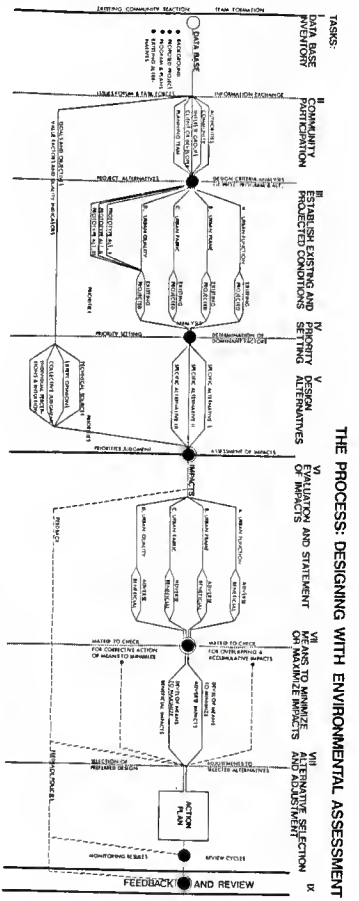
(a) *Establish* effective methods of conservation control of certain planning and architectural elements, not only for the sake of preservation but to provide examples of past solutions to relevant current problems, to enhance a sense of place, to retain the tradition of beauty in built form in the region and to make practical working use of buildings from a previous age.
Partial solution to problems (3)(a), (3)(c), (3)(d), (4)(a), (4)(b), (4)(c).

(b) *Develop* design themes which adapt or have their origins in the best elements from historical patterns, to create modern versions of functioning but, where possible, beautiful building and settlement design.
Partial solution to problems (1)(d), (3)(a), (3)(c), (3)(d), (4)(a), (4)(b), (4)(c).

(c) *Pursue* town planning policies which develop components of design and layout from the past such as a sense of place, and components of this, such as serial vision, visual punctuation, contrast, complementarity and scale, etc. (see G. Cullen in bibliography).
Partial solution to problems (3)(a), (3)(c), (3)(d), (4)(a), (4)(b), (4)(c).

APPENDIX 2

Designing with Environmental Assessment.
Source : Recycling Cities for People. The Urban Design Process, Laurence S. Cutler, 1976.



Urban design is, or should be, highly compatible with environmental assessment.

Outline of Component Tasks

Task I
Data Base Inventory

General description of the project
—History, chronology and statistical base
—Purpose and design criteria
—Proposed program and plans
Description of project areas
—Physical environment
—Socioeconomic environment

Task II
Community Participation and Reaction

Methods of citizen participation
Information from community
Information to community
Modes
—Hearings and meetings
—Radio/TV/newspaper
—Questionnaires
—Interview
—Workshops
—Others
The appropriate uses, advantages, and disadvantages of various methods and modes—groups reached
Community involvement necessary to discern
—Mutuality of goals & user needs
—Dominant factors
—Priorities of issue
—Alternatives proposed or favored

Task III
Establishing Existing Conditions and Analyzing Impacts of Projected Conditions

Urban Functions
—Existing conditions
—Projected conditions
Urban Frame
—Existing conditions
—Projected conditions
Urban Fabric
—Existing conditions
—Projected conditions
Urban Quality of Life
—Existing conditions
—Projected conditions

Task IV
The Establishing of Priorities Through Value Factors in Order to Evaluate Alternatives

Establishing quality indicators for conditions described above
—Urban design quality indicators (sources of value factors)
—Socioeconomic environment quality indicators (sources of value factors)

Task V
Design Alternatives
Schemes/Projects Alternatives

Presenting, comparing, and evaluating alternative schemes
Project physical program and plan

Task VI
Stating Impacts & Developing Means to Minimize Adverse or Maximize Beneficial Effects

Impact areas include
—Response to goals & objectives
—Responsibility, cooperation, and communication
—Project physical program & plans
—Project operation program & use
—Urban function, frame, and fabric
—Urban quality of life components
Overlapping impacts
Adverse impacts & means to minimize
Beneficial impacts & means to maximize

Task VII
Adjustments and Alternatives to Establish a Final Action Plan

Task VIII
Review and Feedback

Management of assessment and review process
—Assessment—review cycles with agencies & community constituents
—Monitoring interim results—testing by both professional analysis and user review
Feedback into design & funding decisions & stages
Feedback into local environmental inventories, plans, values
—Creation of local environmental base data for future use

Within each simplified Task category the complexity of considerations increases. Just within Task III—Urban Function, Urban Frame, Urban Fabric, and Urban Quality of Life—there are myriad possibilities in describing the components and concerns of a city. Besides, what is an urban frame? Like a living body, the city includes a skeleton or a frame and several separate circulation systems. The city, too, includes a nervous system, which causes various parts to function and behave in particular ways. There is also the flesh or the fabric of a city, and there is the spirit—a quality of life about it that makes it special and individual.

With each part there are particular concerns. We recently outlined these elements for the US Department of Housing and Urban Development. This general Urban and Rural Design Checklist, which was developed as an aid in assessing and classifying conditions of urban areas, has also been keyed and numbered for use in cataloging an Urban Studies Library. For example:

B	urban frame	a	collection
408	infrastructure solid waste	01	1st book in this category
		ECS	country or state

Table 1
A Checklist of Considerations in Assessing Urban Function, Urban Frame, and Urban Fabric

A Urban Functions

A100 Image goals

A101 Goals & objectives
A102 General criteria
A103 Problems & potentials/trends & tendencies
A104 Project organization & methodology
A105 Character of environment: physical & spiritual
A106 Government & laws
A107 Regional context
A108 International relations

A200 Social functions

A201 Character of community
A202 Demographic background & change
A203 Regional & local projections
A204 Lifestyle/user needs
A205 Social stratification/grouping
A206 Values, problems, and potentials
A207 Worker/Resident/Visitor interface
A208 Displacement, relocation, and migration patterns

A300 Economic functions

A301 Regional & local projections
A302 City tax base
A303 Cost to city
A304 Feasibility
A305 Marketability
A306 Employment
A307 Education
A308 Housing
A309 Business—large, small, mail order
A310 Commercial—retail, wholesale
A311 Tourism—commercial, recreational
A312 Agriculture—social factors, food resources
A313 Industry—industrial planning

A400 Natural and site functions

A401 Local ecology
A402 Local geology
A403 Topography
A403a —Slope gradients & contours
A403b —Special land forms and outcroppings
A403c —Suitability for development
A404 Soils
A404a —Composition & depth
A404b —Characteristics—permeability, loadbearing, consevanass
A405 Vegetation
A405a —Trees/Shrubs
A405b —Ground cover
A405c —Climate adaptability & density
A406 Wildlife
A406a —Manne/Land
A406b —Native types
A406c —Effect of development
A407 Hydrology
A407a —Availability
A407b —Quality
A407c —Surface & subsurface
A407d —Movement, storage, and erosion
A408 Microclimates
A408a —Sun angles and orientation
A408b —Wind effects and directions
A408c —Shade/Shadow
A408d —Snow/Ice/Frost action
A408e —Rainfall/Temperature/Humidity
A409 Natural hazards
A409a —Flood/Fire
A409b —Hurricane/Storm
A409c —Tornado
A409d —Earthquake
A410 Resources
A410a —Energy
A410b —Air
A410c —Water
A410d —Land/Parks
A410e —Minerals/Vegetation
A411 Pollution control
A412 Conservation & preservation of natural resources
A413 Maximization of natural resources

A500 Cultural resources

A501 History of area
A502 Heritage and legend
A503 Archeological sites
A504 Aesthetics and literature
A505 Museums, historic buildings, universities
A506 Local taste factors
A507 Behavior modes and personal space
A508 Preservation and maximization of cultural resources

A600 Standards and design for health, safety and security

A601 Fire safety codes
A602 Building codes—structural, heating, ventilating, air conditioning, electrical, gas, plumbing
A603 Sanitation standards—water, sewage, waste treatment, solid wastes
A604 Transportation standards—highway and traffic engineering, railway, airport
A605 Health and safety standards
A606 Educational standards
A607 Labor standards
A608 Power standards
A609 Environmental standards
A610 Industrial process and equipment standards—welding, pressure vessel, piping

A700 Citizen reaction

A701 Defining goals & objectives
A702 Pros versus cons
A703 Public awareness
A704 User needs
Information networks:
—Public officials
—Civic associations
—Public interest groups
—Neighborhood groups
—Newspaper/Magazine/Newsletters
—Radio/TV/Movie
—Individuals with specific expertise
—Other
A705 Interpreting design & selection criteria
A706 Comparison of goals & objectives
A707 Risks & responsibilities

B Urban Frame

B100 Massing

B101 Form generators
B102 Gateways & barriers
B103 Centers & nodes
B104 Connectors, lines and interchanges
B105 Density, proportion, scale, and rhythm
B106 Zoning, building heights, floor area ratios
B107 Spatial sequence, views, vistas
B108 Adjacency conditions: hard, soft
B109 Transitional zones & fluidity—directions, signage, and visual pollution
B110 Building prototypes & groupings
B111 Historic massing
B112 Urban frame analysis

B200 Land use

For:
B201 —Residential
B202 —Recreational
B203 —Institutional
B204 —Commercial
B205 —Industrial
B206 —Agricultural
B207 —Mixed Uses
B208 Location, quantity, development units, amenities
B209 Fabric & focus elements
B210 Historic district and sites
B211 Open space system
B212 Land values & availability of types
B213 Economic feasibility
B214 Existing generators
B215 Development patterns & growth
B216 Interaction of above & mixed use proportions

B300 Circulation

B301 Traffic projections
B302 Modal split and demand
B303 Access patterns, origin and destination patterns
B304 Public transportation—PRT, air networks & capacities
B305 Schedules, signage, and signals
B306 Automobile—primary & secondary networks & capacities
B307 Parking requirements, signage and signals
B308 Pedestrian & bicycle—networks & capacities
B309 Physical facilities—existing and changes
B310 Terminal facilities and stations
B312 Physical form of network—radial, linear, loop, radial
B313 Interface and interaction of above
B314 Regional interface & intersection

B400 Infrastructure

B401 Programs, future demands and goals, alternatives
Access to and quality of service facilities for:
B402 —Water—supply, treatment, storage, distribution
B403 —Sewer—collection, treatment, disposal
B404 —Storm/Flood—drainage systems, installation, maintenance
B405 —Electric & gas—production, generation & distribution
B406 —Lighting—streets & highways
B407 —Telephone—facilities and other communications systems
B408 —Solid waste—collection, transport and disposal
B409 —Pollution controls: air, noise, water
B410 —Street amenities: public toilets, benches, bike racks, fountains

B500 Public facilities and services

B501 Programs, future demands & goals, alternatives
Access to and quality of facilities for
B502 —Fire—fire prevention
B503 —Police/Crime prevention
B504 —Emergency/Safety
B505 —Schools/Education
B506 —Health
B507 —Public transportation

C Urban Fabric

C100 Building programs

C101 Goals & capacities
C102 Building use & mixed use
C103 Adjacency diagrams of functions
C104 Square footage/acreage
C105 Number of floors, units, or rooms
C106 Substructures/Foundations
C107 Open space/Site coverage
C108 Architect's plans and procedure
C109 Construction techniques & materials: labor availability
C110 Owner's management policies and phasing
C111 Public facilities & services compatability
C112 Preservation & maximization of resources
C113 Urban function: urban frame fit

C200 Building Treatment

C201 Comparative studies of building types & design
C202 Materials & structure
C203 Texture & color
C204 Proportions & scale
C205 Visibility requirements
C206 Compatibility with existing
C207 Landscaping & siting
C208 Signage & visual pollution controls
C209 Alternatives

C300 Building land use prototypes

C301 Housing
C301a —Site plan type—cluster, P.U.D., site & service, etc
C301b Unit & building types, plot & plot use
C301c —Programming space for user needs, amenities, schedules & family composition
C301d —Relationship to circulation & utilities systems
C301e —Building system types and selection
C301f —Building design, engineering & phasing
C302 Education and health
C302a —Programming space with educational & health system goals, needs and schedule
C302b —Prototype development for various levels
C302c —Building systems types and selection
C302d —Building design, engineering and phasing of schools, colleges, training centers, hospitals, clinics and other health care and education facilities
C303 Institutional facilities and public uses
C303a —Programming, building design, engineering and phasing
C303b —Governmental administrative areas
C303c —Cultural, symbolic, or civic centers
C303d —Libraries
C303e —Postal buildings
C303f —Fire/Police stations
C303g —Court houses

C304 Retail and commercial facilities
C304a —Community commercial centers
C304b —Local convenience services
C304c —Shopping malls, marketing places and bazaars
C304d —Regional malls, marketplaces and bazaars
C304e —Central business centers
C3041 —Office and administrative areas
C304g —Transient residential accommodations
C304h —Entertainment
C305 Recreation and entertainment facilities
C305a —Open space systems—parks and recreation
C305b —Playgrounds
C305c —Gymnasiums
C305d —Tracks
C305e —Zoos
C305f —Pools, rinks, courts
C305g —Arenas and athletic complexes
C305h —Stadiums
C306 Religion and community organization facilities
C306a —Religious and community buildings for town center and neighborhoods
C307 Industrial facilities
C307a —Distribution centers
C307b —Storage facilities
C307c —Light manufacturing, service industry, cottage industry
C307d —Heavy industries
C308 Agriculture
C308a —Existing and reversed use
C308b —Distribution centers
C308c —Storage facilities
C308d —Location
C308e —Water availability
C308f —Productive capacity
C308g —Livestock
C308h —Forestry

D Urban Quality of Life

D100 The Synthesis, or how the parts come together

D200 The Composition or mix of all the elements of consideration above

D201 Proportion of percentage of elements
D202 Priorities or emphasis of elements

D300 The interaction of all the elements of consideration above

D301 Degree of mutuality of goals and objectives
D302 Coordination, cooperation
D303 Overlapping of elements
D304 Critical mass
D305 Conflicts and compatability

D400 The Character or image of the total place

D401 Physical and spiritual imageability
D402 Richness and variety to simplicity and clarity
D403 Chaos and insecurity to blandness and boredom

D500 The Well-being of the individual

D501 Physical and psychological
D502 Self-realization
D503 Options for privacy or sociability

D600 The Well-being of social groupings

D601 Physical and psychological
D602 Activity groupings, amenities
D603 Validity of groupings
D604 Purpose and fulfillment
D605 Legal, governmental and social constraints

Developing a Methodology

In theology no one religion holds the key to all knowledge—so it is with planning theories. Planning theories proliferate because planning methodologies tend to evolve in response to specific and unique sets of problems. This is as it should be.

The best planning theory is, in fact, the hybrid

As each urban area and each set of problems is different, a methodology should not be a dogmatic imposition of a monolithic and inflexible thought process. The best planning theory is, in fact, the hybrid—a responsive adaptation of the best characteristics of many proven methods.

A thorough understanding of existing methods and of their strengths and inadequacies is necessary when planning with incremental adaptation, optimization, structural analysis, or other accepted methods. Necessary too, however, is the creative ability of a team to make adjustments or, when necessary, to devise totally new procedures through which to evolve a plan, or better yet, a method of growth and change for an urban area.

The choice of the appropriate set of planning techniques or methods is conditioned upon the prevailing local conditions and needs and upon the available base of statistical data and other information. For example, techniques applicable to highly industrialized countries (where the data base is broad and historically comprehensive) are usually inappropriate to countries or areas that have a less well-developed information system. When needs for basic amenities, such as roads, water, and housing, are pressing and information is lacking, planning must aim at achieving results rapidly without waiting for extensive data.

In the absence of an extensive data base, it is possible to rely on international standards and rules of thumb, comparative or cross-national analysis, and direct analysis augmented by carefully selected sample surveys to produce results with the speed and sensitivity required. Conversely, to spend an inordinate amount of time in less-developed areas or countries assembling the extensive data base normally available to planners in highly developed areas will only delay the realization of results. Due to the unpredictable nature and difficulties of standardizing data gathering and analysis, there are often lengthy delays and, all too frequently, indefinite, misleading, or inconclusive information results when the area being studied is undergoing a rapid transition or change.

To quote from the conclusions and recommendations of the United Nations Group of Experts on Metropolitan Planning and Development:

*Statistical and other information concerning the economic, social and physical structure of a metropolitan area and its probable evolution is clearly essential for comprehensive planning. It was appreciated that the relatively less developed areas, in particular, need to develop their statistical and research services and, consequently, augment the supply of trained personnel for this purpose. However, the lack of such adequate services should not preclude a program of immediate action with regard to metropolitan planning and development. It should be possible at the outset to prepare some preliminary plans, at least in schematic form, outlining the more urgent objectives, it being understood that these would be periodically reviewed and revised as the statistical and research services improve and more precise data and information became available.**

A comprehensive scale technique for action planning

Although the notions of "Action Planning" and "Intermediate Approach to Planning" have been discussed at length on the academic level and in fragementary subject areas, a comprehensive scale technique has not yet been developed. In developing the methodology to guide the speedy preparation of a wide range of immediate action plans (from regional master planning for seven urban areas in Nigeria to downtown action plans for American cities and towns) we have evolved at ECODESIGN a planning process, a method of working, that is flexible in adjusting to varying levels of information and in accommodating a variety of planning strategies. Yet, as a process, it imposes the required planning order and becomes a structure to control the more intuitive planning strategies.

A structure to control the more intuitive planning strategies

This process has been explained in its simplified outline form and diagramed (pp. 106–125) throughout this chapter. However, when applying the procedure to more complex problems we have expanded upon the basic process and incorporated various new and required techniques through a "Methodology Compatibility" inventory analysis.

*Planning of Metropolitan Areas and New Towns, 1969

Inventory of Techniques

In the section, "Technique: Design Methods," from his book, *Site Planning*, Kevin Lynch gives a thorough inventory of current planning methods. For purposes of explaining the inherent flexibility and versatility of the planning procedure that has been evolved through ECODESIGN's work in urban and rural design, we will expand on this inventory and summarize it, while taking some additional editorial liberties in commenting on each technique's appropriateness and failings for a specific context. This inventory of planning techniques follows:

Incremental Adaptation

Incremental adaptation of solutions previously used (stereotypes) is perhaps the most pervasive and often used technique. It is most useful "when changes in the external situation are slow relative to the pace of environmental decision—when objectives, behavior, technology, motivations, physical settings are all stable. In addition, the available stereotypes must have some reasonable relation to the problem." This is clearly not a methodology appropriate to newly urbanizing or rapidly growing areas.

Optimizing the essential function (linear programming)

Planning must always move constantly between the general and the specific. This method proceeds from the general structure to the specific details of a problem. One abstracts the essential function of an environment, "then imagining a form that will satisfy this general function as well as possible, one then adapts this form to satisfy other functions and constraints." This is also called Linear Programming. In the case of essential human needs

such as water, roads, or infrastructure, this programming concept provides an important and direct impetus, but one that must be carefully guided.

Optimizing general functions

The "optimizing of functions" is a more valid and secure method when it is used as part of a more comprehensive and general design strategy. In early planning stages it points the way and gives programming and design criteria. "This technique is surely correct in pointing to the importance of purpose or function . . . getting right at the heart of a complex problem wherever there is an obvious dominant function" or functions to be corrected or optimized.

The structure of the problem

This is the most physical of planning approaches and is perhaps at its strongest in the absence of statistical data. It deals primarily with "possibilities inherent in a physical setting," but other aspects of the planning can be dealt with in a physical or spatial manner, such as "political power structure, behavior settings." The strongest advantages in this methodology lie in the reduced time element, the fact that "suggestions for design solutions seem to rise immediately out of the problem," and that the data input need not be in statistical form.

Disaggregation

Disaggregation attempts to confront multiplicity (as opposed to coping with complexities) by zeroing in on a critical problem. Here it is assumed that "multiplicity can be managed if it is divided into many parts." These smaller area units or modules, however, must be of a size "large enough to deal with the important issues of the plan." The closest analogy is perhaps the English system of town-plan Layouts. Its failure is most marked in developing countries (and previous British colonies) because its success is dependent upon a total planning system. The unit must be a piece fitting into a strong existing master plan for a city and based on nationally accepted behavior criteria for development and intended lifestyle.

Design by behavior settings

This is perhaps one of the most current and innovative techniques. Basically, an area is "divided into relatively independent, stable patterns of customary behavior together with their appropriate physical settings, which are units in time as well as space. These are more logical divisions than purely spatial ones since they follow the grain of the way a place is used." The major failing of this technique would be "single-focus neglect of larger relations"—such as the inter-relations of activity patterns, movement patterns, regional influences, etc. On the other hand, it does open the door to more intuitive techniques in the absence of a standard data base.

Breakdown by criteria

To prepare "ideal plans for each of a number of major purposes (access, diversity, cost maintenance, etc.) "Is a similar tactic to optimizing a single function, but it is less superficial in that "correspondences are sought and reinforced and conflicts are avoided (note that to this point, the technique closely approximates the Environmental Impact Statement Process) or compromised on some intuitive basis of weighing to give solutions that correspond to many criteria at once." The EIS Process, which examines conflicts to be resolved or avoided, is discussed separately in the following section as it is a basic derivation of the methodology that is explained in this chapter.

Design decision branching

This very complete planning method "involves the development of forms appropriate to separate criteria, though only when the criteria are so finely divided that they are no longer verbal generalities, but are operational statements about what characteristic of form is needed in a particular circumstance. . . . Then a tree-like path of design is constructed in which each design decision (verbal or graphic statement) considers the conflicting requirements of only two subdesigns, the more important conflicts being resolved as early as possible. The final result is a solution that reflects the whole branching chain of suboptimizations and compromises." . .

Although Multiplicity is explicitly dealt with here, in practice the method is inoperative in terms of time and inability to make system-wide reconsiderations in a new light or to change directions midstream. This method is derived from *Notes on Synthesis of Form* by Christopher Alexander. Because of its comprehensiveness, our adapted methodology attempts to amplify and incorporate this aspect.

Focus on means

"Rather than concentrating on objectives or on problems, design may proceed from the opposite end. In such a case it will begin by assembling or imagining possible means (solutions) to see what they are good for."

This general category also includes other direct, intuitive, but, as yet, non-scientific, unprovable, and thus inconclusive means, such as: 1) community participation, 2) shift in context, time, location, or size, 3) synectics approach, 4) Stanislavski or Socratic methods, 5) analogies, personifications, and other gaming simulation, brainstorming, and team approaches. These are valid paths to invention that need to be solidly integrated into a planning process. This integration, in fact, the fast-tracking of these means into the total process, has been a major intent described in this book and in particular, this chapter.

Another group of techniques that would appropriately be categorized as a "Focus on Means" include 6) Experimental prototypes which can either be a physical simulation or a small-scale trial action. These are most useful for small-scale problem solutions and the learning emphasis is on the monitoring and feed-back.

Sieve mapping

Sieve mapping is a simple, straightforward method for aggregating and analyzing complex information patterns in a spatial context. The basic notion is that by simultaneously viewing transparent overlying maps, one is able to see a consensus of separate pieces of information projected onto one final map. This method produces a composite piece of information that is subjective only inasmuch as professional interpretation on particular overlays is necessary.

In the typical sieve mapping-site suitability analysis, a site suitability matrix is developed by overlaying mapping of the following types of survey information: *Soils* (Soil types, erosion, permeability, bearing capacity, shrink-swell or erosion susceptibility); *Geology* (Texture and depth to bedrock, ledge, outcropping, deposits, landforms, orientation of foliation, regional faulting and fractures), *Hydrology* (Streams, flows, flood plains, swales, surficial run-off, subsurface flow, soil yield potential, upland flats, percolation and depth to waterable); *Vegetation* (Hardwoods, softwoods, interspersion, spare-dense, wildlife, visual enclosure, limbar resources, open field, forest-edge condition); *Topographic* (Percentage of slope, recommended maximums for industrial, residential, or road development); *Climate* (Warm/cool slopes, air flow, solar orientation).

All these are overlayed as sieve process maps of site features to determine the site suitability in terms of available acreage, frontage, road access, utilities, and acquisition costs. In this way unsuitable areas and most suitable areas for development of particular projects are identified prior to the design of schematic plan alternatives.

This method produces a most important product in the absence of, or in augmenting, a data base in that it aggregates existing physical information into a meaningful and factual form.

Computer-aided design

The use of the computer in storing and sorting data for programming, for displaying this date either verbally or graphically has proved to be a valuable planning tool, which has been discussed in Chapter 2. However, the computer is only useful when there is a large and complete data base with which to work.

When the data is available, the computer can be used by a creative programmer to display the information graphically through special mapping techniques, animated demographic surfaces, planning models, etc., shown on pages 40 through 43. Laborious calculations can be made—such as projected populations and other demographic or financial data, traffic and parking demands—even perspectives can be drawn. However, because all of these functions depend on availability of data base, equipment, and trained personnel, computer-aided techniques cannot be widely utilized in planning in developing areas, nor even in many parts of the United States.

Roots of the Process

The background: environmental impact statement—E.P.A., 1970.

Each of the methods discussed under the inventory of Techniques have one fault in common: they are not total planning and design processes. They are piecemeal strategies and, as planning methodologies, are prone to error and omissions. Elimination of such omissions, however, was one of the major goals of the "Environmental Impact Statement Process" introduced in 1970.

As the result of the critical and previously unprotected environmental and growth policy situations developing in the United States, the National Environmental Policy Act was developed and, in

spite of its inherent bureaucratic handicaps, it represents the concept of the most comprehensive, if controversial, new planning procedure to be devised in any country in the past decade. It is innovative because it incorporates several important techniques into a process—the most important of these techniques being the testing of a "what if" series of alternatives against shifts in context.

As the first planning procedure to evolve from a legal act of Congress, the process, of necessity, had to be constantly tested and loopholes closed. By the same token, this very legal raison d'être began, precedent by precedent, to develop an EIS Process that tended to be less human-oriented and more technical-oriented. The legal threat of subjectivity was forcing the emphasis less on planning for human needs and more on quantifiable levels of acceptance of the more scientifically measurable impacts of air, noise, water pollution, traffic, and displacement. The quantifiable impacts that could be measured and then compared to established legal or safe levels of acceptance or non-acceptance (thus avoiding any threat of subjectivity) meshed too easily and inflexibly with the legal structure from which the EIS Guidelines had been generated.

The other major criticism of the EIS Process was that it is wasteful in time, professional energies, and, therefore, money because it was designed to follow, rather than to precede, a proposed plan of development or action.

The process: planning with environmental assessment—ECODESIGN, 1975

Because several of the most important Environmental Impact Statements in the United States relating to whole urban areas and downtown Master Plans have been undertaken by ECODESIGN, we were asked by Andrew F. Euston, Jr., Urban Design Program Officer, U.S. Department of Housing and Urban Development, to develop an urban design EIS methodology that was responsive to both professional and community critiques of the existing governmental EIS guidelines.

Our report to the U.S. Department of Housing and Urban Development stated that

The Urban and Rural Planning Process is, or should be, the process of designing with Environmental Assessment. The purpose of the current Environmental Impact Statement process is to identify the impacts of a particular project on the environment and to develop means to minimize adverse impacts and to maximize the beneficial ones. Within these goals, the difference between the Regional and Urban Design Process and the Environmental Impact Statement process is one of timing—the phasing and the additional objective that, if the process is followed in the course of design, the costly, time-consuming needs of Environmental Impact Statement writing after design will be minimized.

Both a Flexible Structure on Which to Plan and a Control Mechanism

The planning methodology developed at ECODESIGN has proved to be a means of establishing broader guidelines for the Environmental Impact Statement process through simplified concepts and a clarified procedure. Although it is a systematic process that evolved out of many complex revitalization reports, downtown plans, and environmental impact studies, it has been simplified to a Work Flow Diagram, a sequenced Outline of Specific Component Tasks, and a Checklist of Urban and Rural Design Considerations.

Plugging in relevant techniques

The methodology, however, is intended as an adjustable structure that would serve simultaneously as a methodology, a schedule of major milestones, and a format for work tasks enumeration. Most importantly, however, we have attempted to construct a process into which various techniques can be plugged and utilized as appropriate. It is a network through which information and creative planning input would pass. It includes a checklist and channels designed to avoid some of the pitfalls of oversight of the single-focused and isolated techniques described above and to "fast-track" some of the more comprehensive, but overly time-consuming, techniques of disaggregation of problems and sequential generation of alternatives.

The four "Impact Areas" (Urban Function, Urban Frame, Urban Fabric, and Urban Quality) also serve as a calibrator to guard against overemphasis such as of physical versus nonphysical and technical versus human-oriented techniques. The individual techniques described in the preceding inventory can thus find their useful positions within the Impact Areas, depending on the particular planning project needs. For example:

☐
Urban Function—(Socioeconomic Functions)
Optimizing of particular functions
Breakdown by criteria
Cause / Effect matrices
Dominant factors grid

Shifting of context
Testing of "What if?" alternatives
☐
Urban Frame—(Physical Land Use and Form)
Problem structure
Design language and diagrams
Form juxtapositions
Sieve mapping process
Spacial location (with and without computer aid)
☐
Urban Fabric—(Area Units and Urban Texture)
Means orientation to spacific problems
Suitability compatibility matrices
Modular development units
Testing of prototypes
☐
Urban Quality—(Behavioral Patterns and Preferences)
Matrix to check for corrective actions
Design by behavior settings
Time mapping—operations, schedules, cycles
Brainstorming and gaming techniques
User needs, Community participation techniques

Checks Against Oversights Are Built-in, Cyclical Events

These Impact Areas are set into the process as a work-flow chart so that problems of comprehensiveness, alternatives consideration, and feedback are made *imperative cyclical events*, for example: testing against and assessment of alternatives are recurring tasks that occur both as generic (or prototypical) alternatives and as specified detailed alternatives. The use of generic alternatives in an early stage (for example, Alt. I—Linear Form, Alt. II—Radial Form, Alt. III—Grid Form) becomes a means of fast-tracking and eliminating some time-consuming aspects of the "tree-like path of design" described in Alexander's *Notes on Synthesis of Form*. The overall intent is that the procedure can be simplified and clarified so as to be understood by a broader professional and lay group while still incorporating the means of dealing with great complexity.

The four Impact Areas are also used as *convenient groupings for the checklist* and for the final *fine-tuning* procedures, as well as the overall evaluation and statement of impacts when adverse and beneficial impacts are identified and means to minimize the adverse impacts or maximize the beneficial are developed. At the impact statement stage the "Matrix to Check for Overlapping and Accumulative Impacts" or the "Matrix to Check for Corrective Action of Means to Minimize" (See page 230) would again be a built-in assurance of comprehensiveness and a guard against causal and accumulative effects and risk-taking.

The ultimate planning procedure must move constantly from the general to the specific, must constantly cycle new information input and feedback into the process, it must insist on the most scientific of proof available, but still allow for and, in fact, insist on the incorporation of intuitive judgments or solutions.

The Prototypes

Functional systems and their prototype components

The elements of consideration involved in contemplating policy programs or plans for the revitalization of cities are overwhelming in their numbers and complex combinations, but the tools for simplification are the systems and their prototypes. With those tools, it is possible to simplify the component elements of the Urban Functions, Urban Frame, Urban Fabric, and even the Quality of Life to their basic ingredients. When reduced to their isolated and most typical essentials, they can be examined first as an independent system that has a purpose, a method of working (or of not working), and an apparatus. Once the system is made clear, it can be evaluated in terms of its functioning, malfunctioning, overloads, and bad connections—and the problem points can then be identified. Prototypes, on the other hand, are useful because they distill and define the essential concepts.

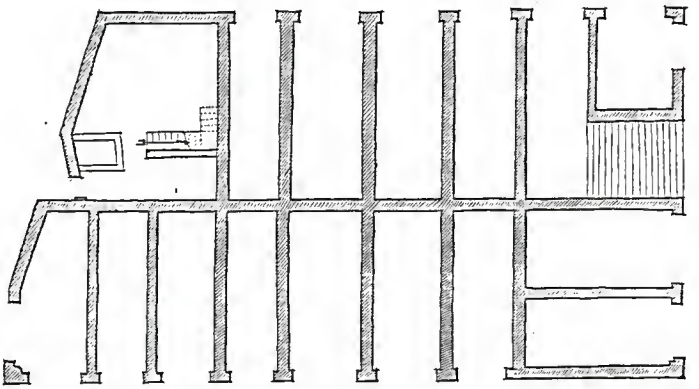
The basic systems that cause cities to function or not to function as they do range from the theoretical, such as the governmental system, to the physical, such as circulation systems and open space systems.

There are functional systems with both theoretical and physical impacts, such as educational systems, public transportation systems, and the security systems of fire and police.

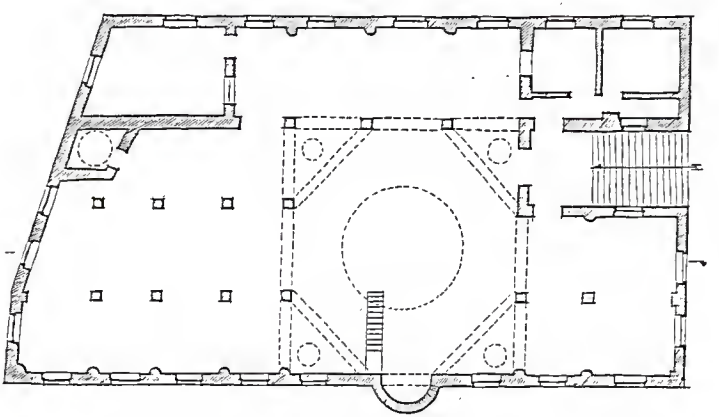
The infrastructure of a city is dependent on both the management and the physical apparatus of water systems, sewerage and drainage systems, electrical utility systems, and road systems.

APPENDIX 3

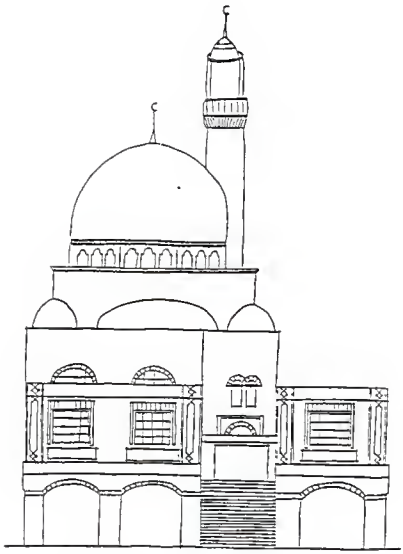
An-Naser Mosque Plans and Elevation.
Source : Personal Communication, 5th Year Students, Dept of Architecture, An-Najah National University Nablus, 1987.



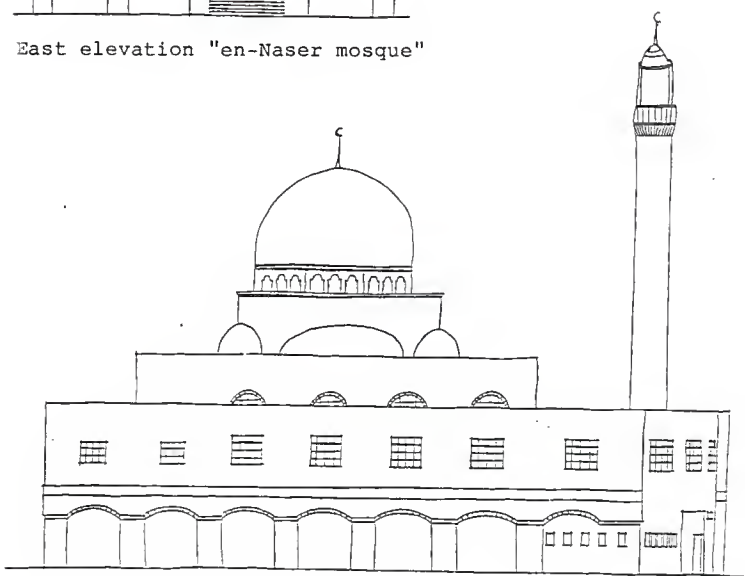
Ground floor plan of en- Naser mosque



First floor plan of en-Naser mosque

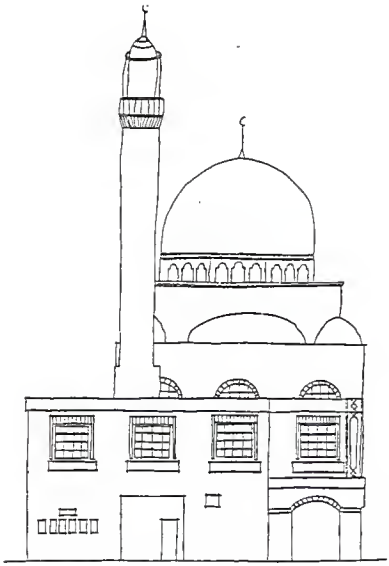


East elevation "en-Naser mosque"

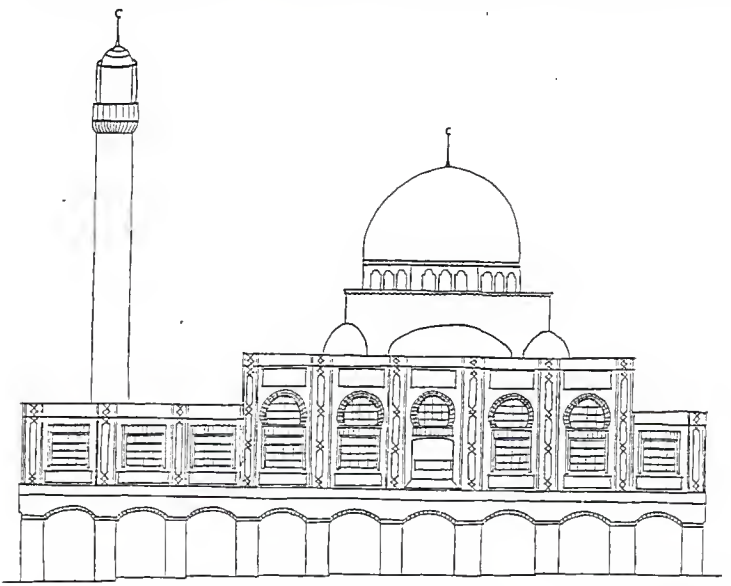


North elevation "en-Naser mosque"

1 2 5m



West elevation "en-Naser mosque"

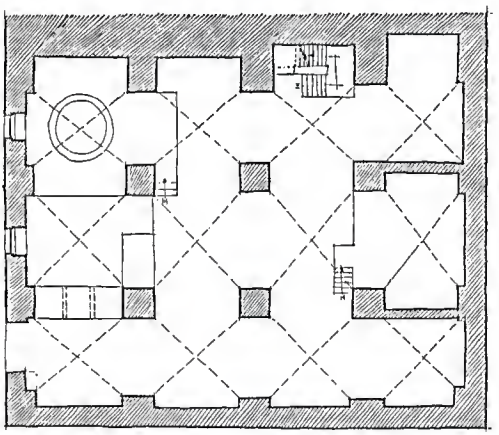


South elevation "en-Naser mosque"

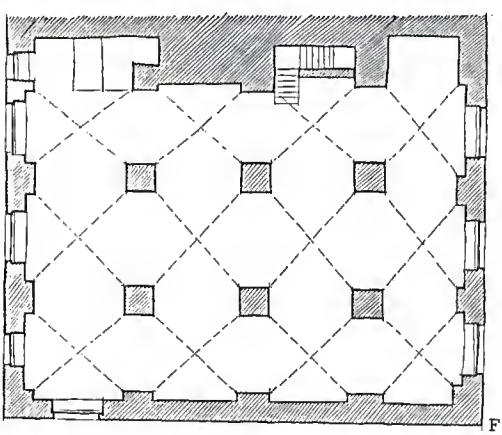
1 2 6m

APPENDIX 4

Sabanet "Soap Factory" Abdul Hadi.
Source : Personal Communication, 5th Year Students, Dept of Architecture, An-Najah National University, Nablus, 1987.



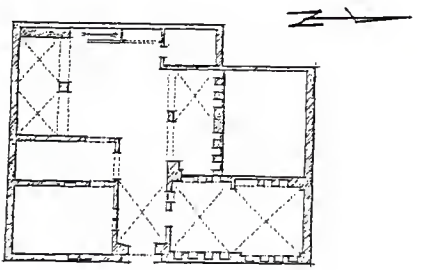
Ground floor plan



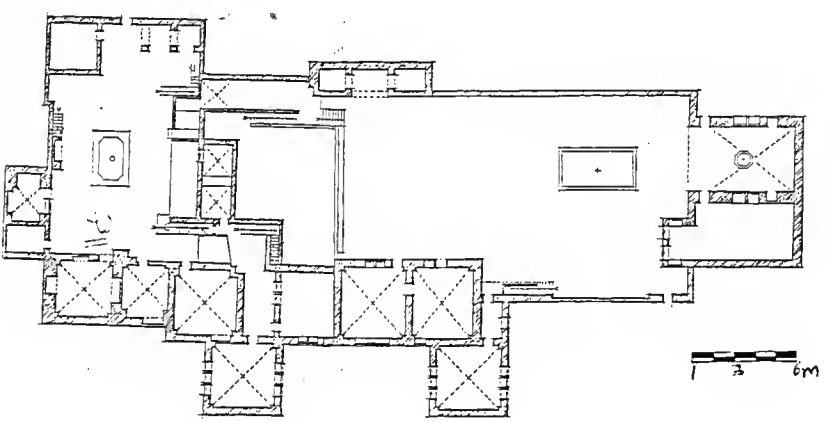
First floor plan

APPENDIX 5

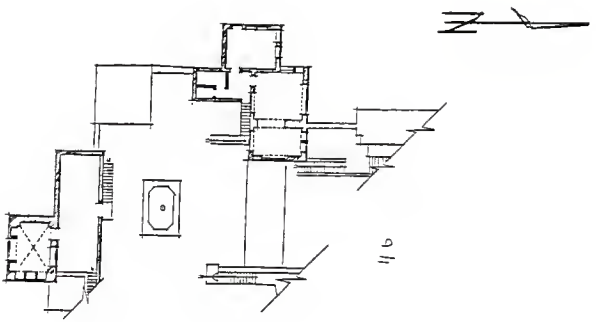
Toqan Palace - Plans & Elevations.
Source : Personal Communication, 5th Year Students, Dept of Architecture, An-Najah National University, Nablus, 1987.



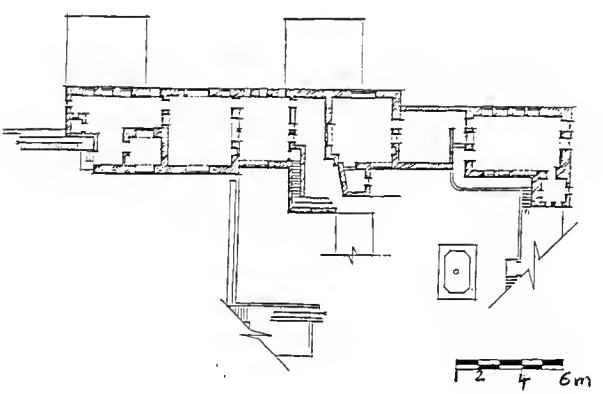
Plan of the entrance "Tuqan palace"



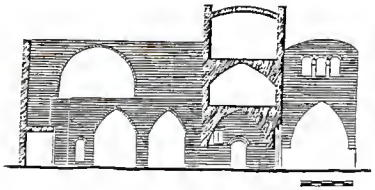
First floor plan "Tuqan palace "

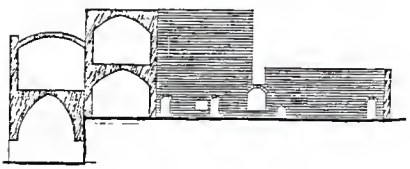


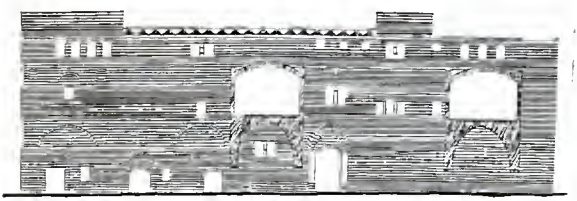
Second floor plan " Tuqan palace "

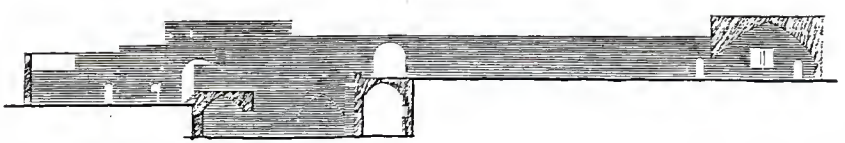


Third floor plan "Tuqan palace "





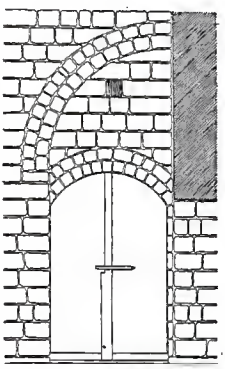


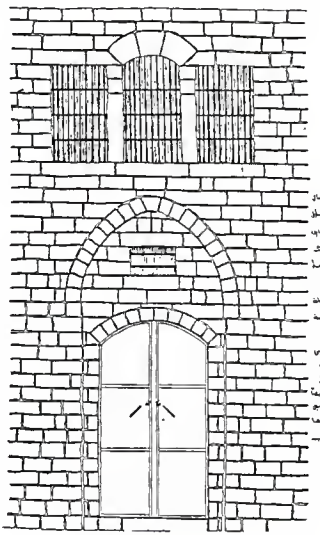


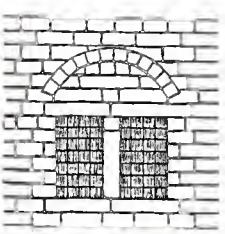
Sections $ Elevations " Tuqan palace "

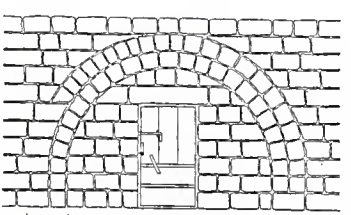
APPENDIX 6

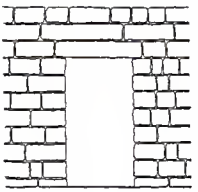
Doors and Windows from the Old City of Nablus.
Source : Personal Communication, 3rd Year Students, Dept of Architecture, An-Najah National University, Nablus, 1987.

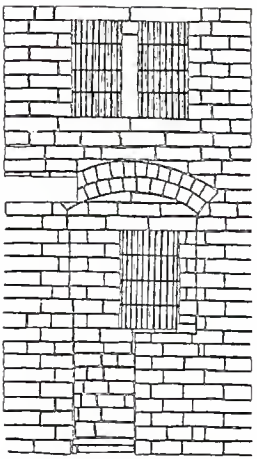


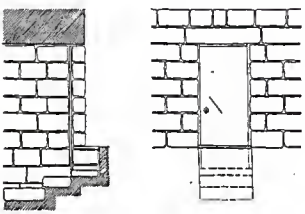


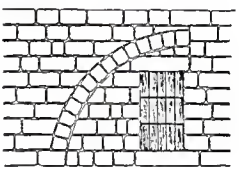


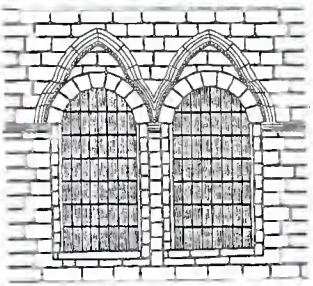


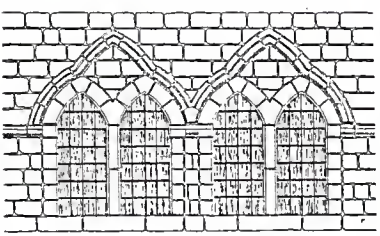


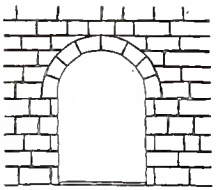


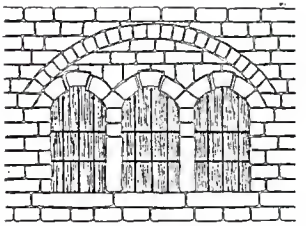


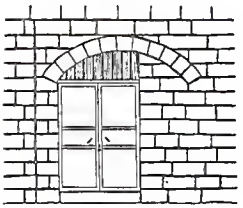


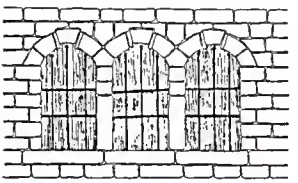


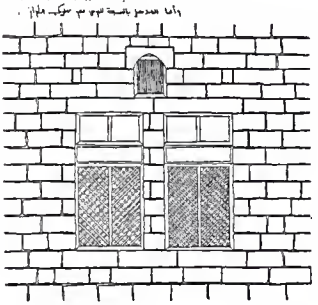


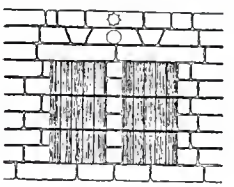


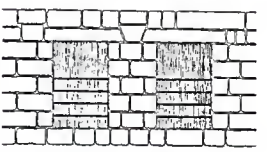


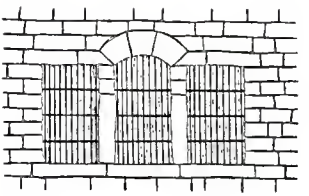












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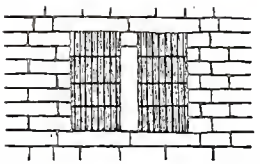

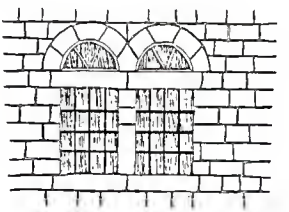

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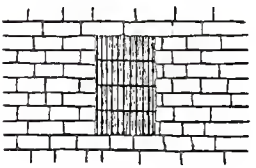

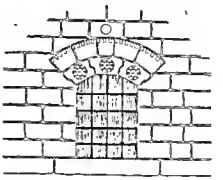

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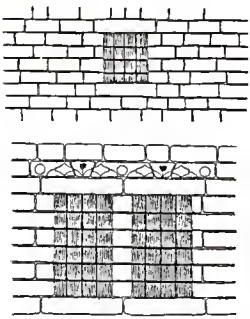

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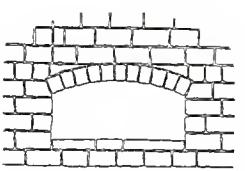

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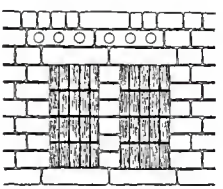

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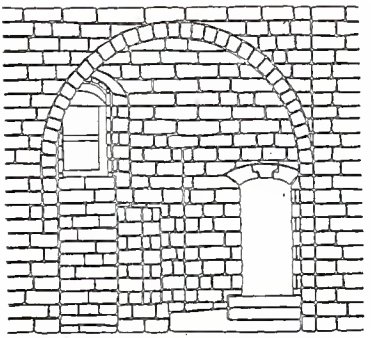
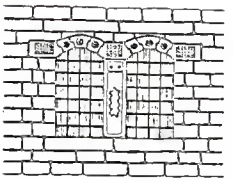
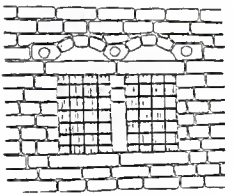
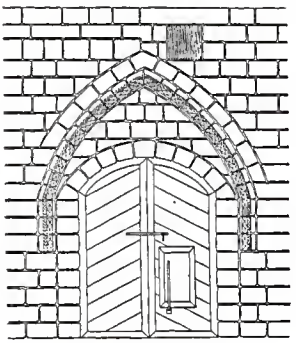
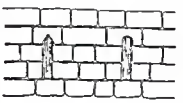
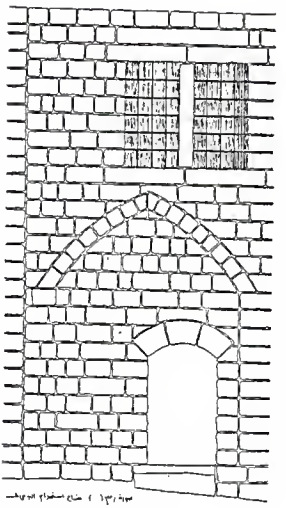


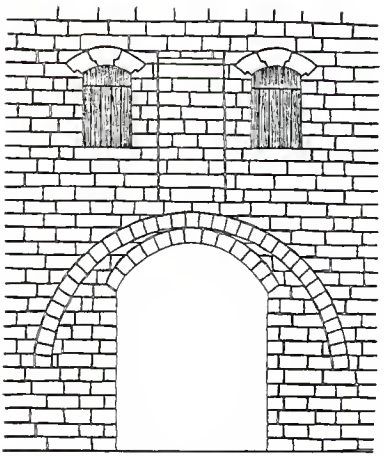


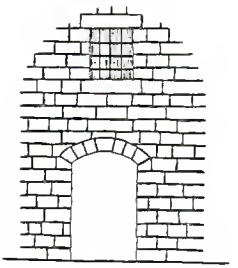


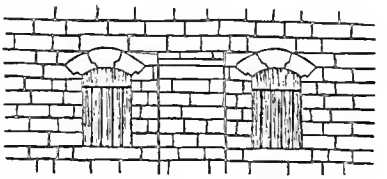


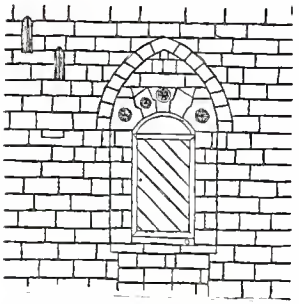


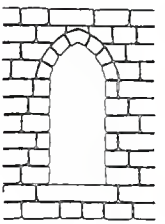


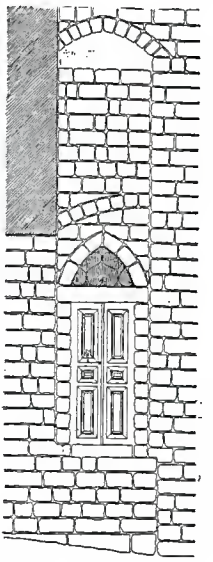


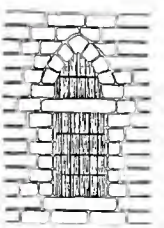






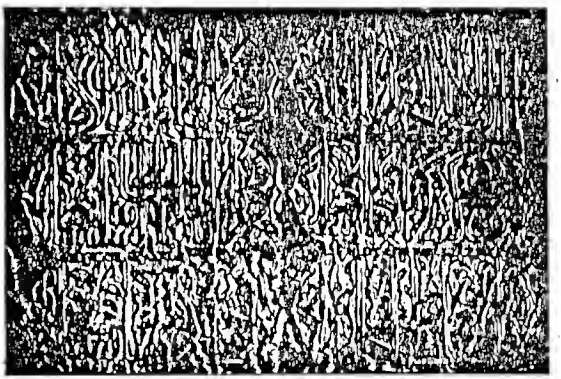






APPENDIX 7

Stone Inscriptions
Source : Personal Communication, Zuhir Dobie, Nablus, 1988.



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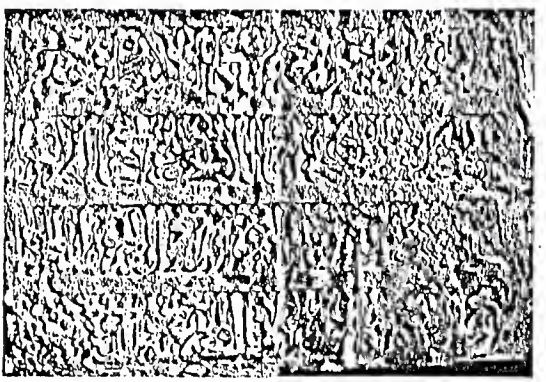

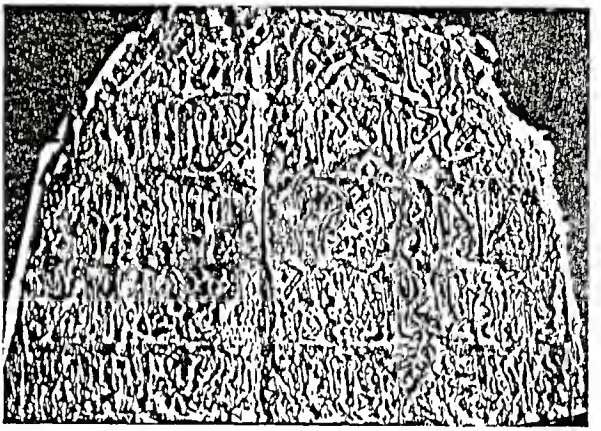

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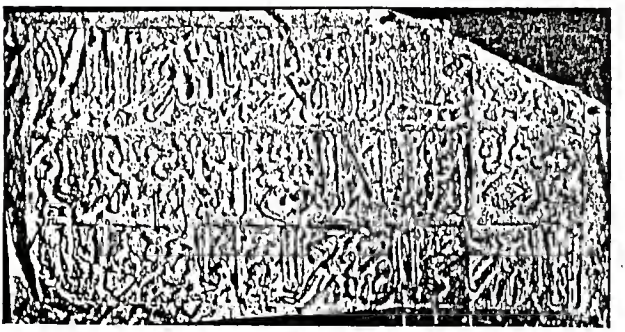

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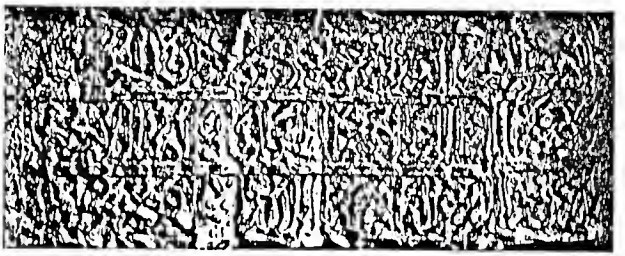

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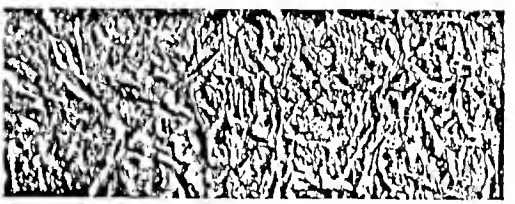

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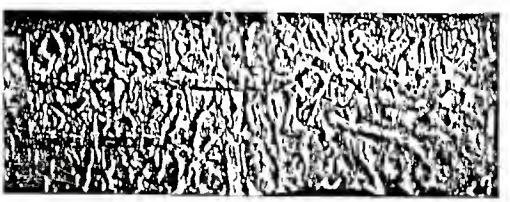

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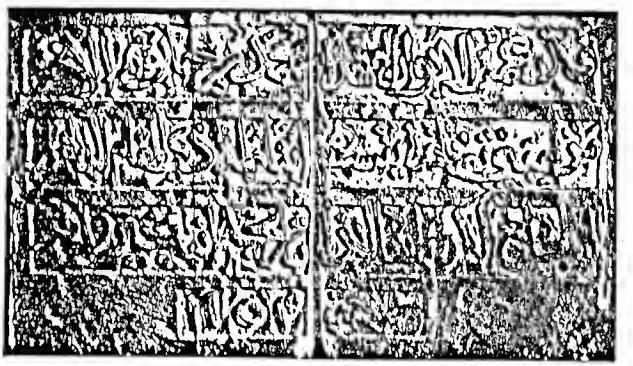

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APPENDIX 8

New Documentation Methodology.

Source : ICOMOS, Vol I, C. Barrett Kennedy and friends, Washinton, D.C., 1987.

Background

In building anew or adapting the old, architects, planners, and builders have struggled to decipher the enigmatic architectural and cultural attributes embodied in extant structures. In the United States, the legislative commitment to the study and documentation of the existing built environment began in earnest with the Historic Sites Act of 1935(P.L. 74-292), which acknowledged the need for records of historic American architecture. This Act authorized the National Park Service to conduct historic resource surveys, and to both secure and preserve drawings, plans, photographs, and other data relating to historic buildings. Among the recent legislative landmarks in the shaping of a federal mandate for the conservation of architectural resources is the National Historic Preservation Act of 1966(P.L. 89-665). Under Section 106 of this act, Federal agencies are required to examine the effects of proposed undertakings on properties either listed on or eligible for the National Register of Historic Places prior to approving the expenditure of Federal funds in support of such projects. In addition to numerous other Federal, state, and local legislative efforts that have reinforced this mandate for conserving the cultural heritage of the United States, significant economic incentives, culminating in those embodied in the Economic Recovery Tax Act of 1981, have been legislated to encompass a broad range of preservation strategies. In recognition of the cultural significance of preservation and the implications that legislative incentives hold for the active conservation of historic resources, the Tax Reform Act of 1986 has retained substantial benefits for preservation efforts. The cumulative effect of these acts represents a fundamental acknowledgement of the economic and cultural value of the nation's historic architectural resources.

The building industry is a major component of the economy of the United States, and the existing building stock represents both a significant capital investment and a fundamental measure of the nation's wealth. It has been estimated by the American Institute of Architects that as many as 90 to 95 percent of the buildings that will exist in the year 2000 have already been built. According to statistics assembled by the A.I.A., rehabilitation and preservation projects represent more than 50 percent of the construction expenditures in this country, and the number is continuing to grow. While the current utilization of existing buildings may not adequately meet contemporary or future socio-economic needs, the prohibitive cultural and economic cost of wholesale demolition and renewal suggests that the architecture profession must devise coherent strategies for efficiently documenting, analyzing, adapting, and managing existing architectural resources. The tools employed in these strategies will have a significant effect on the design, planning, and development professions ability to assess the functional and economic viability of existing resources.

One of the most challenging problems facing architects, developers, and public agencies is the administration of the nation's wealth of historic architectural resources. The accurate and comprehensive documentation of these resources is a fundamental prerequisite for the effective and sensible management of this significant cultural heritage. Traditional methods of recording such architectural assets employed by the Historic American Building Survey (HABS) and Historic American Engineering Record (HAER) have been highly successful over the past fifty years in documenting historic structures. These techniques typically include the use of archival research, oral histories, photography, hand measurements and descriptive field notes. More sophisticated and technologically complex methods entail the use of scaled rectified photographs and terrestrial stereo-photogrammetry, techniques that have been employed more widely in Europe than the United States.

Though these tools of architectural survey are capable of yielding high quality results, the complexity of the documentation task often produces a disjointed morass of written and photographic material. This plethora of material ultimately encumbers not only the field surveyor, but also the editing professional who must assemble and interpret this diverse collection, and the curators who must facilitate accessibility while ensuring archival preservation. Time and budgetary constraints exacerbate these inherent shortcomings of traditional recording techniques, as the process can be both costly and slow. Particularly in the face of catastrophic hazards, such as flood, storm, or fire damage, that imminently jeopardize the structural integrity of a building, a cumbersome methodology can hinder field recording efforts and result in the loss of significant resources without benefit of adequate documentation. Additionally, the quickened pace of socio-economic change can adversely affect preservation efforts by forcing planning and design decisions without an adequate understanding of the cultural and environmental context of which an individual historic structure may be but one small part. Informed decisions concerning the management of a complex cultural heritage, i.e. the 'total ensemble' rather than isolated parts, also depend on the ability to accurately visualize the impact that contemporary decisions have on these cultural resources.

These circumstances require a fresh perspective on the recording of historic architectural resources. The traditional elements of cultural resource survey can provide the foundation for the application of appropriate contemporary technologies that will enhance the accuracy, depth, replicability, execution, accessibility, and economy of documentation projects. Micro-computer, video imaging equipment, and computer-aided design systems, when endowed with the principles of photogrammetric interpretation, dramatically expand the capabilities of survey strategies. The result is a new methodology that can expeditiously and comprehensively respond to the task of architectural resource survey, analysis, and interpretation that is confronting the preservation community.

Methods

The application of videographic and computer processing technology to the documentation of historic sites facilitates the whole process of architectural survey. The videographic method is well suited to the description of historic resources, as it can capture the multisensual context and inherent 'sense of place' through real-time video and audio recordings supplemented with verbal commentary. The imagery, sound, and commentary is immediately accessible in the field, providing an instant confirmation of quality and content. The subsequent manipulation of the recorded information is possible through a unique configuration of computer hardware and software systems.

The process of documentation begins with a television camera and video recorder which are used to document an individual building, group of buildings, or landscape included in the range field are a reference radius and target, which provide three dimensional control points. Appropriate elevations, floor plans, details, and environmental data are recorded on video tape. These images are then transferred to the computer environment by a process called 'frame grabbing'. The entails converting the video signal (which is an ione or raster form) in digital (dot or pixel) form. The resultant digital image is henceforth in a format which can be manipulated by the computer. The computer image, which duplicates the video image, is stored in a permanent memory medium (disk) for future reference and dimensional analysis. The digital image can be further supplemented by other kinds of tabular and contextual information such as construction date, architect, historic reference, structural condition, construction techniques, materials, and field interviews. Much of the technology that supports this system has been developed for the information needs of various disciplines. However, neither the configuration of this system, nor the performance parameters have been previously articulated for applications relevant to historic preservation.

The unique videographic software package that drives the system is called VCAD, the Videographic Computer Assisted Designer. It consists of two and three dimensional graphic programs which have the capacity to construct the necessary geometry for quantifying dimensions, correcting perspective distortions, and comparing the size, shape, and position of the object image. This software program provides the analytical basis for dimensioning images and defining the specific graphic parameters necessary to create measured drawings. The VCAD software is an interactive videographic data base manager which has been developed by VideoCAd, Inc. of Blacksburg, Virginia (USA). As the foundation component of this documentation method, the software enables the user to combine and manipulate data from a variety of verbal and visual media sources.

In addition to the obvious architectural applications for video recordings that consist of dimensionable graphic images, videographics can serve as the base for investigations into building technologies and materials, public perceptions toward existing architectural resources, the cumulative effects of historical change, and the effects of proposed management strategies and modifications on the contextual fabric of "place."

In developing this method for documentation, analysis, and interpretation, various sites were selected for test exercises. Consequently, the system is configured for recording a range of cultural resources, from individual historic structures to urban historic districts or rural cultural landscapes. National Park Service sites in Richmond, Virginia, including such diverse resources as the Richmond National Battlefield Park and the Maggie L. Walker National Historic Site in the Jackson Ward Historic District, have been utilized in testing the viability of the method. A study site currently being researched is Poplar Forest, Thomas Jefferson's plantation near Lynchburg, Virginia. A major preservation effort is planned for this landmark, which exemplifies Jefferson's mastery of the classical style. The loneliness of the Poplar Forest project and the complexity of the preservation effort presents an opportunity to further test the parameters of the documentation system by tracking a restoration project from conception to completion.

Through the ability to economically and comprehensively record (with dimensionable video images) individual historic artifacts and structures in their environmental context, this methodology facilitates:

1... documentation of cultural resources by merging video images, verbal commentary, and archival data. Buildings that might not prove economically or logistically feasible to document with extensive hand measurements and drawings can be effectively recorded with the videographic system.

2... analysis of resources through the extraction of information from images relating to building dimensions, materials, code compliance, and stylistic character. Specific information relating to building character or structure can be generated as required to fulfill management or design needs. Once the videographic database exists, the system user can exercise a high degree of discretion in determining the information to be extracted from visual and tabular attributes.

3... simulation of the historic context and proposed designs or treatments through the addition of information to the recorded image. A more comprehensive understanding of the environmental and cultural context, and the impact of proposed changes, is possible through the computer animation of video images, supplemented by oral commentary, drawings, photographs, and text. When a new building is designed for an historic district, or changes to an otherwise environmentally or culturally sensitive area are contemplated, the effects of these proposals can be studied by merging the video record of the existing context with the graphic simulation of the proposed project. These visual computer simulations can promote dialogue between cultural resource professionals, architects, developers, public constituencies, and public administrators that result in more informed decisions about the effects of proposed design or management strategies.

4... prescriptive treatments in the assembly of construction documents, maintenance management guides, and monitoring systems. The development of a highly accessible, interactive, visual information base contributes substantially to formulating strategies for addressing maintenance, rehabilitation, and restoration issues. In the context of large scale conservation projects, detailed recordings of building parts to be removed during construction can be made and placed in the system's data base prior to removal. After repair or replication, these parts can be efficiently identified and correctly replaced according to the specifications or instructions contained in the video document.

Methodological parameters for this documentation system have been shaped by consultations with representative professionals from the architecture and planning community, public administrators, and private developers. As a result, two of the primary attributes of the system relate to the speed and accuracy of a recording project. The time advantage of videographic documentation over traditional hand-measuring techniques is comparable to that of conventional photogrammetric methods. It is estimated that photogrammetric techniques can affect as much as an 80% time savings over hand-measuring methods. The VCAD software is able to perform in both low and high resolution environments, with the accuracy of the image analysis a direct function of the sophistication of the electronic hardware employed in the system. High quality results which match those of conventional recording techniques can be achieved. The technology is steadily available to assemble a digital system that yields an image density in excess of 2000 lines, the equivalent of high resolution photographic films. The videographic method offers additional advantages over conventional photogrammetry through real time audio-visual recordings that encompass a range of contextual issues, providing a greater capacity for image analysis and manipulation. Repeated trips to the project site no longer bear a negative connotation, as they can simply be accomplished by activating the videographic data base at a desktop work station.

APPENDIX 9

Social Survey form, Istanbul.
Source : Conservation as Cultural Survival, Aga Khan Award for Architecture, 1978.

The following Social Survey Form was used to document the Istanbul rowhouses in terms of individual user reaction.

GENERAL INFORMATION

1) City the survey is conducted in:
Country:
District:
Street:
House number:
Utilization of the building:
Basement: First floor:
Second floor: Third floor:
Number of rooms: Total area: ..... m²

2) Please list the residents of this house, starting with the head of the family:

Name	*Relation to Head of Family*	*Sex*
1.	.....	...
2.	.....	...
3.	.....	...
4.	.....	...
5.	.....	...
6.	.....	...

Age	*Birthplace*	*Education*
1. ...	.....	.....
2. ...	.....	.....
3. ...	.....	.....
4. ...	.....	.....
5. ...	.....	.....
6. ...	.....	.....

Job	*Work Place*
1. ...	.....
2. ...	.....
3. ...	.....
4. ...	.....
5. ...	.....
6. ...	.....

Monthly income of head of family:

MOBILITY

3) How long have you been living in Istanbul?
Year: .... Month: .... Day: ....
4) How long have you been living in this neighbourhood?
Year: .... Month: .... Day: ....
5) How long have you been living in this house?
Year: .... Month: .... Day: ....
6) Where did you live before coming here?
What was your reason for moving here?
Was your job the same or different before you moved?
Same job: .... Different job: ....
7) Has there been any change in your monthly income?
Yes: .... No: .... Did it increase? ....

TATE OF OWNERSHIP

8) Are you the owner?
Yes: .... If you sold your house, how much would you ask for it?
No: .... How much rent are you paying?
9) If you moved to a rental house, what would be the maximum rent you could afford to pay?

IDEAS ABOUT THE HOUSE

10) Are you satisfied with your home?
Yes: Why? ....
No: Why? ....
Partially: Why? ....
11) Do you consider moving out?
Yes: .... No: ....
12) If not, why don't you move in another place?
13) If you would or could move, which district would you like to move into? ....
Why that district? ....
14) If you would or could move, what kind of house would you like to live in?
15) Do you think that your home now meets all the needs of your family?
Yes: .... No: ....
16) If not, what is lacking?
17) Are you satisfied with the sunlight and ventilation your home gets?
Yes: .... No: .... Partially: ....
18) Which of the following does your house have?
Running water: .... Electricity: .... Gas: ....
Connection to sewage system: ....
Central heating: .... W C : ....
Bathtub-shower: .... Kitchen: ....
19) Do you have a garden?
Yes .... No: ....
20) If yes, are you satisfied with your garden?
Yes, why? .... No, why? ....

UTILIZATION OF INTERIOR

21) Where do you eat at home? Why? ....
Is this space sufficient? ....
22) Which room do you use as the living room? ....
Why? .... Is this space sufficient? ....
23) Where do the parents sleep? .... Why? ....
Is this space sufficient? ....
24) Where do the children sleep? .... Why? ....
Is this space sufficient? ....
25) Where do the grandparents—if any—sleep? ....
Why? .... Is this space sufficient? ....
26) Where do you cook? ....
Is this space enough? ....
27) Where do you peel the vegetables? ....
28) Where do you do the laundry? ....
29) Do you do ironing?
If yes, where? .... No ....
30) Do you do quilting? If yes, where? .... No: ....
31) Do the children have a separate room? ....
32) Where do they play? ....
33) Where do they study? ....
34) If there is a baby in the family, where does it sleep in the evening? ....
Where does it sleep during the day? ....

NEIGHBOURHOOD RELATIONS

35) Are there noisy people in your neighbourhood? ....
If yes, who are they? .... No: ....
36) Do you consider your neighbourhood crowded?
If yes, why? .... If no, why? ....
37) Do you consider the buildings in your neighbourhood beautiful? ....
If yes, why? ....
If no, why? ....
Partially, why? ....
No answer: ....

NEIGHBOURLY RELATIONS

38) How many of your neighbours do you have close relations? ....
39) Do your neighbours get along well among themselves?
Yes: .... No: ....
Partially: .... No answer: ....
40) How often do you visit your close neighbours? ....
41) Where else do you come together with these neighbours?
42) What do you do during your vacations? ....
43) Do you have any relatives living on the same street with you?
Yes .... No ....
44) Do you have any relatives living in the same district with you?
Yes .... No ....
45) Have you at some earlier time had relatives living on the same street or in the same neighbourhood?
Yes: .... Where did they move to? ....
Why? .... No: ....

URBAN ACTIVITIES

46) Where do you do your daily shopping? ....
47) How often do you shop at the market place? ....
48) How often do you shop around Beyazit? ....
49) How often do you shop around Beyoğlu? ....
50) Which of the following would you like to live close to?
1. Market ....
2. Coffee shop ....
3. Entertainment places ....
4. School ....
5. Park ....
6. Bus stop ....
7. Close to all ....
8. Other ....
51) Which of the following do you own?
1. Car ....
2. Bicycle ....
3. Motorcycle ....
4. Other ....
5. None ....
52) Do you plan to purchase any of the above that you don't have?
Yes: .... Which one(s)? ....
No: .... Why? ....
53) Do you know of any additions that have been made to this house since it was first built?
Yes: .... What? ....
No: ....
54) Does your house need plastering and repair?
Yes: .... No: .... Partially: ....
55) Would you have liked any changes inside the house?
Yes: .... No: ....
56) If yes, what are they?
57) Could you afford to pay for this change?
Yes: .... How much? ....
No: ....
58) Do you consider the old houses in your neighbourhood worth conserving?
Yes, why? ....
No, why? ....
Partially: ....
59) If you had to move because the house needed repairs would you want to return to the same house when they were completed?
Yes: .... No: .... Undecided: ....
60) What do you think is necessary to improve these old houses?
61) Would you want to help repair the house yourself?
62) If the residents of your neighbourhood founded an organization to repair houses, would you join that organization?
63) If the State were to loan money for the repair of your house, how much could you allocate from your budget each month to pay back your debt?

Observations:

Surveyor: Date:

APPENDIX 10

Building Evaluation.
Source : Historic Preservation Inventory & Planning Guidelines, City of Las Vegas, Charles H. Page & Associate, Inc., San Francisco, 1978.

1. Architectural Significance

Exceptional: Buildings of national or pre-eminent local importance such as meritorious works of noted architects, outstanding examples of an architectural style, unusual structures exhibiting superb design qualities and buildings which illustrate stylistic development of architecture in the United States.

Excellent: Important examples of architectural styles that retain a high degree of design integrity.

Good: Representative examples of architectural styles exhibiting a moderate amount of design integrity.

Fair: Buildings which are not, of themselves, distinguished works of architecture, but those which contribute to the character of a neighborhood or potential preservation area in scale, materials, proportion and other visual ways.

Poor: Buildings with little or no design integrity and those which may even detract from the character of their visual environment.

2. Environmental Significance

Exceptional: Buildings which give major definition to a neighborhood by virtue of their design or siting, or which retain distinctive landscaping or other features representative of an earlier time. A structure with a carriage house, garden and fenced grounds would be an example.

Major: A structure or place that helps to give definition to an important grouping, or buildings in that grouping if they are important contributors.

Contributing: Structures or places that contribute to the over-all character of an area or form compatible, but not major, components or groupings.

Non-contributing: Land use, style or visual character inappropriate.

3. Desecration of Original Design

None or little: Buildings with no exterior modifications, or such minor ones that the appearance of the building is entirely in its original character.

Moderate: Buildings with bad signs, exterior fire escapes or other superficial modifications that are inappropriate but not irreversible.

Considerable: Extensive or permanent changes to the original design. Inappropriate additions, extensive removal of architectural details and resurfacing of wooden facades in stucco are examples.

4. Historical/Cultural Significance

Exceptional: The highest evaluation reserved for structures or places of national, pre-eminent local or state importance.

Major: Reported association with persons or events of local and/or statewide significance, and/or with major development patterns of the area.

Moderate: Reported association with minor development patterns, and persons or events of some local importance or influence. A person who is active in the community, such as a high ranking Mason.

Minor: Buildings of no established association with noted persons or events. Also, buildings for which little or no historical information was received in time for the evaluation.

APPENDIX 11

Preservation for Earthquakes.
Source : ICOMOS, Vol II, Sir Bernard Feiden, Washington, D.C., 1987.

BETWEEN TWO EARTHQUAKES.
The Management of Cultural Property in Seismic Zones
Sir Bernard Feiden –
Director Emeritus ICCROM.

A brief summary of the administrative actions before, during and after a seismic disaster to be used as a check list is given below. It should be applied to the local situation working within the administrative methods planning procedures, patterns of ownership and cultural attitudes of each country.

1. Before Disaster General.
   a) Make full inventories of all cultural resource supported by photographs and photogrammetric records of important historic buildings, sculptures and artistic decorations. Keep duplicate records in a non-seismic place or safe building and prepare seismic survey forms and outline drawings of all important buildings. Pending the release of sufficient resources the individual institution should protect awaiting documentation and records by collecting these and placing them in the safest place available, until more formal plans can be implemented. (A disaster teaches one the importance of inventories and documentation).
   b) Rehearse fire fighting drills at six monthly intervals. Earthquakes have a low probability so integration of earthquake preparedness into preparedness for other hazards such as fire and flood will ensure that they are not neglected. Arrange rehearsals with civil and military authorities at biennial or triennial intervals, which include members of cultural heritage services. Earmark sites for helicopters to bring aid.
   c) Educate the public in the importance of historic buildings, maintenance and seismic upgrading of vernacular buildings and publish guidelines for local builders in the correct techniques.
   d) Rationalize ownership of private property by appropriate legislation, one person should be nominated as the Trustee of Cultural Property in order to facilitate any property changes needed, but the onus for nomination must be on the owners.
   e) Install a national or regional emergency group for protection of cultural property.
   f) Provide incentives for maintenance and anti-seismic upgrading. Preserve skills and materials needed for maintenance and repair of historic buildings.
   g) Train architects and engineers in seismic resistant design for historic buildings and in making inspections and reports.
   h) Organize regular inspections of important cultural resources at appropriate intervals by qualified professionals who would classify work needed under headings IMMEDIATE, URGENT NECESSARY, DESIRABLE, and KEEP UNDER OBSERVATION. Develop a maintenance strategy that includes anti-seismic resistance upgrading in an economical way.
   i) Prepare portable generators, pumps, vehicles and motor fuel. Allocate seismic resistant buildings to be used as conservation warehouses in a disaster. Provide a mobile conservation laboratory (useful in any case). Establish reserves of conservation materials and emergency boxes.
   j) Insure objects as far as possible and classify as replaceable (by obtaining duplicates) or irreplaceable. It should be noted that while insurance may serve a purpose it should be in the context of the last factor to be considered. Efforts should be primarily directed at eliminating or at least mitigating risks of loss in accordance with basic management philosophy, particularly since any cultural properties and artifacts are irreplaceable.

2. Before a disaster – Professional actions.
   a) Geological Studies showing zones with higher risk due to underlying site properties and geologic structure. Microzoning is most important.
   b) Seismic Studies including historic records to evaluate return periods of earthquakes with various intensities. Predictions of frequency.
   c) Vulnerability Studies for earthquakes of different intensity. Such studies should relate to the artistic and historical value of the buildings, their furnishings and contents.
   d) Town and Country Plans relating developments to various grades of seismic damage.
   e) Assess risk to infrastructure of roads, drainage, water, gas, electricity, telephones and other installations. Initiate anti-seismic design for these life-lines. Improve life-lines preceeded by archeological investigations when excavation is needed.
   f) Prepare Seismic Safety Plans for individual or groups of historic buildings. Strengthen buildings by stages as and when economic.

3. During a Disaster and Shortly Afterwards.
   Priority must be given to saving life and rescue operations with emergency help to provide tents and provision of tents, blankets, clothing, food, doctors, nurses and medical supplies. These activities however come outside the scope of this review.
   a) Fight fires and prevent looting of works of art. Prevent water damage from rupture of water supply pipes or firefighting.
   b) Protect as much cultural property as possible. Label and take all moveable cultural property to designated warehouses, fumigate and give first aid. (The best methods of fumigation are much under discussion).
   c) Obtain co-operation of local civil and military authorities as soon as possible.
   d) Organize a quick inspection of damage and co-ordinate work of conservators, architects and engineers. Grade damage to buildings.

4. After the Disaster – Short term.
   a) Protect important buildings from the weather.
   b) Set up multi-disciplinary conservation teams and allocate materials and labour to repairs, giving priority to protection against the weather.
   c) Seek international aid through the Government disaster relief co-ordinators office and request any special equipment needed.

5. After the Disaster – Long term.
   a) Organize an in depth assessment of damage with estimates of costs (see Standard Forms in Appendix 7 of the ICCROM/GETTY booklet).
   b) Organize priorities for the repair programme.
   c) Execute structural repairs using teams of architects trained in conservation, engineers historians and archaeologists.
      (i) Set up multi-disciplinary teams to prepare projects for repair and reconstruction of damaged buildings.
      (ii) Evaluate alternative schemes balancing risk and vulnerability against degree of intervention and loss of cultural values.
      (iii) The engineers work must be integrated into the architectural/historical methodology, in accordance with the resolutions of the Skopje 1965 Symposium. (Appendix 9 of the ICCROM/GETTY booklet).
      (iv) Present schemes for public approval and support.
      v) Execute structural repairs. Note the skills needed for this work are different from those needed for reconstruction of industrial or modern buildings. So, historic buildings are not competing for labour only for materials. The amount of materials needed for repairing damaged dwellings is far less than is needed for new houses. A high priority should be given to repair of historic buildings used as dwellings.

APPENDIX 12

Preservation of Stone Today.
Source : ICOMOS, Vol I, Richard Pieper, Washington, D.C., 1987.

Preserving the artifact: The chemistry of consolidation

While there has been little unanimity in which techniques or chemicals are most appropriate for the preservation of stone, the important properties of an "ideal" chemical consolidant have generally been agreed upon:

1. The consolidants must impart good mechanical resistance and should have adequate elasticity so as not to separate from the stone due to expansion and contraction.
2. The consolidant must be resistant to atmospheric pollutants and to aging.
3. The consolidant must render the treated surface water repellent, without hindering the vapor permeability of the material.
4. The consolidant must penetrate deeply into the stone and not remain concentrated at surface layers, nor dramatically alter the porosity of treated layers.
5. Ideally, the consolidant must be reversible, that is, capable of being redissolved and removed with a solvent.

In practice, no one material has proven satisfactory for all stones and types of deterioration, and consolidants and treatment methods are selected on a case by case basis. To add to the confusion for an architect or conservator, each method has its own strong adherents, and the personal biases which result quite frequently conflict. The disputes between practitioners may seem arcane and technical, but unfortunately they affect the future of our monuments. For the non-initiate, a brief primer in stone conservation chemistry is in order.

Consolidants in current use may be divided into categories as organic or inorganic treatments. Inorganic consolidants are, in general, more durable than organic resins, but may lack adequate elasticity to give treated stones good mechanical resistance. Inorganic treatments that act through chemical reaction with the stone itself may also have problems of inadequate penetration. Of the two major inorganic systems in use, treatment with silicon esters (generally tetraethyl orthosilicate) is by far the most common. These ethyl silicates are widely marketed for the consolidation of sandstones and function by depositing colloidal silica within the pores of the stone. They are not generally suitable for use with limestones and marbles and do not impart a water repellency to the treated stone. A barium hydroxide treatment for limestones and marbles works through chemical combination/transformation of the calcium carbonate of the stone itself and by depositing interstitial barium carbonate within the pores of the stone. While the barium hydroxide method has some strong proponents, it is not in general commercial use today, in part because it is relatively difficult to apply, requiring lengthy application periods and the use of caustic solutions.

The organic consolidants currently in use may be very generally categorized as acrylic resins, silicone resins, and epoxy resins. Acrylic resins, generally combined with an amount of silicone resin to foster water repellency, have seen extensive use in northern Italy for the consolidation of marbles. Acrylics may be redissolved, and thus theoretically are reversible, although in practice they would be difficult to remove completely. For in situ treatments acrylics may be brush applied.

Different types of silicone resins with greatly variable properties have enjoyed significant popularity as stone consolidants. Alkoxy silanes, one type of silicone resin, has been widely marketed as a sandstone consolidant, often applied in combination with ethyl silicate.

Epoxy resins are not generally considered suitable as consolidants because of problems of inadequate penetration and susceptibility to photodegradation and changes in color. They offer significant advantages where structural strength is a factor however, and in solution with organic solvents have found use as consolidants for very porous stone, particularly in some eastern European countries. New types of epoxies have shown greater resistance to photodeterioration.

Thus it becomes apparent that the selection of a consolident may be highly subjective. Add to this an extraordinary variability in methods and conditions of application and we see the difficulty of assuring that a treatment will be successful or of understanding why an unsuccessful treatment has failed. Preliminary laboratory experimentation and careful field control become of paramount importance.

The rush to consolidate: the problem of commercialization

If stone preservation remained in the laboratory, or in the hands of a few trained specialists, one might be assured that decisions to consolidate would be based upon careful study, weighing the dangers of treatment against the threat of continued deterioration. In an imperfect world, treatment decisions are frequently made by an architect relying on the technical expertise of a commercial supplier, who is at least as concerned with the commercial success of his product as with its long term efficacy. In the U.S., application is more likely to be by a "waterproofing" or masonry restoration firm than by a trained restorer. Little differentiation may be made between deteriorated stone and adjacent sound stone which requires no treatment. This should not be construed as a criticism of the supplier or applicator, but as a warning to the architect who sees treatment as a panacea, and to the custodian of the monument, who may think that further inspection and maintenance is unnecessary. Both views are incorrect.

Given that these materials are being aggressively marketed as stone preservatives and will see greatly increased use in the future, the need for a comprehensive philosophy for their application is apparent.

Toward a philosophy for the preservation of stone

As with the selection of the consolidant itself, the difficult decisions of when and what to consolidate will necessarily be made on a case by case basis. It will never be possible to eliminate the subjective element from this decision making process. It is possible, though, to establish a rationale for the preservation of stone; a set of guidelines for the architect and conservator follows:

1. Establish the value of the deteriorated stone as an "artifact". As with most evaluations of this nature, judgments may be criticized as subjective. Still, some relative values may be established: a bas-relief or a column capital may be considered a more appropriate candidate for consolidation than an untooled block of ashlar.
2. Determine, on a case by case basis, where "artifact" or "craft" approaches are warranted. In a country where craft practices have been preserved and replication of ornament is traditionally accepted this may mean adoption of a hybrid solution where some carved ornament is consolidated and other elements are replicated.
1. Employ consolidation treatments only when the stone is in such an advanced state of deterioration that destruction is threatened or replacement otherwise necessary.
4. Perform no treatment without analysis and thorough documentation of existing conditions. Select a treatment based upon its suitability for a particular application, not just commercial availability.
5. Record conditions, methods and materials used in treatment. Both conditions documentation and treatment records must be assembled for archival storage.
6. Assure before treatment that the custodian of the monument accepts responsibility for periodic inspection and maintenance of the treated stone.
7. Lastly, and most importantly, monitor and publicize the performance of the materials in use. By these reports advances in chemistry and application will be achieved, and decisions for retreatment will be made.

APPENDIX 13

Standard Definitions.
Source : Reading in Historic Preservation. Why? What? How?, Norman Williams and friends, The State University of New Jersey, 1983.

Section 68.2 *Definitions.*

The standards for historic preservation projects will be used by the National Park Service and State historic preservation officers and their staff members in planning, undertaking, and supervising grant-assisted projects for acquisition, protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. For the purposes of this part: . . .

(b) *Preservation.* Means the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of site. It may include initial stabilization work where necessary, as well as ongoing maintenance of the historic building materials.

(c) *Protection.* Means the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss, or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archaeological sites, the protective measure may be temporary or permanent.

(d) *Reconstruction.* Means the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or a part thereof, as it appeared at a specific period of time.

(e) *Rehabilitation.* Means the act or process of returning a property to a state of utility through repair or alteration that makes possible an efficient contemporary use while preserving those portions or features of the property that are significant to its historical, architectural, and cultural values.

(f) *Restoration.* Means the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

(g) *Stabilization.* Means the act or process of applying measures designed to reestablish a weather-resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

Section 68.4 *Specific standards for acquisition, protection, stabilization, preservation. rehabilitation, restoration, and reconstruction projects.*

In addition to the general standards set forth in section 68.3 the following specific standards shall be applied as appropriate: . . .

(b) *Protection.* (1) Before applying protective measures, which are generally of a temporary nature and imply future historic preservation work, an analysis of the actual or anticipated threats to the property shall be made.

(2) Protection shall safeguard the physical condition or environment of a property or archaeological site from further deterioration or damage caused by weather or other natural, animal, or human intrusions.

(3) If any historic material or architectural features are removed, they shall be properly recorded and, if possible, stored for future study or reuse.

(c) *Stabilization.* (1) Stabilization shall reestablish the structural stability of a property through the reinforcement of loadbearing members or by arresting material deterioration leading to structural failure. Stabilization shall also reestablish weather resistant conditions for a property.

(2) Stabilization shall be accomplished in such a manner that it detracts as little as possible from the property's appearance. When reinforcement is required to reestablish structural stability, such work shall be concealed wherever possible so as not to intrude upon or detract from the aesthetic and historical quality of the property, except where concealment would result in the alteration or destruction of historically significant material or spaces.

(d) *Preservation.* (1) Preservation shall maintain the existing form, integrity, and materials of a building, structure, or site. Substantial reconstruction or restoration of lost features generally are not included in a preservation undertaking.

(2) Preservation shall include techniques of arresting or retarding the deterioration of a property through a program of ongoing maintenance.

(e) *Rehabilitation.* (1) Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historic, architectural, or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.

(2) Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

(f) *Restoration.* (1) Every reasonable effort shall be made to use a property for its originally intended purpose or to provide a compatible use that will require minimum alteration to the property and its environment.

(2) Reinforcement required for structural stability or fire installation of protective or code-required mechanical systems shall be concealed whenever possible so as not to intrude on or detract from the property's esthetic and historic qualities, except where concealment would result in the alteration or destruction of historically significant materials or spaces.

(3) When archaeological resources must be disturbed by restoration work, recovery of archaeological material shall be undertaken in conformance with current professional practices.

(g) *Reconstruction.* (1) Reconstruction of a part or all of a property shall be undertaken only when such work is essential to reproduce a significant missing feature in a historic district or scene, and when a contemporary design solution is not acceptable.

(2) Reconstruction of all or a part of a historic property shall be appropriate when the reconstruction is essential for understanding and interpreting the value of a historic district, or when no other building, structure, object, or landscape feature with the same associative value has survived and sufficient historical documentation exists to insure an accurate reproduction of the original.

(3) The reproduction of missing elements accomplished with new materials shall duplicate the composition, design, color, texture, and other visual qualities of the missing element. Reconstruction of missing architectural features shall be based upon accurate duplication of original features, substantiated by historical, physical, or pictorial evidence rather than upon conjectural designs or the availability of different architectural features from other buildings.

(4) Reconstruction of a building or structure on an original site shall be preceded by a thorough archaeological investigation to locate and identify all subsurface features and artifacts.

(5) Reconstruction shall include measures to preserve any remaining original fabric, including foundations, subsurface, and ancillary elements. The reconstruction of missing elements and features shall be done in such a manner that the essential form and integrity of the original surviving features are unimpaired.

APPENDIX 14

Personal Communication.

Mohammad Ata Yousof
1429 Laramie St. #3
Manhattan, KS, 66502
U.S.A.

October 31, 1988

Mr. Eliezer Frenkel
Hasadna Leitzur Pnim Ve'adrichalut
P.O.Box 21192
Tel Aviv 61211
Israel

Dear Mr. Frenkel,

I am a graduate student in the Department of Architecture Kansas State University. I am working on my thesis -General Guidelines for Developing and Conserving the Old City of Nablus, West Bank, under the direction of professor Bernd Foerster. Unfortunately, the material that is available to me is inadequate.

Recently, I learned that you are one of the architects who did a good job in developing and preserving the historic quarters of Jaffa. I would appreciate it if you could mail me a copy of the guidelines that you used in Jaffa, or any other material that would be useful to me.

I would prefer to have materials written in English sent, if possible.

please feel free to send me the cost of any materials you send and I will reimburse you.

Thank you

Sincerely,

Mohammad Ata Yousof
(913) 776-8695.

SADNA·ARCHITECTURE & INTERIOR DESIGN WORKSHOP

P.O.B 21192 TEL AVIV 61211 ISRAEL
TEL: 03 255185

Tel-Aviv, 7. 12.1988

Mr. Mohammad Ata Yousof,
1429 Laramie St. Apt. 3
Mannattan, KS 66502,
U. S. A.

Dear Mr. Mohammad Ata Yousof,

My appologies for the in delay answering your letter,but regretfully I recieved it at a very hectic period and couldn't get to it as quickly as would have wished.

I am enclosing a copy of a brochure of the Jaffa project which was prepared in the late 60'- as is evidenced from the "before and after" photos. I hope this brochure will be of some help, even if it doesn't seem to convey the "reality" of the old city of Jaffa nor the reason for its popularity. But after all, we are looking back some 28 years after work begun and over 20 years since it's "offical" completion (minor work on the site continued till about 10 years ago and in some cases is still in progress).

Then as now, our tendency, as architects, is to over emphsise the esthetic aspect. Yet, the main questions and problems in urban renovation are of social, economic and administrative nature.

Therefore I suggest you should consider the following questions:

1. In what way will the present population - which is usually poor - participate in the project ? - keeping in mind that the cost of renovation is as high as that of new construction.

2. Since existing population and building density are usually very high and hardly suitable for modern living - how should one define criteria to clear at least some of its present population and building and at what cost? - assuming one overcomes such problems as "private wakff", which prevents present owners from selling their property and many others with which you should be as familiar as I ám.

To overcome such obstacles requires large sums of money, the good will of the whole population and above all clear goals of benefits, far beyond sentiments of nostaligia, cultural heritage, history, etc.

In short, one should try and be as realistic as possible, even if it sounds somewhat materialistic. It is, by the way, precisely this attitude which made Jaffa a living reality.

SADNA·ARCHITECTURE & INTERIOR DESIGN WORKSHOP

P.O.B 21192 TEL AVIV 61211 ISRAEL
TEL: 03 255185

The very decision to create an "Artist quarter" in Jaffa was based on the assumption - which proved to be true - that artist will be willing to live in a romantic and historic area - although living conditions are more difficult - if they can benfit economically: In this case, own a studio-gallery at a realativly reasonable price compared to any other place in town. The same, by the way, is true of artists quarters everywhere. An alternative to artists can be any other group of people whom I would call "Bohemians" for lack of any other name. It could be religious groups or students or historically minded people etc. - but always remember the economic social and othe aspects, just as in any other urban and architectural project.

As for design criteria I am afraid that these can not be transmitted in writting.

I wish you a successful project and hope to hear from you.

Eliezer Frenkel

Eliezer Frenkel - Architect
Head of Sadna

Mohammad Ata Yousof
1429, Laramie St. #3
Manhattan, KS 66502

September 23, 1988

US-ICOMOS
Decatut House
1600 H Street, N W
Washington D C 20006

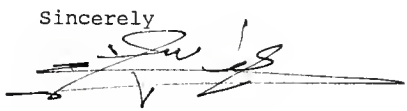
Dear Mr. Keune:

I am a graduate student in the Department of Architecture at Kansas State University.

I am working on my thesis - General Guidelines for Developing and Conserving the Old City of Nablus, West Bank - under the direction of Professor Bernd Foerster.

Unfortunately, the material that is available to me is inadequate. I would appreciate it if you could mail me any information related to my topic, or anything that would be useful to me. It would be helpful if you have material dealing with the preservation of Islamic heritage.

Sincerely



Maohammad Ata Yousof

U.S. COMMITTEE
INTERNATIONAL COUNCIL
ON MONUMENTS AND SITES
US/ICOMOS

Mr. Maohammad Ata Yousof
1429 Laramie Street, #3
Manhattan, Kansas 66502

October 13, 1988

Dear Mr. Yousof:

In response to your September 23 inquiry, I am sending printed material which describes ICOMOS and US/ICOMOS. Our office does not have available for distribution the type of specific information you are seeking with respect to Islamic planning and architecture.

I have two suggestions:

1. The Aga Khan Program for Islamic Architecture operated by Harvard University and the Massachusetts Institute of Technology in Cambridge, Massachusetts has the best collection of published materials on Islamic planning and architecture in the United States. I would suggest your writing to Mr. Omar Khalidi, Aga Kahn Program Collection/Reference Librarian, Department of Architecture, Room 10-390, MIT, Cambridge, Massachusetts 02139. Their annual reports list all of the publications they have added to their collections for that year. Have you checked your university library's potential computer access to the library holdings of other university collections - i.e. MIT?

2. The ICOMOS Documentation Centre in Paris may be able to provide you with a listing of their published holdings on the preservation of Islamic architecture. The address for the Documentation Centre is noted in the blue US/ICOMOS brochure.

I trust that these two information sources may be of some assistance to you as you work on your thesis project.

Sincerely yours,

Russell V. Keune

Russell V. Keune, AIA
Vice President for Programs

Enclosures

1600 H Street, N.W. Washington, D.C. 20006 (202) 673-4093, 673-4211

GENERAL GUIDELINES FOR DEVELOPING AND PRESERVING THE HISTORIC OLD CITY OF NABLUS - WEST BANK

by

MOHAMMAD ATA YOUSOF

B. Arch., An-Najah National University
Nablus, West Bank, 1986

AN ABSTRACT OF A THESIS

submitted in partial filfilment of the
requirements for the degree

MASTER OF ARCHITECTURE

College of Architecture and Design
Kansas State University
Manhattan, Kansas

1989

ABSTRACT

The old city of Nablus is one of the best preserved traditional cities on the West Bank of the Jordan river. It contains one of the greatest collections of national monuments in all the West Bank, and is considered by many to be the most attractive city in that area after Jerusalem.

Nablus is seriously threatened with the disfigurement and destruction which may cause the eradication of whole chapters of its history. The question then, is how can future architectural development in the old city of Nablus be prevented from accelerating the loss of its cultural identity.

A systematic program of preservation is recommended. This program can offer present and future generations of Nablus the opportunity to create a better community while maintaining and enhancing the best from the past.

Preservation must be integrated into the regular planning process. It must mean something to the man in the street and involve the community. Above all it must be compatible with contemporary ways of living, and with changes that are taking place. Preservation must be part of an organic process in order to assure the continued enjoyment of Nablus' special attributes embodied in its heritage. Such an approach will help to make Nablus dynamic and fascinating, as a place in which to live or to visit.

Efforts shall be made to identify the personality that the historic quarters convey, to revive past values, to regain

the architectural integrity of the historic quarters and to create a more livable environment. It is essential to maintain the charm and picturesque quality of this historic city about which an anonymous Palestinian poet once wrote "when you say fame, you mean Nablus."