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*Saving
the Old Town of
Nablus*

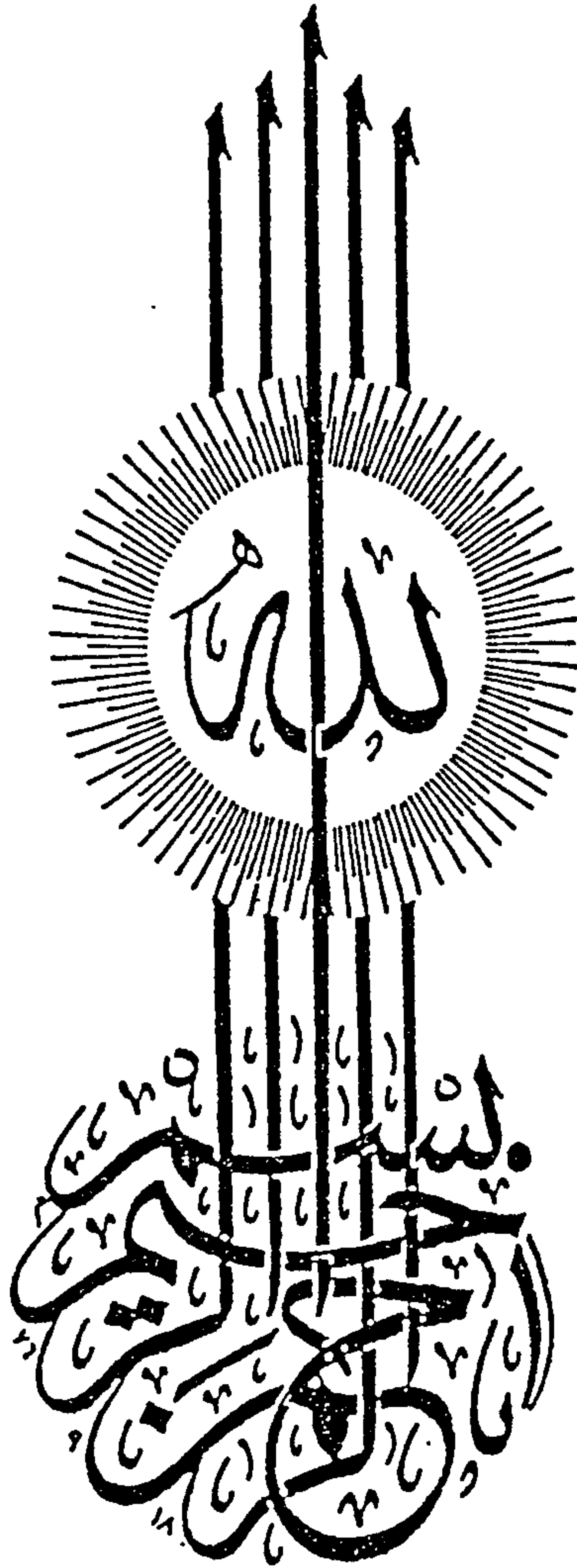
A Conservation Study

1992

By

Khaled Farid Qamhieh

*Submitted to
the Mackintosh School of Architecture / University of Glasgow
on June 1992,
in fulfilment of the requirements for the degree of
Ph.D. in Architecture.*



In the Name of God, Most Gracious, Most Merciful.

Dedicated
to
my beloved brother;

Rami,

*who had been brutally murdered on 5th June 1990 by the
Israeli Occupation's Soldiers.*

He never exceeded thirteen years of age.

Abstract

The aim of this study is to save the historic buildings and structures of the Old Town of Nablus and protect them from any future threat or danger. To achieve this aim and because this is a pilot study; introducing Nablus city and the creation and development of the Old Town is the first part of this study. It shows the great importance of Nablus city and its strategic location in the heart of the national road system of the West Bank. The fact that Nablus is the capital of the Nablus region provides it with a special economical and administrative importance. This part of the study plays an important role in recording and documenting the urban structure of the City and its historical development.

The second part of the study addresses the urban structure of the Old Town and its importance as the historic core and a main part of the commercial centre of Nablus. This part analyses the physical fabric and socio-economical problems of the Old Town. These problems were resulting mainly from the physical nature of its historic built environment and urban design and the current political situation. The Israeli occupation helped in a way or another the presence of the poor economical situation of the Old Town's residents. Also the fact that most of the occupiers of these historic buildings are poor rural emigrants who cannot afford living in the new suburbs and maintaining these properties causes the desertion, neglect and lack of maintenance of the traditional houses, which lead to the deterioration of these historic properties.

The third part of this study proposes an ideal Conservation Programme; which addresses all that should be done to improve the physical and living conditions and to attract the better off people to return to the Old Town. But because of the unique situation of the Old Town under the Israeli military occupation, and the absence of a national authority a special Implementation Programme has been proposed to provide the fertile ground for executing the required conservation works administerly, legally and financially, in accordance with the available money and power to the Municipal Conservation Committee, and with a priority sequence.

The forth part of this study is a case study. It takes a carefully selected site that has most of the Old Towns' problems and presents the concluded results of the study as an architectural exercise of design application.

The work concludes by considering the great importance of executing the findings of this study and the state of readiness in terms of preparing all the required detailed studies and architectural drawings by the Municipal Conservation Committee, in order to provide quick and practical actions the moment the opportunity allows.

Acknowledgement

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System of Transliterations

The system of transliteration from Arabic used in this document does not fully abide with one of the systems used by different literature. However in the attempt to choose the simplest and the best way possible to convey the nearest audible pronunciation, several systems were referred to, but the transliteration system of the Encyclopaedia of Islam was the main reference.

Constants

ع	'	ذ	th	ع	°A, °E, °I or °U
أ	a	ر	r	غ	gh
ب	b	ز	z	ف	f
ت	t	س	s	ق	q
ث	th	ش	sh	ك	k
ج	j	ص	s	ل	l
ح	h	ض	d	م	m
خ	kh	ط	t	ن	n
د	d	ظ	z	ه	h

Long Vowels

آ	a
و	o or w
ي	i or y

Short Vowels

ا	a
و	u
ي	e

ة h, t (*constant state*)

ال Al-(Arabic name), which equals the use of (the).

Stressed letters are doubled, e.g. م mm.

English quotation or names of authors or books are left the way they are, even if they do not abide by the above system. French and Dutch names and words are written without punctuation. Plural Arabic names are used within their Arabic-English pluralism; for example Hammam - Hammamat.

Dates and Periods:

Both the Islamic Hijrah date (AH; after the Prophet migration) and the Circa date are used. The Hijrah date is written first, followed by the Circa date with a slash in between. The same system is followed with the centuries.

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"The traditional Islamic city was a living entity, changing over time but within coherent sets of Islamic values. It was a living entity because it responded to active cultural, economic, and legal functions, that in turn yielded in the past a desired pattern of spatial organization. Having possessed a magnificent past, the Arab city of today faces a fundamental and unique challenge which, if not met, will have an adverse effect on its future physical environment" (Serageldin, 1981, p.218).

Chapter One

Introduction

1.1. The Problem:

1.1.1. Objectives:

This study is focused on saving the historic part of the city of Nablus, which is called "the Old Town of Nablus". It attempts to trace firstly its urban and social structure. Secondly its different problems and the factors that are causing them. Afterwards a conservation programme that aims to solve most of these problems and up grade the Old Town's built environment to be reconciled with the requirements of the twentieth century.

1.1.2. Reasons for the Study:

Nablus is the second large and important city in the West Bank, after Jerusalem. It is an important administrative, cultural, educational, industrial, health and commercial centre. The special importance of the Old Town resulted from its being a historic town consisting of special buildings built in traditional architectural style and construction methods that are no longer in use, together with a unique urban pattern, which is a well preserved but which is suffering from many problems start mainly after the city's expansion and modernisation.

The Old Town is registered in the Unesco's World Heritage List of the historic towns and cities (Nablus Municipality, 1989), therefore it should be protected and all the necessary methods and instruments for its conservation, should be taken. Thus this study is a very important step in this direction.

This study proposes a complete programme for the Old Town conservation. If the results of this study are fully implemented, many job opportunities will be created, which will increase the inhabitants' income and the Old Town as well as the City will become a very attractive place to live in and be visited.

Despite the historical value of the Old Town, no previous study of a systematic and empirical nature was found in the literature. However very few archaeological studies and travellers' descriptions to the town were found, but they were strictly limited to its mosques, bazaars, and houses. Recently there were three studies concerning the Old Town. The first was a report by Dr. Michael Burgoyne (1987), in corporation with the British Council and prepared for the Nablus Municipality. It is a very useful but a brief one. The second study is a master thesis prepared by Mr Muhammad Ata (1989). It is a general and a theoretical study, as it tackled the used methods and techniques of conservation without referring to the Old Town of Nablus. The third study is also a master thesis prepared by Mr Jihad A. Awad (1989). It tackled the problems of the main

bazaar; *Soq Al-Sultan* with general recommendations for its and the whole Old Town conservation.

1.1.3. Limitations.

This study was carried out under special circumstances, causes some limitations. The most important one of them is the inclusion of the Old Town of Nablus only. Constraints over time and budget, besides the fact that the author was sent specifically to research on the Old Town of Nablus, limited this study to this specific town.

The study faces another limitation by the lack of sufficient information concerning the Old Town and its buildings; no proper surveys or architectural drawings; even in the Municipality archives are found. Because of this, the author depends on the field surveys and on the recent architectural drawings and photos he made in early 1989, or obtained from the architectural students of An-Najah National University in Nablus. The accuracy of this data will not be high, but it will be adequate to explain the general approach of the required study.

1.1.4. Definitions:

This study is limited to the Old Town of Nablus; so the usage of abstract nouns such as the Old Town, the City, the City Centre, the Municipality; all of them will be related to Nablus. Later, in chapter seven the MCC will be used instead of the repetition of the whole name of the "Municipal Conservation Committee".

1.2. Organisation and Methodology:

This study is divided into four major parts and a conclusion. Each part, while partially independent, develops in such a way that each part provides a foundation for the next one.

1.2.1. Part One: Nablus City and its Historical Development.

This part provides a background for the studied problem; the Old Town of Nablus, starting with the Nablus city its geographical location, climate, natural resources and the Nablusian people; their educational and economical situation and the administrative role the City plays nowadays (see chapter 2). This part will discuss; in some details; the historical development of the City, from the day it was founded in AD 72 till nowadays;

1412-3/1992. (See chapter 3.)

1.2.2. Part Two: The Old Town of Nablus and its Problems.

This part analyses the present condition of the Old Town, after introducing its location within the Nablus city and its inhabitants. The urban structure and elements also will be reviewed; starting with the traditional housing and neighbourhood characters and ending with studying the other public urban elements; the religious, educational commercial, industrial, and finally the leisure and recreational institutions. Afterwards the Old Town's open spaces, particularly the traditional street pattern will be studied. The last part of these analyses is analysing the traditional building materials and techniques. (See chapter 4.)

The problems of the Old Town will be viewed in some details. Some of them will be compared with those of the new parts of the City:

- A. The physical fabric problems concerning the condition of the traditional buildings, and the challenges they are facing from the new town's houses and neighbourhood. Also the natural and man-made causes of decay will be dealt with briefly. (See chapter 5, section 5.1.)
- B. The traditional houses' efficiency Problems resulting from the changes in the family size, and required house size. Also the presence of indoor facilities will be compared with that of the new suburbs of the City. Public buildings' efficiency problems also will be discussed. (See chapter 5, section 5.2.)
- C. The problems of the built urban fabric will be analysed; particularly the street's problems in terms of street-scape, furniture, and the traffic problems. The traffic problem is one of the main problems facing the Old Town nowadays. (See chapter 5, section 5.3.)
- D. The socio-economical problems then will be analysed; concerning the conditions of employment, income level, the Old Town's family properties, the traditional house existing modern accessories, the ownership situation and the average monthly rent. Then the financial difficulties of the Old Town's families will be listed in comparison with those of the new City's families. (See chapter 5, section 5.4.)
- E. Factors behind the Old Town's deterioration, in terms of causes of the physical decay and the social changes, also will be discussed (See chapter 5, section 5.5.)

1.2.3. Part Three: The Conservation and Implementation Programmes.

This part proposes a conservation programme that includes set of goals which aim at proposing solutions for the exiting problems of the Old Town that are exposed in chapter five, and developing the built environment to reach today's required standards that are found in any modern city without spoiling the historic fabric or spoiling its traditional character. The proposed programme will work on three major axes:

- A.** Conserving the physical fabric of the existing buildings and structures. (See chapter 6, section 6.3.)
- B.** Developing the Old Town's urban elements, including traffic controlling and improving its services. (See chapter 6, section 6.4.)
- C.** Rehabilitating the existing buildings. (See chapter 6, section 6.5.)

Afterwards an implementation programme will be proposed. This programme starts by listing the forces against the Old Town conservation. Then the required committee that will administer and hold the implementation responsibility of the Conservation Programme will be discussed. This committee will try to ease the implementation problems and initiate the conservation process. Also this committee should do its best to find the required funds to cover the cost of the work. The implementation methodology of the Conservation Programme will be discussed in terms of the possibility a step by step programme initiated by preparing the fertile soil to ignite the conservation programme, by an advertisement and Publicity programme directed to ensure better respond and participation from the public, followed by set of environmental control and public service improvement, which are the normal duties of the Nablus Municipality. Then the conservation priorities are proposed. (See chapter 7.)

1.2.4. Part Four: The Case Study:

A part of *Al-Qaysariyyah* quarter will be studied to give a practical example of what should be done in the Old Town. This site is chosen as it contains many problems from which the Old Town is suffering. The case study is a design application for what this thesis concludes. (See chapter 8.)

1.2.5. Conclusion.

The conclusion of this thesis is an emphasis on the great importance of conserving the Old Town of Nablus and preserving its identity for the present and future generations.

Part One

*Nablus City
and
its
Historical Development*

Chapter Two

Nablus City

2.1. Location:

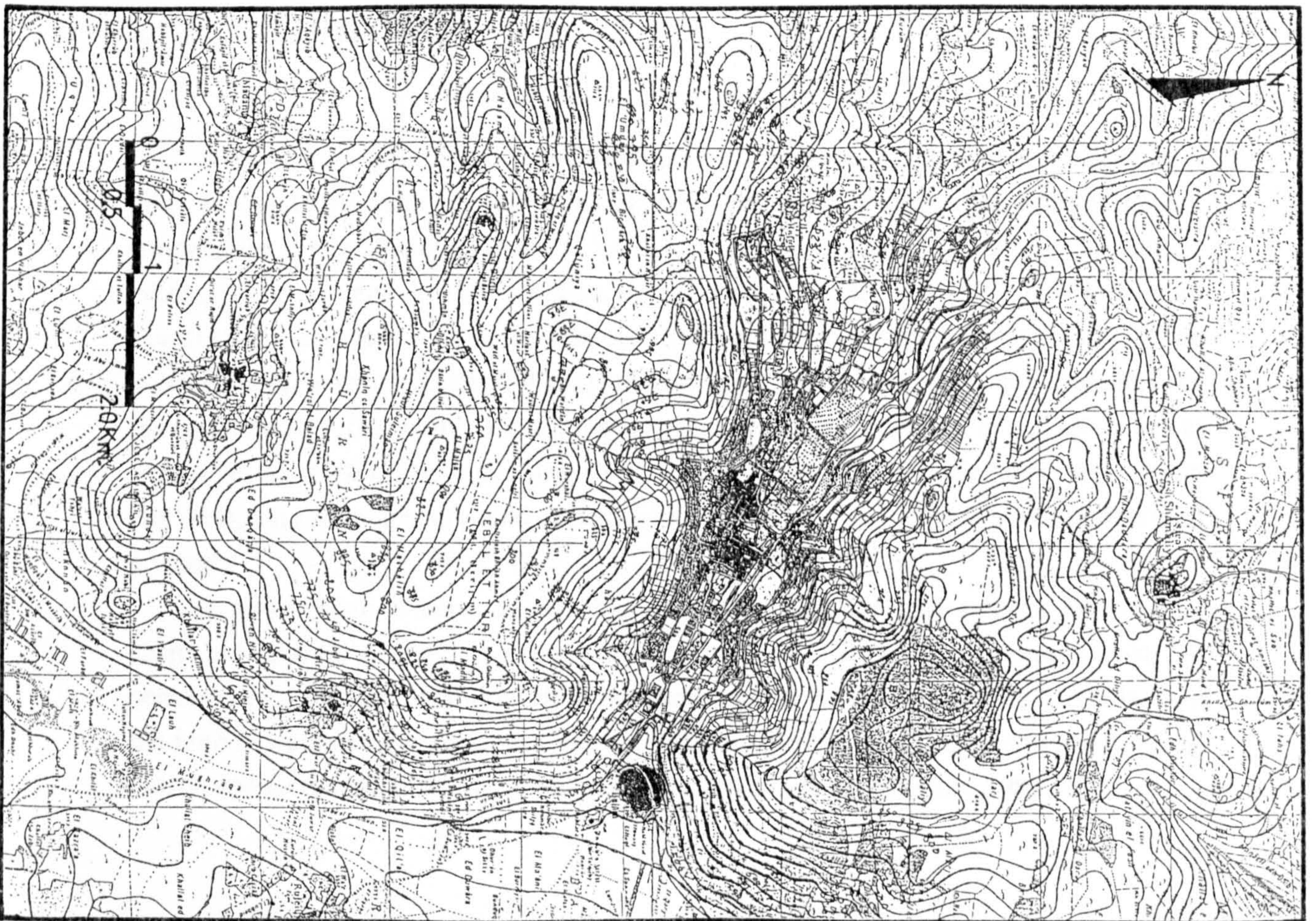
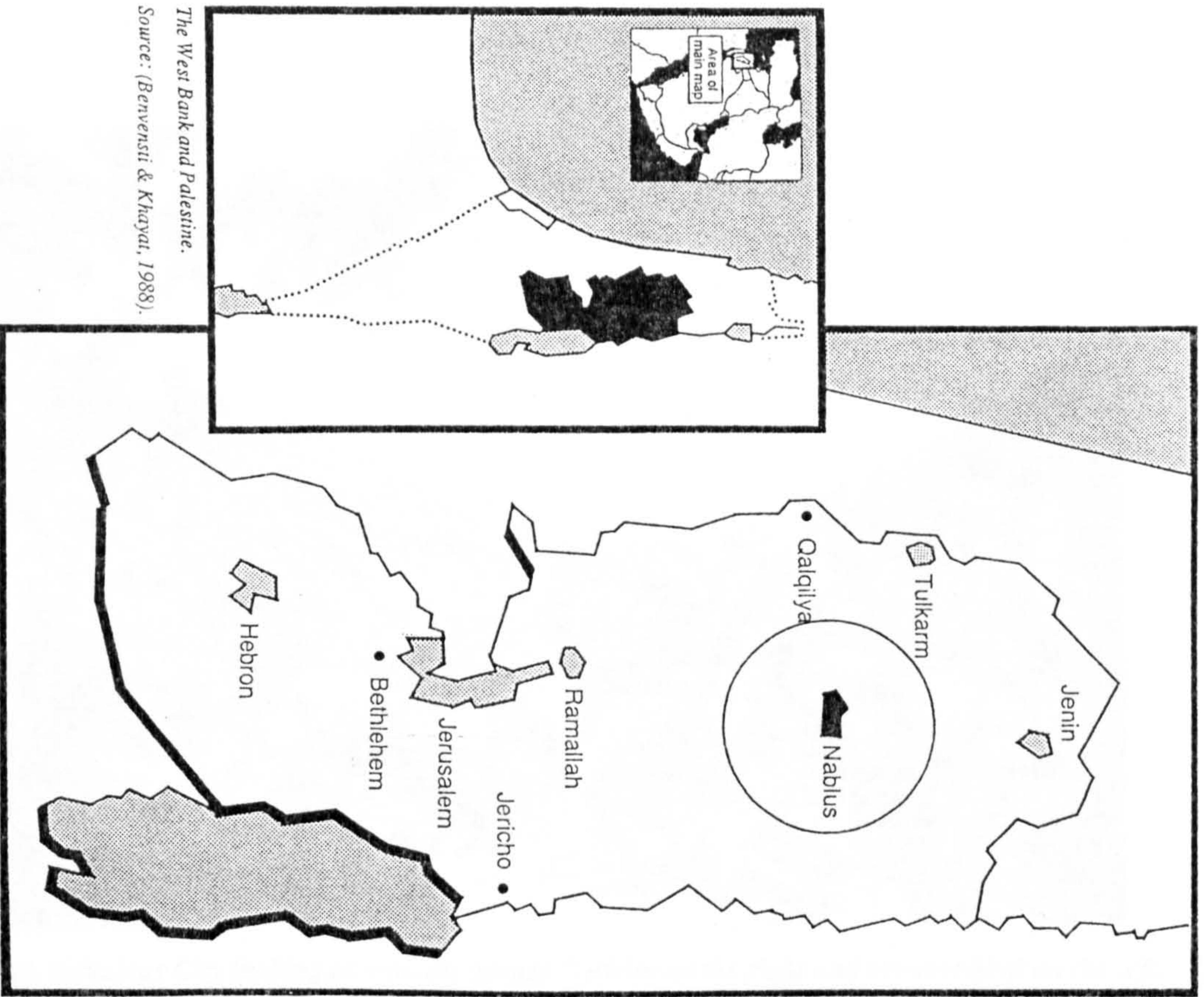
Nablus city is the second largest city in the West Bank and coming after Jerusalem in importance. It is the capital of the Nablus region, and an administrative, educational, commercial, and industrial centre. The West Bank and Gaza Strip are the two parts of Palestine left under the Arabs rule, after the 1948 war, when the Jews established their Jewish state; Israel, on the captured land of Palestine. See figure (2.1).

Nablus is a beautiful city situated half way between the Jordan River in the East and Tulkarm in the West, about 50 kilometres south of Jenin (ʿArif, 1964), 69 kilometres north of Jerusalem (Shahada, 1987), and 42 kilometres east of the Mediterranean Sea (Khatib, 1985). Its latitude is 32° 12' north and longitude 35° 16' east of Greenwich.

Nablus lies in a spacious valley between two mountains, Mount ʿEbal 940 metre above sea level on the North and Mount Gerizim 870 meter above sea level on the South (ʿArif, 1964). The Samaritans believed that on Mount Gerizim Isaac (as Muslims, we believe he was Ismail) was offered to be sacrificed by his father; Ibrahim (Mills, 1864). Nablus valley runs from East to West. It extends for several miles from the eastern abutments of the two mountains to the West. About half-way from the eastern entrance of the valley to the City of Nablus is the place where the two mountains approach nearest to one another. Here the breadth of the valley is about a quarter of a mile, or a little more. Here also is the highest ground; and it forms the watershed between the valley of the Jordan on the one hand, and the Mediterranean Sea on the other. To the East of the two mountains and the valley is a large plain, stretching for several miles from North to South. Proceeding towards the City, the mountains again recede, and the valley widens to about half a mile or more. It is hardly any flat land, but is a gradual slope of the two mountains until they dovetail into each other, see figure (2.2).

This amazing site gave the City its importance among the Palestinian cities and towns. It works as the mouth of the only east-west passes at the centre of an ancient road system, and it is one of the most fertile and scenic areas of the country with a plentiful water supply, which in a climate like that of Palestine is sufficient reason to choose such a place to build a city.

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*Figure (2.2): Nablus City looking eastwards; Mount Gerizim on the right and Mount 'Ebal on the left.
Source: A postcard published by Al-Maktabah Al-Jami'yyah, Nablus.*

2.2. Climate:

Nablus climate is the same as the Mediterranean climate, which is characterised by a long, hot and dry summer, and a short, cool and rainy winter. The average annual temperature varies between (18-20°C.) with an average of (25-28°C.) during the hottest month, August, and (8-10°C.) for the coldest month, January. The maximum Temperature can reach 44°C in summer and minimum of zero during winter. The average rainfall varies from 550 mm. to 650 mm. per annum with approximately 45 rainfall days of more than 1.0 mm., falling mainly during the period from November to March (Bitar, 1988). The prevailing winds mostly blow from the Mediterranean Sea in the West, but sometimes dry cold eastern winds might blow, which can affect agricultural products.

The city's location between two big mountains, and the east-western longitudinal shape modifies its weather. Within different parts of the City some differences exist; the central core is the hottest, followed by the eastern parts, the two mountains foothills, then the high elevations on their slopes. Mount 'Ebal blocks the cold fronts blowing from the North, and Gerizim blocks the south and south-western fronts (Khatib, 1985).

Figure (2.3): Nablus in the 1860s. Source: (Watson, no date, vol.3)

2.3. Natural Resources:

Nablus is one of the most beautiful towns in Palestine. This beauty resulted from its special site in the olive grove valley, which attracted the travellers to wonder around and to enjoy its beauty, see figure (2.3).

"M. Van de Velde, who approached this valley from the richer scenery of the north, is not less struck by it than those who contrast it with the barren hills of Judea. After speaking of the grandeur of the gorge of the Leontes, and of the hills of Lebanon; of the wild oak forest and *brushwood* of Naphtali; of the mountain-streams of Asher; of Carmel with its wilderness of timber-trees and shrubs; of plants and bushes, he wrote: "The Valley of Shechem differs from them all. Here there is no wilderness, here there are no wild thickets, yet there is always verdure; always shade, not of the oak, the *terebinth*, and the *carob-tree*, but of the olive-grove, so soft in colour, so picturesque in form that for its sake we can willingly dispense with all other wood. Here there is no impetuous mountain torrents yet there is water, water too in more copious supplies than anywhere else in the land.

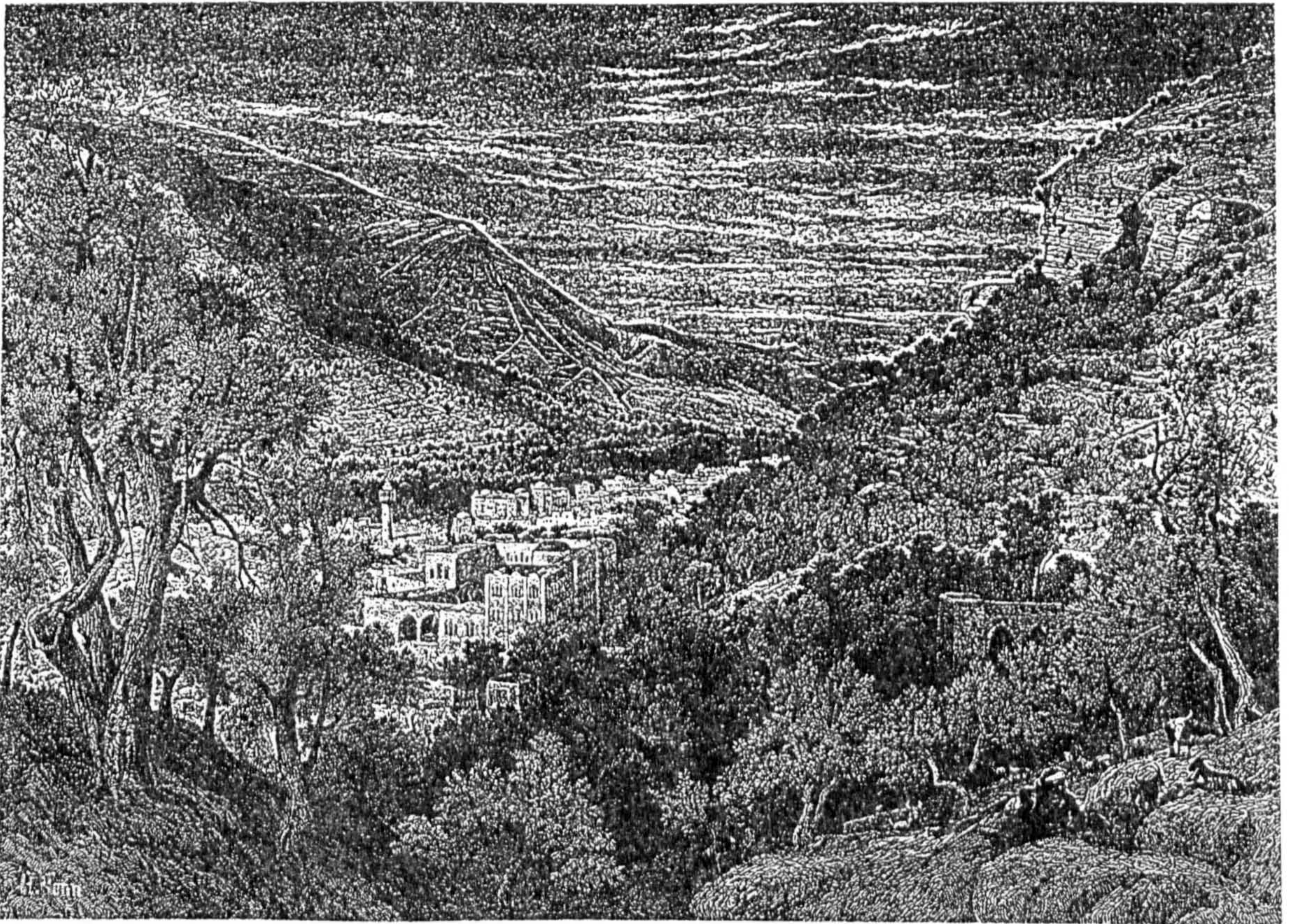


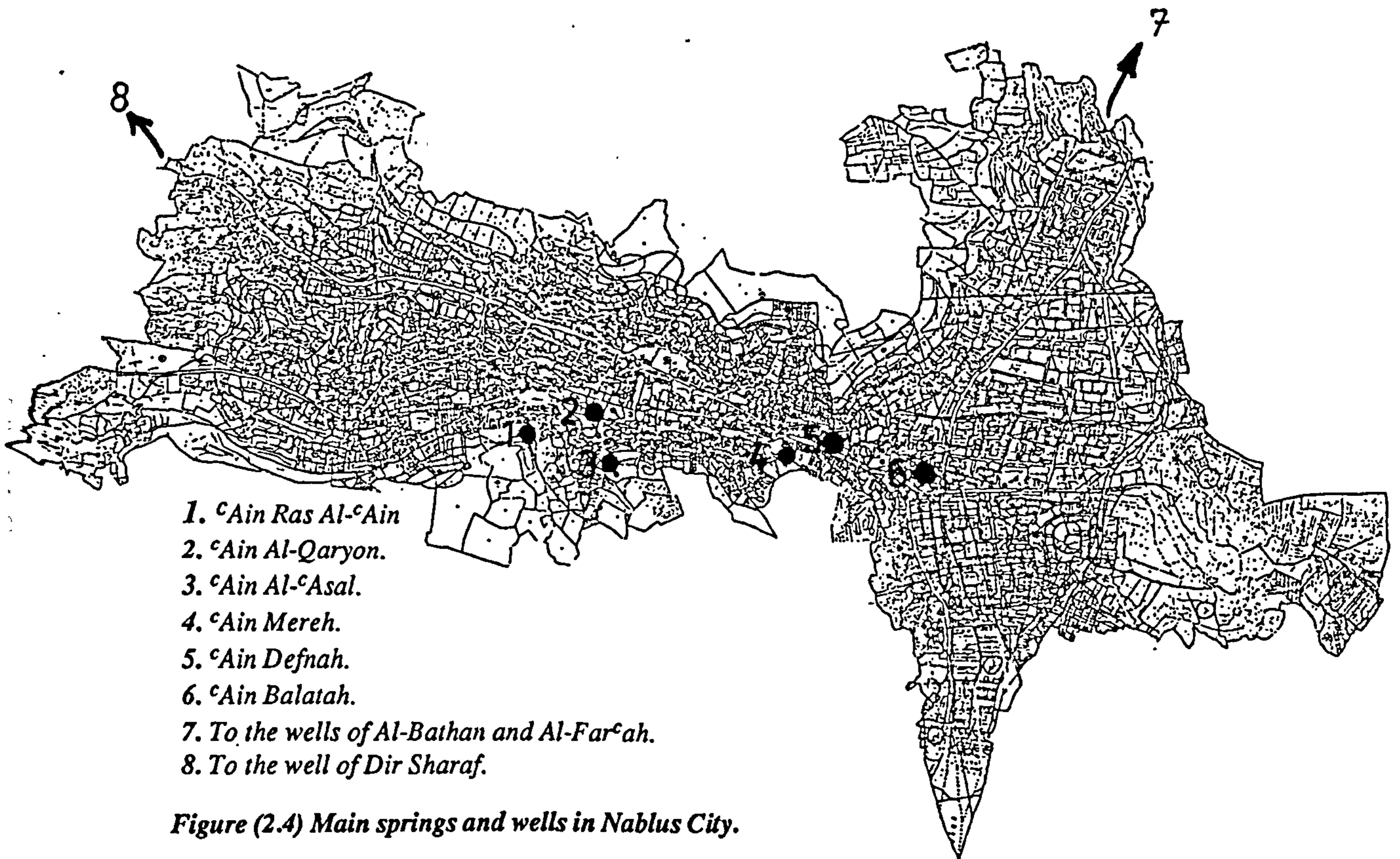
Figure (2.3): Nablus in the 1860s. Source: (Wilson, no date, vol.2).

There is a singularity. It need hardly be said that it is from its abundant supply of water that this beauty is derived: twenty seven springs, each known by its peculiar name, beside a crowd smaller sources pour their treasures into the valley, and have thus secured the perennial glory of its green grassy sward, its olive-groves, its orchards of fig and vine and pomegranate" (Stanley,1896, pp. 234-5).

Nowadays, Nablus still depends on springs for its water needs. There is not a single spring watering Nablus valley from the ^cEbal side. All springs are from Gerizim mountain. Within the City itself the principal water supply was derived from numerous springs. There used to be more than twenty one of them, but nowadays just six springs within the City are still in use; ^cAin Defnah (which is a very copious and is one of the main city water resources), ^cAin Al-Qaryon, ^cAin Ras Al-^cAin and ^cAin Al-^cAsal. They provide the City with an average of 150 cubic metres per hour in summer, and 570 cubic metres per hour in winter (Khatib, 1985). In the eastern part of the town there are two springs, whose sources are near the watershed. One of these; ^cAin Mereh, which dries up during the summer months; the other and close by, in the annexed village of Balatah, is another spring, ^cAin Balatah. Because of the growing number of Nablus population and the shortage of the local springs' water Nablus pump most of its water from neighbouring areas; Al-Bathan and Al-Far^cah in the east and Dir Sharaf in the West, see figure (2.4).

The main reason behind the springs decline lies in the overuse of water by the increasing number of Israeli agricultural settlements in the country, beside the huge amount of water used in irrigating and the cultivating of the Negev desert. The Israelis transported water from the Sea of Galilee through what they called "the National Water Carrier". This carrier was built in the early 1960s. It is a 3 metres in diameter pipeline, and which can transport more than one million cubic metres a day (Pearce, 1991).

For most of the past 10 years, the Israeli settlements consumed more water than has gone into the aquifers and reservoirs. As a result of this Israeli water overuse, the underground water is becoming deeper and deeper. Because most the Palestinian settlements depend on shallow wells, so they are under threat of losing their water supplies. The Nablus municipal water authority has been refused permission to tap into a deeper aquifer by the Israeli water commissioner for the occupied West Bank (Pearce, 1991). If this situation continues, it might cause a wide regional problem in the future.



1. 'Ain Ras Al-'Ain
2. 'Ain Al-Qaryon.
3. 'Ain Al-'Asal.
4. 'Ain Mereh.
5. 'Ain Defnah.
6. 'Ain Balatah.
7. To the wells of Al-Bathan and Al-Far'ah.
8. To the well of Dir Sharaf.

Figure (2.4) Main springs and wells in Nablus City.

2.4. The People:

2.4.1. The Nablusians:

The Nablusian society consists of three communities, divided according to their religions. The Muslims who formed the majority of population, the Christians who belonged to the Greek Church, Roman and Protestant, and the Samaritans who "as Dean Stanley justly remarks, are "the oldest and smallest sect in the world," (Mills, 1864, p.vii). The Jews used to live in Nablus in very few numbers till the first decades of this century, as shown in table (2.1), but they returned nowadays, and many of them are living within new settlements, as well as the occupation military officials.

Nablus approximates the rest of the Middle Eastern cities in its social, economic and cultural characteristics, but its unique situation under the Israeli occupation restricted its economic development. The significant political influence that intermingles in every aspect of the people's lives played a great role in shaping the Nablusian society. The Nablusians are strongly united around each other, especially the members of same family. This situation gave the family a great opportunity to play an important role in the social and economic life of the City. These long terms and successive occupations made the Nablusians notorious for their spirit of independence, bravery and a kind of bigotry against foreigners from the earliest ages.

The demographic structure of the City is much like that of any Arabic Middle Eastern city. It has a higher proportion of women as well as children under 15 years of age. The new parts of the City showed higher increase in population than the Old Town (Khatib, 1985).

About 900 Christians and 300 Samaritans are living in Nablus (Khayyat, 1985). The Samaritans are the remnant of an ancient religious community that has lived in Palestine ever since the eighth century BC. They are following a Jewish sect and who adhere strictly to Biblical and Hebrew religion with their own Torah written in their own Samaritan alphabet (Patai, 1958).

2.4.2. Population Growth:

Table (2.1) lists the growth of Nablus population since 1820. The figures shown in this table are for Nablus city population living inside its municipal boundaries, which varied through different period of times, as a result of the City expansion, which will be dealt with in the next chapter; (The historical development of the City).

Nowadays, Nablus city includes the original Old Town and the annexed villages; Balatah, cAskar, Al-Junayd, and Rafidyah, as well as the three refugee camps established after the 1948 war, Balatah, cAskar, and Bayt Alma'. This variation of the City Municipal boundaries or the town expansion, played a great role in the rapid growth of the population, as well as the changes in the political situation in the region.

Following the 1948 war, there was a sudden increase in Nablus population due to internal migration of the refugees. During the next decade the rate of increase slowed to less than 0.9% annually (Tahal, 1972, p.7). According to the census of 1961, the population of Nablus (excluding the annexed villages and the refugee camps) was 45,768 persons (Tahal, 1972, p.7).

The interior migration from the surrounding villages to Nablus was encouraged by the increasing work opportunities in it, as well as by the political factor, represented by the Israeli Occupation. Within the period 1948-67 the population of the West Bank went from being predominantly rural to predominantly urban. In 1948 less than 18% of the country inhabitants lived in urban settlements, while in 1967 it reached about 45% (refugees were included). By 1980 the urban population reached about 32%. The decline was due to the 1967 war, which resulted in massive migration especially from the refugee camps. Nablus share was increased from 7% in 1967 to 10% in 1980 of the West Bank population (Khatib, 1985, p.53).

In 1967, the Israeli occupation carried out a census after "the six days war", and the population was 61,143 persons (Khayyat, 1985, p.31). The average of the annual population natural growth between the years 1967-1972 was 4.75% according to the

Health Authorities of Nablus (Tahal, 1972, p.8). But the average annual increase in Nablus population in 1985 was less than 3.5% (Khayyat, 1985, 31). In 1972, the population of Nablus town (excluding the annexed villages and the refugee camps) was 50,100 persons (Tahal, 1972, p.8). "The available data on past population growth do not constitute a reliable basis for projecting the future population growth of Nablus. Past trends could not be clearly defined because of the many external events that have affected the population and whatever information is available on natural growth is not reliable. The general trend, discernible from the census figures given above, is distorted by the superposition of events which caused a large number of persons to be either attached to or detached from the City from time to time" (Tahal, 1972, p.9).

Following the 3% annual population growth that was calculated by Tahal (1972) and Khayyat (1985), Nablus population nowadays (1990s) should be about 139,400 persons. In the year 2007 (the goal year of Nablus city Comprehensive Plan), the population is anticipated to grow up to 224,390 persons (Nablus Municipality, 1989).

Nablus Population Growth

Year	Total	Muslims	Christians	Jews	Samaritans	Reference
1820	7,500					Owen (1982, p.57).
1840	8,000					Owen (1982, p.57).
1860	9,500					Owen (1982, p.57).
1882	8,000					Shahada (1987, p.116).
1894	9,000		650		200	Dabbagh (1965, vol.II, pp.206-9).
1904	19,202	18,386	602	50	164	Dabbagh (1965, vol.II, pp.206-9).
1911	21,072	20,168	725	13	94	Dabbagh (1965, vol.II, pp.206-9).
1922	15,947	15,238	544	16	149	Graham-Brown (1980, p.102).
1930	17,000					Dabbagh (1965, vol.II, pp.206-9).
1931	17,189	16,483	533	6	167	Dabbagh (1965, vol.II, pp.206-9).
1938	19,700					Dabbagh (1965, vol.II, pp.206-9).
1939	20,200					Dabbagh (1965, vol.II, pp.206-9).
1945	23,250	22,360	680	0	210	Dabbagh (1965, vol.II, pp.206-9).
1948	25,000					Dabbagh (1965, vol.II, pp.206-9).
1952	42,499					Dabbagh (1965, vol.II, pp.206-9).
1961	66,440					Tahal (1972, p.8).
1967	61,143					Khayyat (1985, p.31).
1972	79,500					Tahal (1972, p.8).
1975	82,000					Khayyat (1985, p.31).
1980	85,000					Khatib (1985, p.53).
1985	115,000	113,800	900		300	Khayyat (1985, p.31).
1988	115,000					Bitar (1988, p.4).

Table (2.1). Sources as above indicated.

2.4.3. Education:

Since the Ibrahim Basha raid on Palestine in 1830s, education was put under state control and became compulsory. Initially schools were parts of mosques and classes were a number of circles gathered around the *‘Ulama*; scholars. The taught subjects were mainly Islam and the Arabic language, as well as scientific subjects, but for a few highly specialised classes. The Nablusians interest in education was reflected on the characteristics of the society itself. The Nablusians respect any educated person especially from the Nablusians families that dedicated their men in obtaining the higher educational degrees, especially, religious education. This respect was reflected by establishing many schools that attracted many students from all over the Arabic world to study in them such as An-Najah National school that later had been converted into a collage then into a university.

In 1962-3 there were 24 schools in Nablus supervised by the Jordanian Education Ministry. There were 5091 boys and 4205 girls, distributed as the following: 12 male schools; 2 secondary schools with 1104 boys, 3 primary schools with 1369 boys, and 7 elementary schools with 2618 boys. Also 12 female schools; 5 primary/secondary schools, and 7 elementary schools with total 4205 girls. In 1966-7 there were 29 state schools: 14 male schools with 6441 boys and 15 female schools with 5280 girls. Also an industrial secondary school was established, supervised by the Education Ministry and in this year 258 boys were studying in it. The UNRWA had 6 elementary/primary schools; 3 male schools with 1062 boys and 3 female with 785 girls, their total number was 1847 refugee boys and girls. Also Nablus had 16 private schools with 3874 boys and girls, among them Al-Najah National Collage. Total students number was 17700 boys and girls (Dabbagh, 1965, pp.212-221). In 1985 there were 47 different schools (Khayyat, 1985, p.27), increased up to 53 schools in 1989 (Nablus Municipality, 1989) besides An-Najah National University and many other educational institutions and collages.

In spite of the difficult political conditions the Palestinians living in the West bank and Gaza Strip under the Israeli occupation, are still demanding education. Schools and universities are mostly closed for long periods of time, especially during the *Intifadah* time. Table (2.2) shows the educational levels of the Nablusian people in 1989.

The Education level for people over 15 years old in Nablus, 1989

	Illiterate	Elementary	(Prep.&Secondary)	Higher	Still studying
Male	13.1	21.9	37.0	13.2	14.7
Female	20.0	19.7	32.4	11.5	16.2
Total	16.4	20.9	34.8	12.4	15.4

Table (2.2). Source: (Za^cnon,1989).

2.5. *Economy:*

"Nablus, being the centre of a rich district, and as of old, the gateway of the trade between the northern and the southern part of the country, as also between Jaffa and Beirut on the one hand, and the trans-jordanic district on the other, becomes, of necessity, the mart of an active traffic. The consequence is that the inhabitants enjoy a greater amount of the comforts of life than those of any other town in Palestine" (Mills, 1864, pp.89-90).

The conspicuous prosperity of Nablus rested on trade and manufacture. Nablus remained Palestine's most important centre for local and regional trade and for manufacture of soap, oil and cotton goods. It was standing close to those districts that up to the 1870s were the most economically active in the country. The economic rise of Nablus then found another expression in the building activity and the town development, which will be discussed in the history chapter.

This economic prosperity continued until the 1940s when a recession period resulted by the political instability, which was ended after the 1948 war when the Jordanian ruled the West Bank. At the beginning of the Jordanian rule, The West bank economy was exhausted from the large numbers of refugees who came from the occupied parts of Palestine. Besides the Jordanian government policy to up grade the East Bank economical conditions to catch up with that of the West Bank, which was relatively a developed one. This policy impeded the West Bank economy and made it completely dependent on the East Bank economy (Khatib, 1985). But the availability of job opportunities in the Oil producing countries opened the way to new economic relaxation, which obviously appeared in the rapidly increase of building movement and towns expansion. In 1961 employment was 20% of the total Nablus city population, which equal to 7.5% of Nablus region (Nassar, 1991, p.68).

By the late 1960s, the City's economy had begun to suffer from a dependency on the Israeli economy; which suffers a 400% annual inflation rate and rapid monetary devaluation. The Israeli martial law forbids any Palestinian from import and export goods except through an Israeli agent (Khatib, 1985). In 1978 the average percentage of Nablusians working in agriculture in both the West Bank and Israel was 13%, in Industry 29%, in construction about 22%, and the average percentage for self employed was 36% (Khatib, 1985, pp. 63-4). In 1985 employment was 2.9% employed in agriculture, 20.1% in industry, 12.3% in construction, 21.4% in trade, 8.4% transportation, 27.4% services, and 7.7% working in other branches (Khayyat, 1985, p.41). In 1989 householders' employment (aged 15-65 years old) was 24.2% in salaried jobs, 13.4% self employed, 2.7% employers, 0.6% retired, 16.2% are students, and 43% not working (Za^cnon, 1989). Employment among family men in the same year was 13% unemployed, 2% in

agriculture, 13% in industry, 26.7% in trade and 42.3% in other sectors as services, and education (Za^cnon, 1989). See table (2.3).

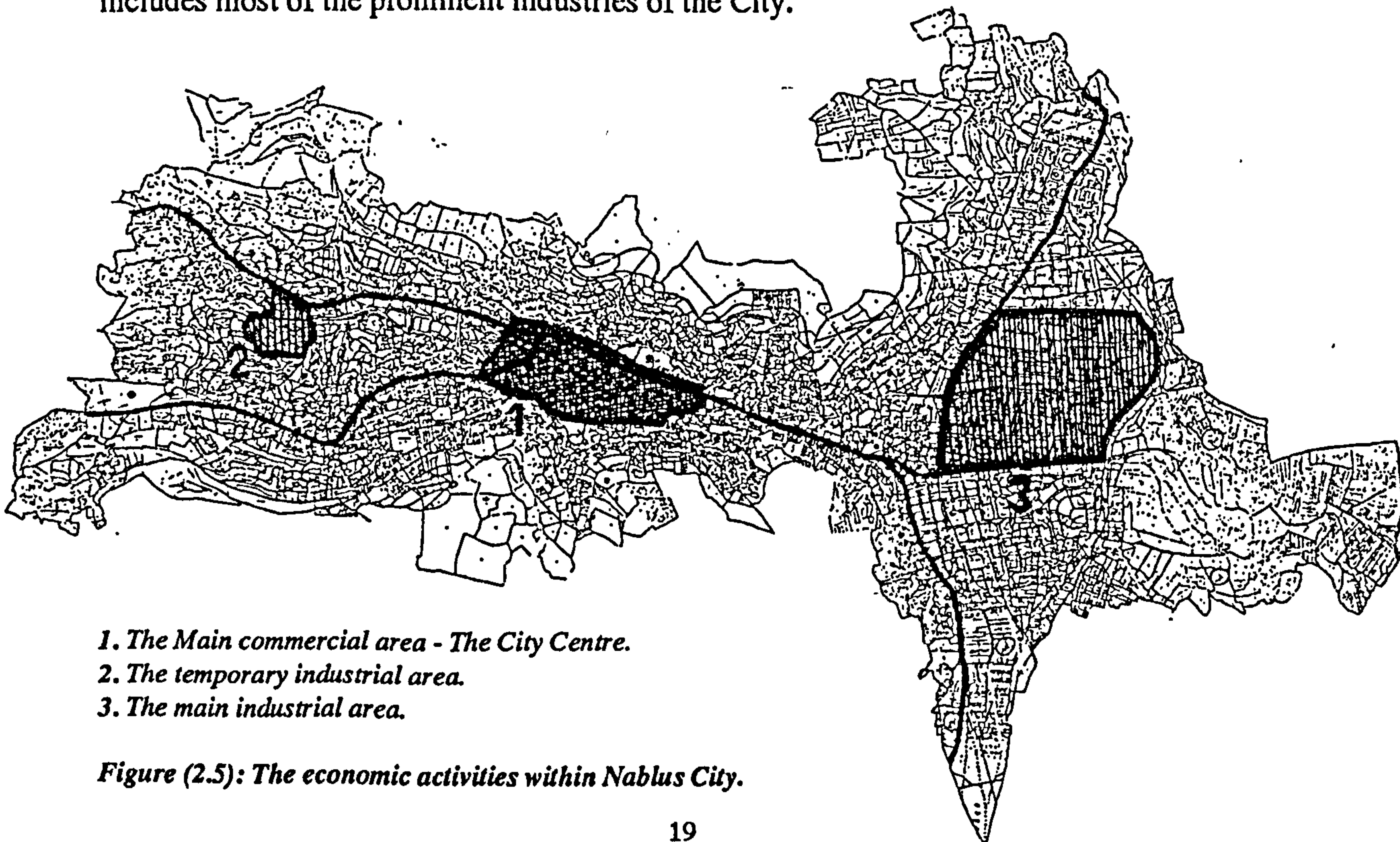
Nablus Employment

Year	Trade	Industry	agriculture	Construction	Others
1978 (*)		29.0%	13.0%	22.0%	36.0%
1985 (-)	21.4%	20.1%	2.9%	12.3%	43.5%
1989 (+)	26.7%	13.0%	2.0%		42.3%

Table (2.3). Sources; () : (Khatib, 1985, p.63-4), (-) : (Khayyat, 1985, p.41), and (+) : (Za^cnon, 1989).*

Table (2.3) summarises Nablus employment figures of 1978, 1985, and 1989, from which it is possible to predict that the economical future of the City will stand on the trade and service sectors, as both agriculture and industry show continuous decline mainly caused by the hard political situation in the region.

Figure (2.5) shows the different economic activities in Nablus city. The commercial streets of the Old Town consist of small shops, which could hardly be served by motor vehicles. The new commercial areas within the new street markets consist of larger shops, and wider streets, suitable for both the pedestrians and the motor vehicles. The industrial areas are located in two sites at the eastern and western ends of the City, as well as others distributed within the City. The western part is a temporary one, as the Municipal planning authority found that this particular site could cause an environmental hazard to the City. The eastern part has a bigger area and a permanent one, and which includes most of the prominent industries of the City.



1. The Main commercial area - The City Centre.
2. The temporary industrial area.
3. The main industrial area.

Figure (2.5): The economic activities within Nablus City.

2.5.1. Trade and Commerce:

Nablus was one of the important commercial centres in Palestine. Its importance was for its central location and the availability of easy transportation (Nassar, 1991). The Nablusians are known locally as successful business men. The family name is of great importance and could be the first step in success (Khatib, 1985).

The main exported goods are soap, vegetable oil and leather products, while the main imported goods are timber, steel, corn oil, plastic and electrical devices (Nassar, 1991, p.68). Most of the West Bank trade is with Israel, which represented 55% of the West Bank export and 90% of its import. Trade with Jordan represented 2% of the West Bank import and 45% of its export. Export to other countries is negligible (Benvenisti, 1986).

Nablus is an important commercial centre in the West Bank, especially as a regional distribution centre for agricultural products gathered from the surrounding villages, and distributed in Nablus itself as well as the other West Bank cities; like Jenin, Tulkarm and Ramalla. The distribution centre used to be near the railway site till recently when the Municipality built a new market at the eastern end of the City, see zone 3 in figure (2.5).

The commercial activities in Nablus have been concentrated in the City Centre and along the main streets in it, as shown in figure (2.5). These commercial activities; fruit mongers, fishmongers, groceries, cloth dealers, house holds dealers and others are distributed within the City without any organisation as they used to be in the nineteenth century. In 1989 there were 2642 different commercial shops in the City (Nablus Municipality, 1989). Table (2.4), shows the different commercial activities within Nablus city in 1984:

<i>Economical Activities within Nablus City</i>	
<i>Activity</i>	<i>Number</i>
<i>Commercial Shops</i>	1077
<i>Offices</i>	214
<i>Money Exchange</i>	48
<i>Cinema</i>	4
<i>Electric shops</i>	93
<i>Banks</i>	1
<i>Restaurants and Cafes</i>	105
<i>Others</i>	502
Total	2044

Table (2.4). Source: (Khayyat, 1985, p.43).

2.5.2. *Industry:*

"In addition to its function as a trading centre, Nablus contained the region's most important textile industry (Nimir, 1975). The cotton of Nablus was praised as the best in Syria. During the American Civil War boom, Nablus became a centre of cotton-processing for export. "The busy hum of the cotton gins greeted us on all sides, and heaps of cotton husks lay about the street ... Though we had seen every-where the signs of a nascent cotton-trade, yet in no place was it so developed as here" (Tristram, 1866, pp. 137-8). Even after the boom, the quality of Nablus cotton was such that it continued to find a ready market in Palestine, Transjordan and Central Syria. The same holds true for the cotton, wool and camel-hair fabrics and for the silk passementeries manufactured in the town, though in their case the quantity of production may well have decreased. In addition to the weavers and dyers, silversmiths and goldsmith their products east and west of the Jordan, and there were a number of manufactures of olive oil, which also had a high reputation for quality" (Scholch, 1982, p.50).

The production of soap was the most important industry. What was not consumed locally was exported - particularly to Egypt and Anatolia. For the year 1860, Rosen spoke of 15 factories with an annual production of about 4500 quintals (Rosen, 1860, p.638). Guerin reported an annual export of Nablus soap of 4000-5000 quintals (1 quintal = 100 Kilograms) (Guerin, 1874, p.399). In the year 1882 there was 30 soap factories in the town (Dabbagh, 1965). The soap industries of Nablus provided the most important manufactured export from Palestine in the nineteenth and early twentieth centuries (Scholch, 1982).

The soap was made from the pure olive oil, coming mostly from local groves and being processed with an alkali in a vat. In 1927 there were 24 such factories in Nablus, each employing an average of 5 to 6 workers (Graham-Brown, 1980, p.113). Nablus soap industry came to grief in the 1930s for two main reasons:

"First, Egypt, which had previously provide 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" (Graham-Brown, 1980, p.114).

During the fifties and early sixties the City's industry flourished because of the refugees cheap, semi-skilled labour, about 40,000 Palestinian refugees settled in Nablus, also because of the presence of the large Arabic exchange markets, resulting from the improvement in transportation and communication (Khatib, 1985).

The industries of the West Bank declined after the 1967 war when the Israeli occupation started, which partially closed the Arab market against the Palestinian exportation. The Israeli economic policy of converting the West Bank into a consumption market to their products, so many of the local industries were badly hit, and many factories were forced to close, such as Al-Masri Flour Mill and the matches factory in Nablus.

Nowadays, Nablus is the second most important industrial centre of the West Bank, next to Hebron; *Al-Khalil*. One of the main characteristics of Nablus industries is that they depend mainly on the local raw materials, soap production, tanning, weaving, pastry and dairy products (Nassar, 1991, pp. 65-6). Other industries that depend on imported raw materials also exist; plastic industries, Aluminium finishing, pharmaceuticals, chemicals, and *Tahini* producing, see Table (2.5). All these industries are of small scale, and their production is mostly for a limited West Bank market, and some, such as the soap, vegetable oil and leather products, are allowed to be exported through Jordan to the Arab countries. The industrial workshops and factories are distributed and mixed among commercial shops without any organisation or classification except in some parts of the Old Town as the goldsmith market near the main bazaar of the Old Town.

Industrial Activities within Nablus City

<i>Industry</i>	<i>Number of Main Establishments in 1980.</i>
<i>Soap factories</i>	31
<i>Olive Mills</i>	6
<i>Tahini Mills</i>	7
<i>Pastry</i>	30
<i>Pharmaceuticals and Chemicals</i>	12
<i>Animal and Poultry Feeding products</i>	3
<i>Weaving and Sewing</i>	45
<i>Leather and Plastic Shoes and Cases</i>	13
<i>Furniture</i>	16
<i>Vegetable Oil Refinery</i>	1
<i>Tin Cans and Steel pads</i>	2
<i>Matches</i>	1
<i>Glassware</i>	1
<i>Metal Plating</i>	2
<i>Concrete Blocks</i>	8
<i>Stone Polishing and Cutting Mills</i>	28
<i>Aluminium Finishing</i>	3
<i>Cartoons, Cardboards and Paper Bags</i>	10
<i>Handicrafts</i>	8
<i>Miscellaneous</i>	24
Total	251

Table (2.5) Source (Khatib, 1985, p.61).

2.5.3. Agriculture:

Agriculture in Nablus, including the animal wealth, is not of that importance to the town economy. Nablus city depends on its region for its needs from food and olive production to keep the soap and olive oil industries. Agriculture in Nablus region is primitive and depends, mainly, on rain water. Because of this the annual production is not stable.

Nablus region is abundant with olive groves. In 1963-4 there were 467,000 Dunums (1 Dunum=0.1 hectare) of olive groves, within which about 4,670,000 olive trees. The unproductive olive trees (less than 15 years old) were approximately 140,000 trees (cArif, 1964, p.46). It is known that olive tree could live for centuries, some of the existing trees are more than a thousand years old. The average annual production of olive was about 9,000 tons. 4,500 tons of which went in the local markets, half of which was used to produce soap, and what was left was exported (cArif, 1964, p.46). In 1981 there were 147,000 Dunums of productive olive trees and 8,900 Dunums of unproductive olive trees (Nassar, 1991, pp. 67-8).

Between 1948-57 citrus agriculture was developed in the Nablus region, and its products increased from 245 tons in 1952 up to 723 tons in 1957. After 1967, Nablus citrus and other agriculture production were badly affected by the Israeli occupation policy of land confiscating for settlements and the openings of new roads, as well as encouraging the Palestinian farmers to desert their lands and work in the Israeli factories. Because of this the West Bank agriculture was badly hit. In 1952 there were 238,202 peasants in the Nablus region, in 1961 about 240,930 peasants, and in 1967 about 185,075 peasants formed successively 75.6%, 70.5%, and 56.5% of the West Bank population (Nassar, 1991, pp. 67-8).

2.6. Administration:

Nablus has been the administrative centre of Nablus region during the British occupation, the Jordanian rule and nowadays the Israeli occupation. This administrative function gave the City a special importance among the surrounding towns and villages, who are obliged to come in to it for the attainment of their needs. There are many regional administrative services located in Nablus, such as: the regional Israeli military authorities, the civil administrative department, the interior office, the inhabitants registration office, the West Bank educational administration, the social security office, the works and labour office, civil Courts, the regional police administration, the regional antiquities department, the regional post office, and the Regional Planning Authorities.

Nablus Municipality is the only public local authority, which serves the Arab

residents. The Nablus Municipality offers the essential public services (water, electricity, planning control and maintenance, markets control, and fire brigade services) to the City and some surrounding towns and villages. Nablus Municipality is one of the oldest municipal authorities in the region. It was established in 1868 (Nimir, 1975). Up to this moment there were 32 elected mayors and an appointed Israeli one. The last was in office during 25/3/1982 - 19/12/1985 after the political dismissing of Mr. B. Al-Shak^cah; the x-mayor. In 1986 the Nablus Chamber of Commerce administered the Municipality, and Mr Zafer Al-Masri - The head of the Chamber of Commerce was appointed as the mayor. Later Mr Masri was killed, and his successor Mr. H. Toqan also was forced to step down for national reasons. Nowadays, the municipality is administered by its Nablusian employees under the Israeli supervision.

2.7. Health Institutions:

There are four hospitals in the City; the National hospital (governmental, with 90 beds), Rafidyah hospital (governmental, with 150 beds), the English hospital (private, with 50 beds), and *Al-Itihad Al-Nisa'y* hospital (private, with 90 beds). Besides these hospitals there are three charitable dispensaries, and more than 100 clinics with different medical specialities and about 35 dental surgeries and 44 pharmacies (Nablus Municipality, 1989).

Chapter Three

*Nablus Historical
Development*

3.1. Foundation of the City, The Roman Period, 63 BC-AD 324:

The Romans took possession of Palestine in 63 BC. Four years later, the Samaritans of Shechem revolted against the Roman Empire and gathered at Mount Gerizim. As a result of this the Roman Emperor sent a great military expedition, sieged them and killed about eleven thousands of them, and totally destroyed their city; Shechem.

In AD 72 Vespasian; the Roman Emperor, ordered the building of the new city; Flavia Neapolis for veteran legionaries to settle in. The city was located on the northern eastern side of Mount Gerizim, and extended to Tel Balatah in the East, and to what is called *Kishakeh* today (Nimir, 1975. vol.I, p.47). The city acquired all the civil and religious structures of any Graeco-Roman city: hippodrome, agor, colonnaded streets, aqueducts, fountains, temples and later, basilicas, ramparts, and on the slopes of Mount Gerizim, a necropolis (Burgoyne, 1987). Later the Samaritans rebuild their houses and a Synagogue on the old spots of Shechem, and the new buildings of Neapolis expanded till they joined the Samaritans buildings (no dates, Nimir,1975).

In this period, the most important event for the western world today happened in the birth of Jesus Christ and the subsequent growth of Christianity. Later the rulers of Rome became Christians and expelled the Jews to the northern parts of Palestine away from Jerusalem (Albright, 1956). At the beginning of the second century, Hadrian (AD 117-138) built with Phoenician assistance a temple to Jupiter on Mount Gerizim, replacing the Samaritans temple, which had been destroyed in 67 BC. The Greek and Roman period left few traces in the memory of the people. The ruins of proud Hellenistic and Roman cities still testify to their artistic and technological civilisation. Some separate traces of the Roman city have been excavated beneath the present day Nablus, see figure (3.1) over page.

3.2. The Byzantine Period, AD 324-636:

From the fourth century Neapolis became the seat of a bishop, but the early Christians had to struggle constantly against the Samaritans. In about AD 485 Emperor Zeno expelled the Samaritans from Mount Gerizim and replace their synagogue with a church. In AD 521 the Samaritans murdered

NEAPOLIS

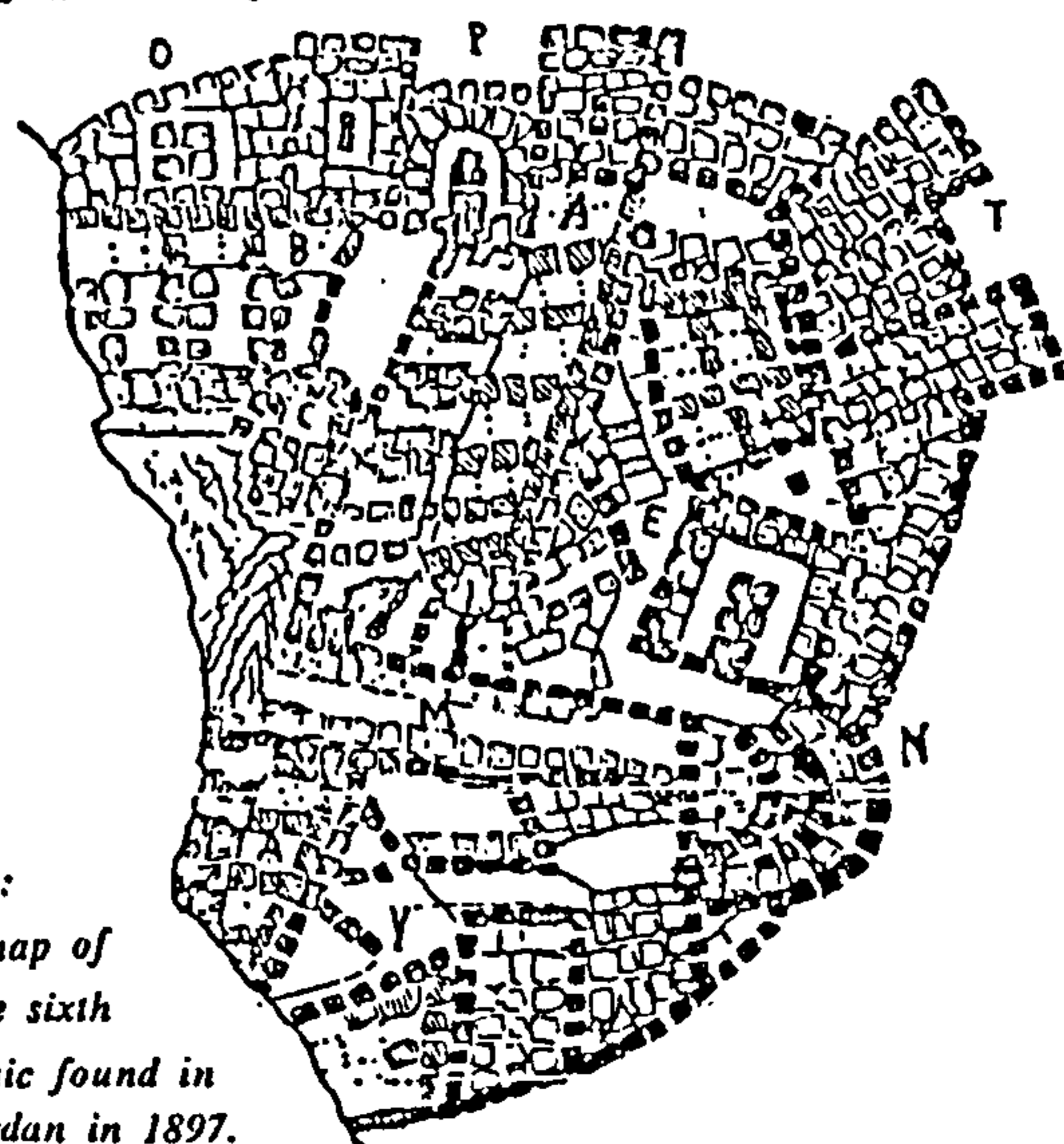
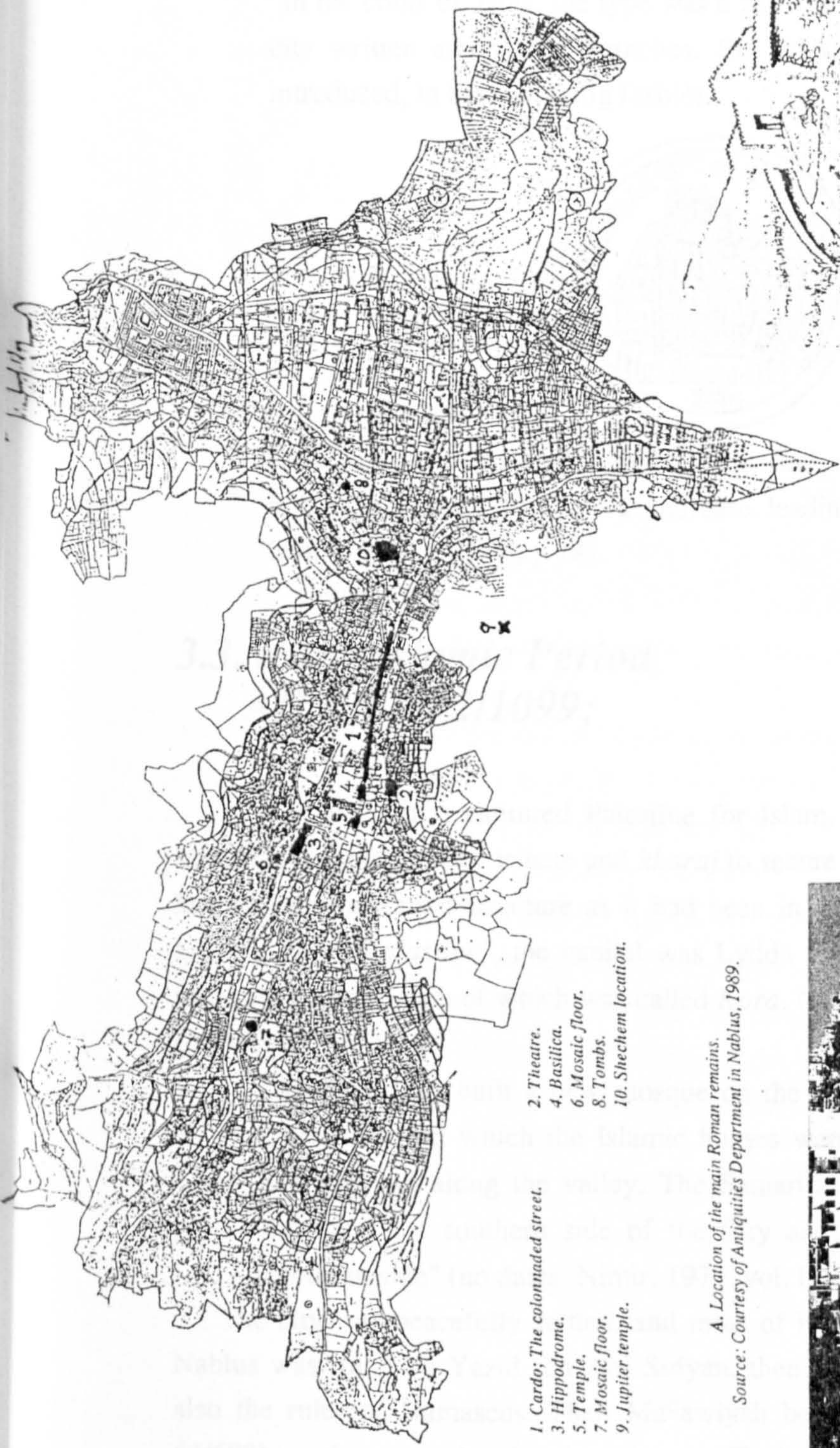


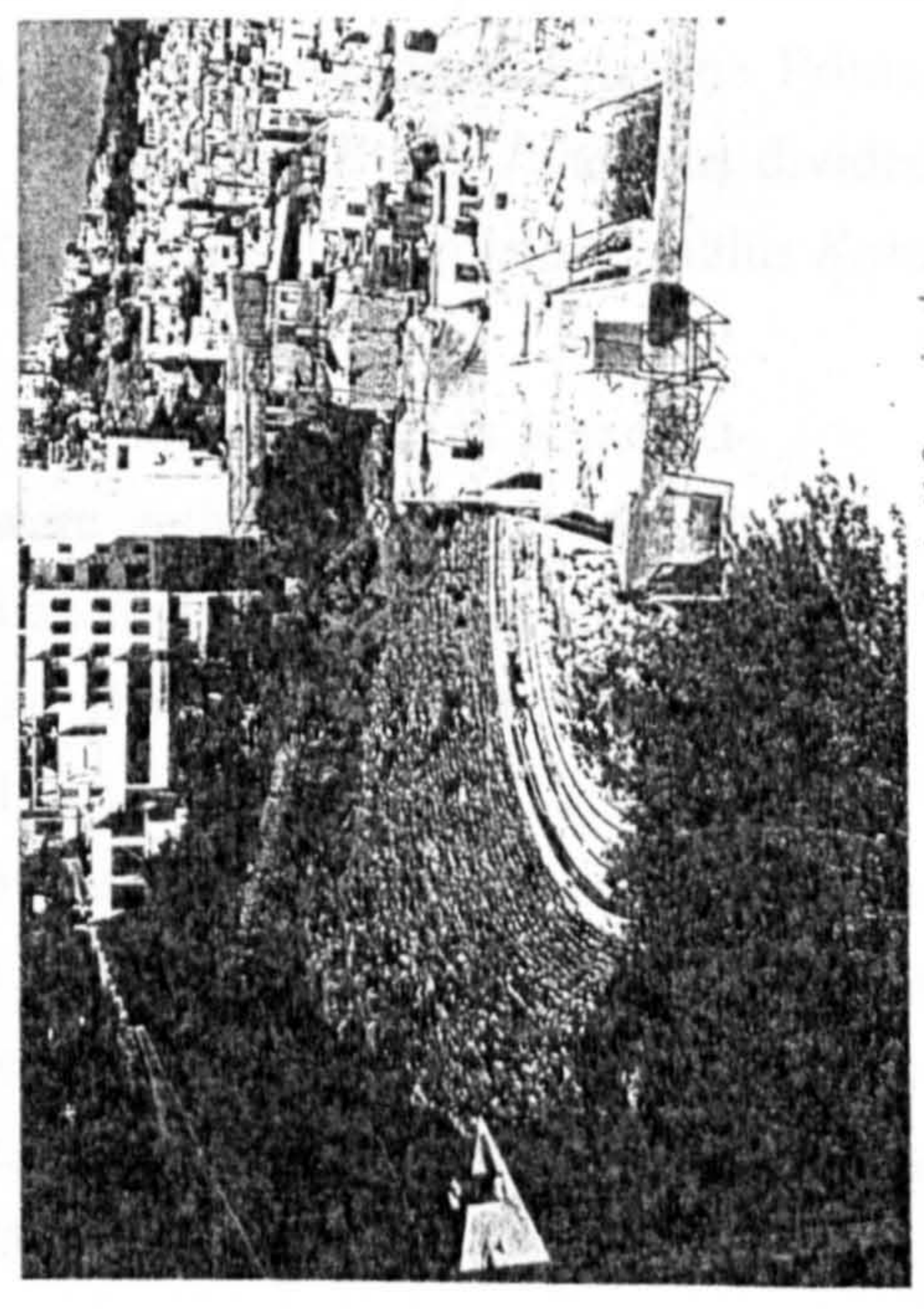
Figure (3.2):
The oldest map of
Neapolis, the sixth
century mosaic found in
Madeba, Jordan in 1897.
Source: Courtesy of Mr Fanni, 1989.

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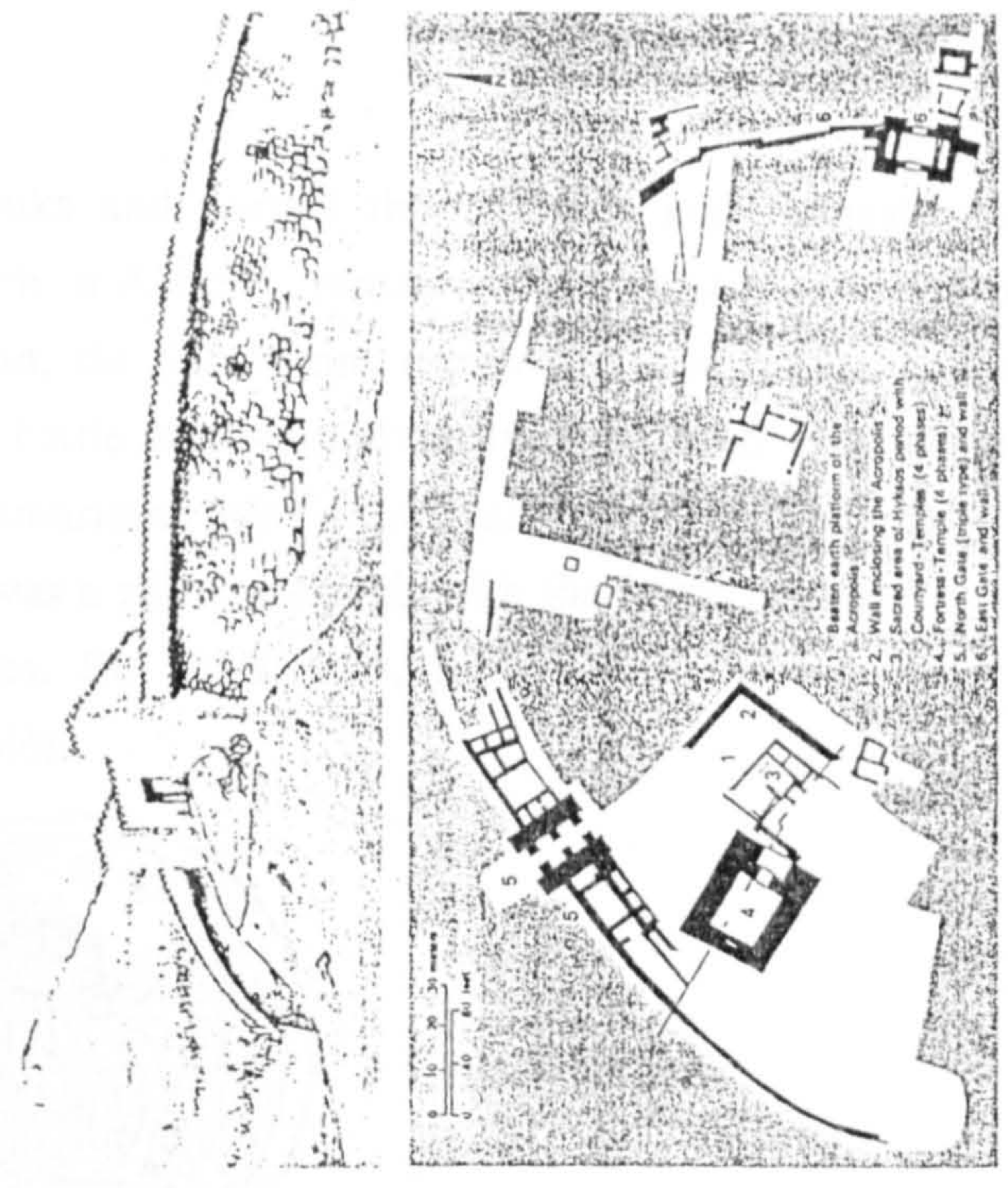


- 1. Cardo; The colonnaded street.
- 2. Theatre.
- 3. Hippodrome.
- 4. Basilica.
- 5. Temple.
- 6. Mosaic floor.
- 7. Mosaic floor.
- 8. Tombs.
- 9. Jupiter temple.
- 10. Shechem location.

A. Location of the main Roman remains.
Source: Courtesy of Antiquities Department in Nabulus, 1989.



B. A photograph of the Roman Theater remains in Al-Qaysariyeh.

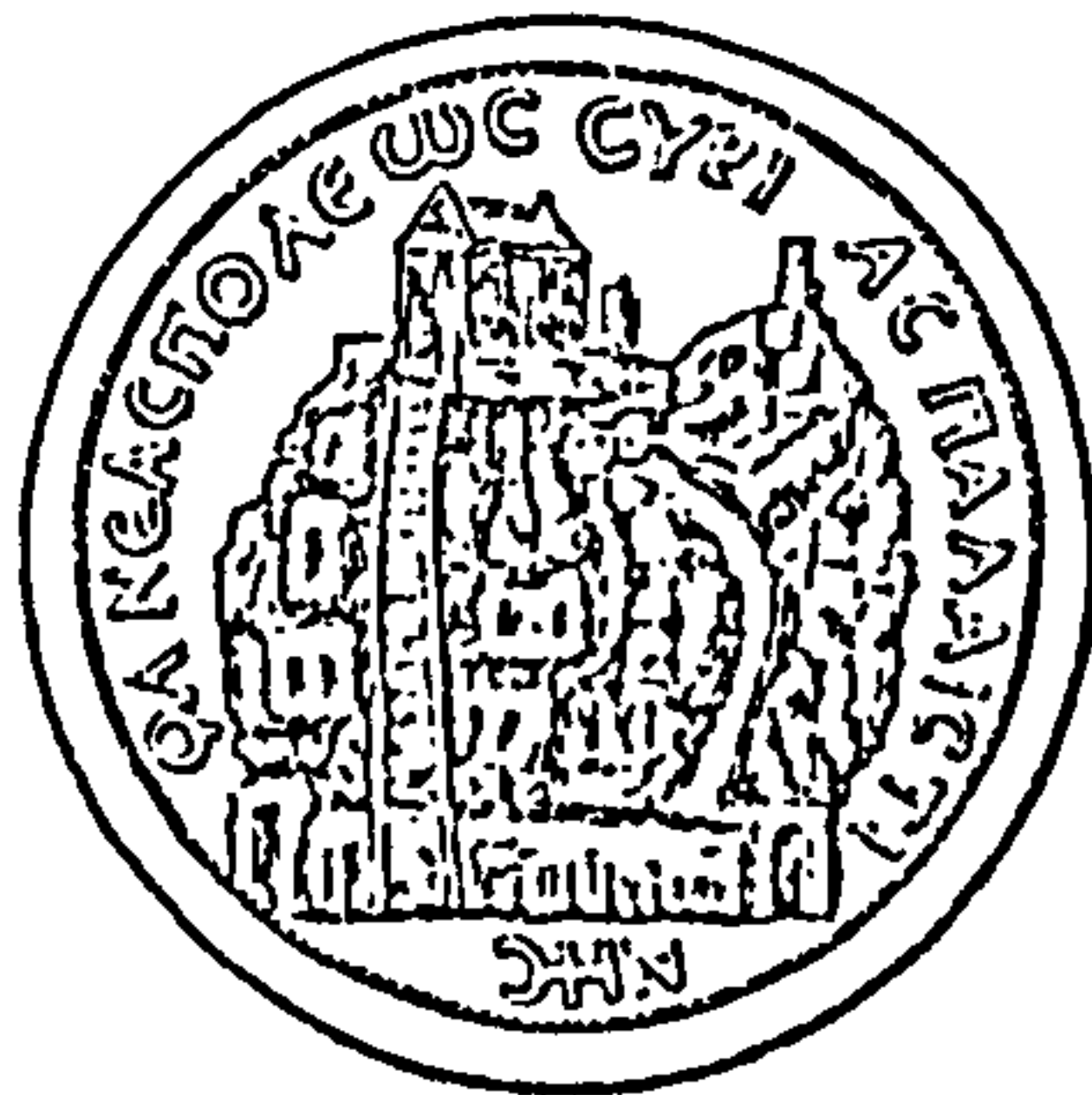


C. Remains of Shechem. Source: Courtesy of Mr Fanni, 1989.

Figure (3.1): Shechem and the Roman remains within Nabulus City.

the bishop, massacred priests and monks and burned the churches and monasteries. Emperor Justinian restored Zeno's church in AD 531; remains of which still exist. After suffering several repulses from Justinian, the Samaritans eventually 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 300 Samaritans live on lower slopes of Mount Gerizim.

"In the coins of Titus, the type was a palm or laurel, with the name of the city written among the branches. But afterwards, Mount Gerizim was introduced, in the following fashion:-



Here is represented a building of some kind, most likely a temple, with a high tower close by, and a staircase leading up from the city to the temple"(Mills, 1864, p.78).

3.3. Early Islamic Period, AD 636-492/1099:

In AD 636 Arabs captured Palestine for Islam, lead by Amru Ibn Al-Ass. The inhabitants agreed to pay tribute and *kharaj* to secure their lives and properties. Muslims left the administrative structure as it had been in the Byzantine time, Palestine Prima, became "*Jund Falastine*", the capital was Lydda then Ramle. Every *Jund* was divided into sub-districts, each of which was called *Kora*. Nablus was the capital of Nablus *Kora* (Dabbagh, 1965).

"The Muslims built a new mosque on the site known later as Khan Al-Tujjar, around which the Islamic houses were gathered and extended to the east and along the valley. The Samaritan and the Christian quarters occupied the southern side of the City and the Islamic quarter on the northern side" (no dates, Nimir, 1975. vol. I, p.47).

The city was peacefully settled, and most of its inhabitants became Muslims. First, Nablus was ruled by Yazid Ibn Abi Sufyan, then by his brother Mu'awiyah, who was also the ruler of Damascus. Then Mu'awiyah became the Umayyad Caliph (60/680-64/683), and was succeeded by his son Yazid. The Abbasid dynasty brought the Umayyad rule to an end in 132/750 and captured Palestine and Syria.



Figure (3.3) The oldest picture of Nablus. Source: (Nimir, 1975).

The Fatimids gained control of Palestine, including Nablus, in 359/970. The Fatimids were Shi'is but the loyalty of most of the population probably remained Sunni, apart from the small number of Samaritans and Christians. Al-Muqaddasi (375/985), the famous geographer in the tenth century, wrote:

"Nablus is on the mountains, abounded of olives, called little Damascus, and it is in a valley squeezed between two mountains. Its market is extended from the gate to the gate, and another to the heart of the City. The Jame' is in its centre. It is finely paved, clean, and through it there is a stream of running water. Their buildings are built of stone" (Al-Hanbali, 1973).

In about 468/1075 Nablus was captured by the Suljuk Turks - who were Sunni. The Suljuks and the Fatimids remained locked in combat until 492/1099 when the Crusaders came to conquer Palestine; the Holy Land (Bishawi, 1984).

3.4. The Crusaders Period, 492/1099-583/1187:

The Crusaders reached Palestine in the spring of 492/1099. While they were surrounding Jerusalem, a delegation from Nablus offered the surrender of the City. On 25th July 492/1099 Tancred entered Nablus with no difficulty. It remained in his possession until he left the country and handed it to King Baldwin I. The town was called by them Naples (Benvenisti, 1970).

Because of its central geographical location, Naples (as the Crusaders called it) was the meeting place of the King and his court to discuss the kingdom's condition. Naples became the Royal residence and domain until the 560-70s/1170s. Also the wealth and the beauty of the City attracted the churches and military orders to it. Naples at that time was described by travellers who passed through it and praised the City and its surroundings. Daniel the Russian reported:

"The land of Naples is very rich in various fruit trees, figs, nuts and olives. The plantation resemble dense forests surrounding the town. The territory also was fertile of wheat. The entire region is notable for its beauty and its rich produce includes oil, wine, grain and fruit. The city of Jerusalem obtains its food stuff from Naples" (Benvenisti, 1970, p.163).

In 502/1108 Baldwin I gave the Milly dynasty the Master ship of Naples feudality. He appointed a Viscount as his representative. The Viscount's duties were to build markets and hotels, to collect taxes, to keep order and to command courts (Bishawi, 1984). In the period 493/1100-513/1118, Baldwin I built a fortress on Mount Gerizim, to protect the City. In 507/1113 Naples was attacked by the Muslims and many many of the Crusader's buildings were destroyed. Because of this, Baldwin I fortified the City by building a fortified tower "Turrus Neapolitana" on the western side, see figure(3.4). In 512/1118 Baldwin II became the King. He did not make any serious changes to Naples's situation.

In 518/1124 the Fatimids attacked Naples, which did not resist as the Crusader army was busy in capturing north Palestine, and its garrison preferred to stay in the fortress. Some of the City buildings were badly affected during this attack. In 526/1131 Baldwin II died and Fulk became the King. Jerusalem; the Capital was attacked in 532/1137 by the Mamluks lead by 'Imad Al-Din Zinky who made Fulk sign a reconciliation. Simultaneously, Basaj the ruler of Damascus, attacked Naples and fired the Crusaders' buildings, besides arresting the Crusaders who did not escape to the castle. Then he left the City carrying a lot of spoils without any losses, as it was empty of soldiers who had gone to help the King in Jerusalem (Bishawi, 1984). These two successive attacks might be what Ihsan Al-Nimir (1975) meant when he said:

"During the Crusaders wars, the eastern part of the Roman city then the Islamic quarter were damaged and the Samaritans deserted the City. The Christian places were also damaged, and the City shrank to the south western corner. After the return of the Muslims, they settled in this part, and ignored all the other parts and used the remains for their buildings" (Nimir, 1975. vol.I, p.47).

After that, the Master of Naples and the Viscount devoted themselves to repairing the City's damage, with the financial aid of the King Fulk. In 538/1143 King Fulk died and his wife, Queen Melis, ruled the kingdom for her son Baldwin III, as he was too young to be a king. But when he became old enough, in 546/1152, she refused to renounce the kingdom. So he captured the kingdom by force, then gave Naples to his mother, the Queen, as an independent feudality till she died in 556/1161. A year later Baldwin III died and his brother Amalric became the king. In 562/1167 Amalric gave his wife, Queen Maria, the Mastership of Naples (Bishawi, 1984). In 563/1168 Amalric gave the Church of the Resurrection in Jerusalem a piece of land in Naples to build a church. They restored the Byzantine church and added a number of bays and apses. They called it the Church of the Passion and the Resurrection (Benvenisti, 1970).

The offensives against the kingdom increased when Salh Al-Din became an effective ruler of the Muslims in 569/1174. But as the strength of the Crusaders was still something to be reckoned with, Salh Al-Din decided to unite the Muslims around him before taking any serious action (Benvenisti, 1970). In July 583/1187, Salh Al-Din launched his attack and very effectively defeated the Crusaders at the battle of Hettin. As a result of this, the Crusaders of Naples fled from the City, and the Muslim inhabitants captured it before the arrival of Salh Al-Din's forces (Bishawi, 1984).

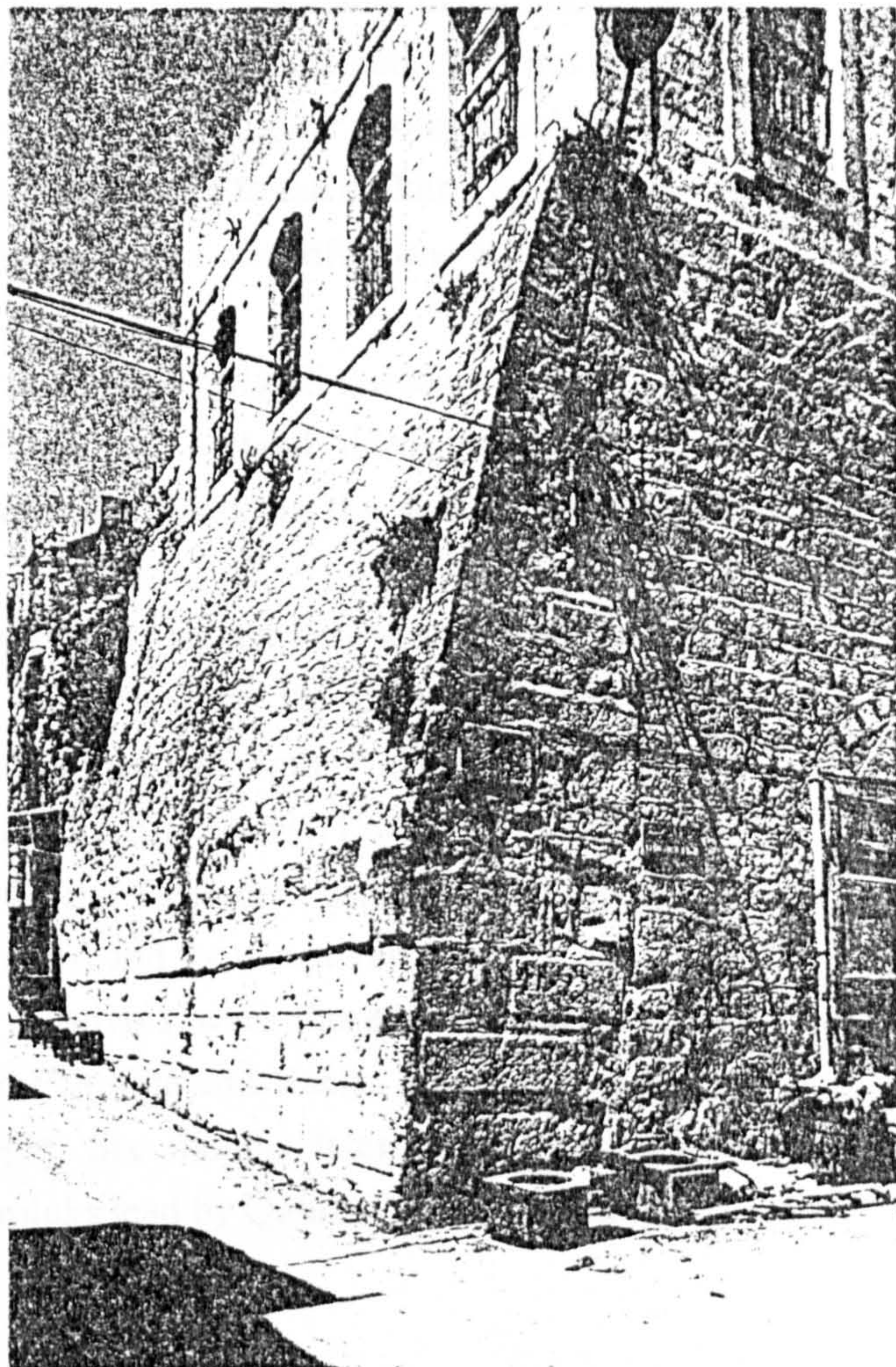


Figure (3.4): Remains of the fortified tower; "Turrus Neapolitana", now it is a store. Source: Courtesy of Dr Burgoyne, 1987.

3.5. The Ayyobid Period, 583/1187-658/1260:

Salh Al-Din's forces lead by his nephew, Hossam Al-Din Ibn Lajin, entered Nablus in the middle of July 583/1187. The town was badly damaged. Hossam Al-Din settled in Nablus and started to arrange its civil life. He gave the inhabitants much attention and helped them in repairing the City. They converted the Crusaders churches into mosques. The Church of the Passion and Resurrection became the great mosque; *Al-Jame^c Al-Kabir*. The apses were demolished, to arrange the entrance to the building on the east side (Benvenisti, 1970). During this period the City enjoyed a peaceful time as there were no more Crusaders raids.

In 597/1201 the City suffered a major earthquake. Nearly all the town buildings were badly affected except those in the Samaritans part. About thirty thousands of its inhabitants were killed, and the survivors were distributed in the surrounding villages (Nimir, 1975).

In 626/1228 a peace agreement for ten years was signed between the Ayyobids and the Crusaders in Acre, in which Jerusalem was ruled by the Crusaders, and Nablus remained in the Ayyobid hands. But the disagreement among the Ayyobid leaders themselves encouraged the Crusaders to attack the City in 637/1240, but its inhabitants defended it and defeated them. In 639/1241 the Crusaders repeated the attack and managed this time to enter the City, killed, robbed and took captives, even the Christians did not escape from their hands. The only survivors were those who escaped to the mountains. In 658/1260 the Mongols invaded Palestine and Nablus was badly sacked as the Mongols killed and plundered its people. Six months later, the Mongols were defeated in the battle of ^cAin Jalot by the Mamluks lead by Qutuz (Dabbagh, 1865).

3.6. The Mamluks Period, 658/1260-922/1517:

Nablus enjoyed a peaceful time, mainly during Bybars time (658/1260-678/1278), as he did his best to improve the regional security and the inhabitants' safety. He also organised the mail to be accurate and quick, and used it in watching every event around his kingdom.

At the beginning of Qalawon time (678/1279-689-1290) and in 680/1281 the City was attacked by marauding nomad tribesmen, who later were captured by the ruler of Gaza and about thirty of them were executed (Nimir, 1975). An agreement was signed between Qalawon and the Crusaders, indicated that the people from both sides should be free to move any where in all the area, so the Crusaders could be seen on a Muslim

public path without any fear. This agreement helped developing the City (Bishawi, 1984). Also Qalawon restored *Jame^c Al-Khadrah* in the south western side of the City.

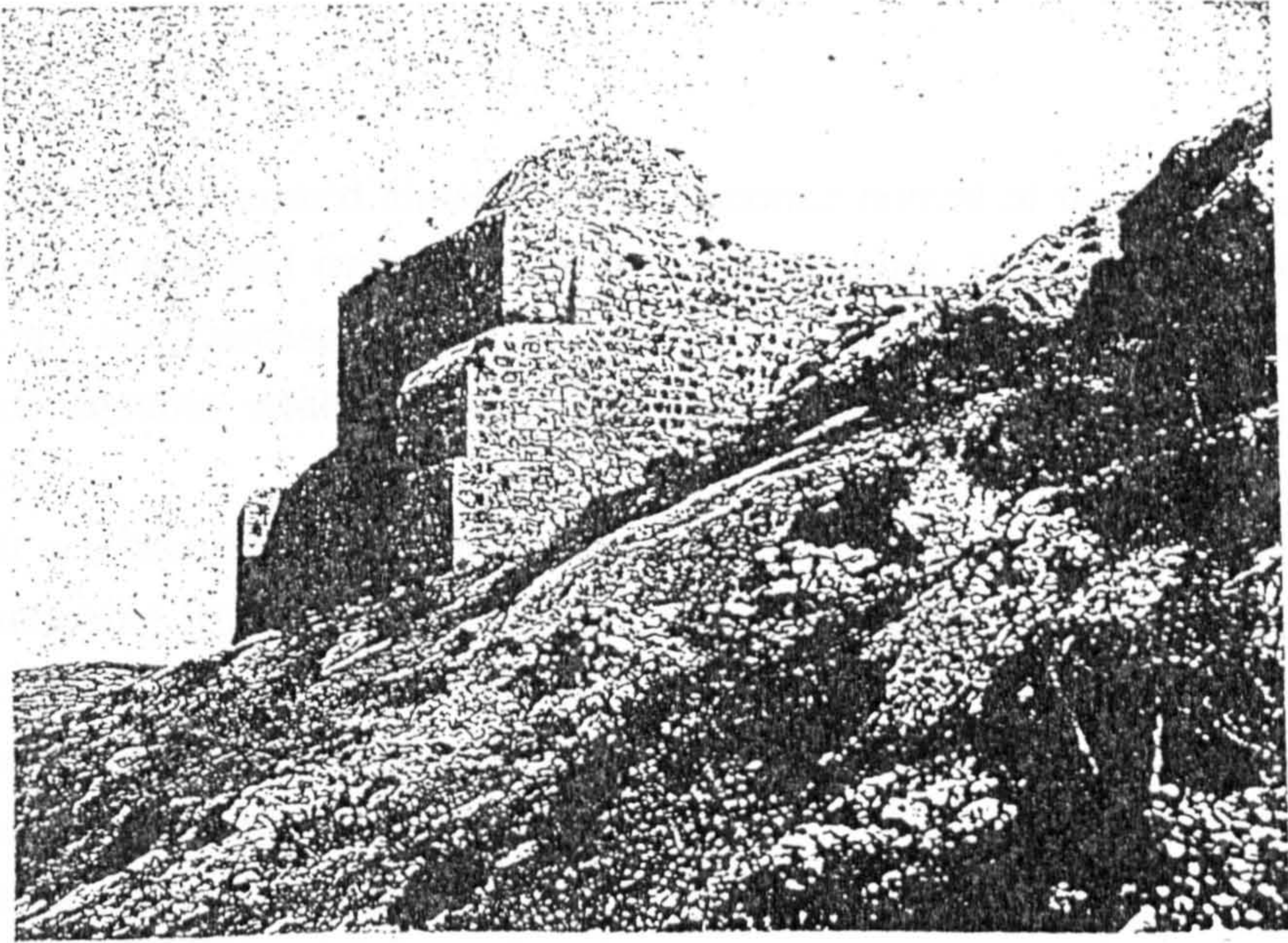
During the Mamluks period many buildings were erected on strategic summits for watching and warning the Muslims of any suspicious movements. *Maqam^c Imad Al-Din* on Mount ^cEbal and *Maqam Al-Shaykh Ghanim* on Mount Gerizim were two examples of these buildings (Bishawi, 1984), see figure (3.5). Also in the Mamluks period, many school buildings were erected inside the City. These schools served all the inhabitants of the City and the surrounding villages, and continued working till the beginning of the twentieth century (Dabbagh, 1965).

3.7. The Ottoman Period, 922/1517-1337/1918:

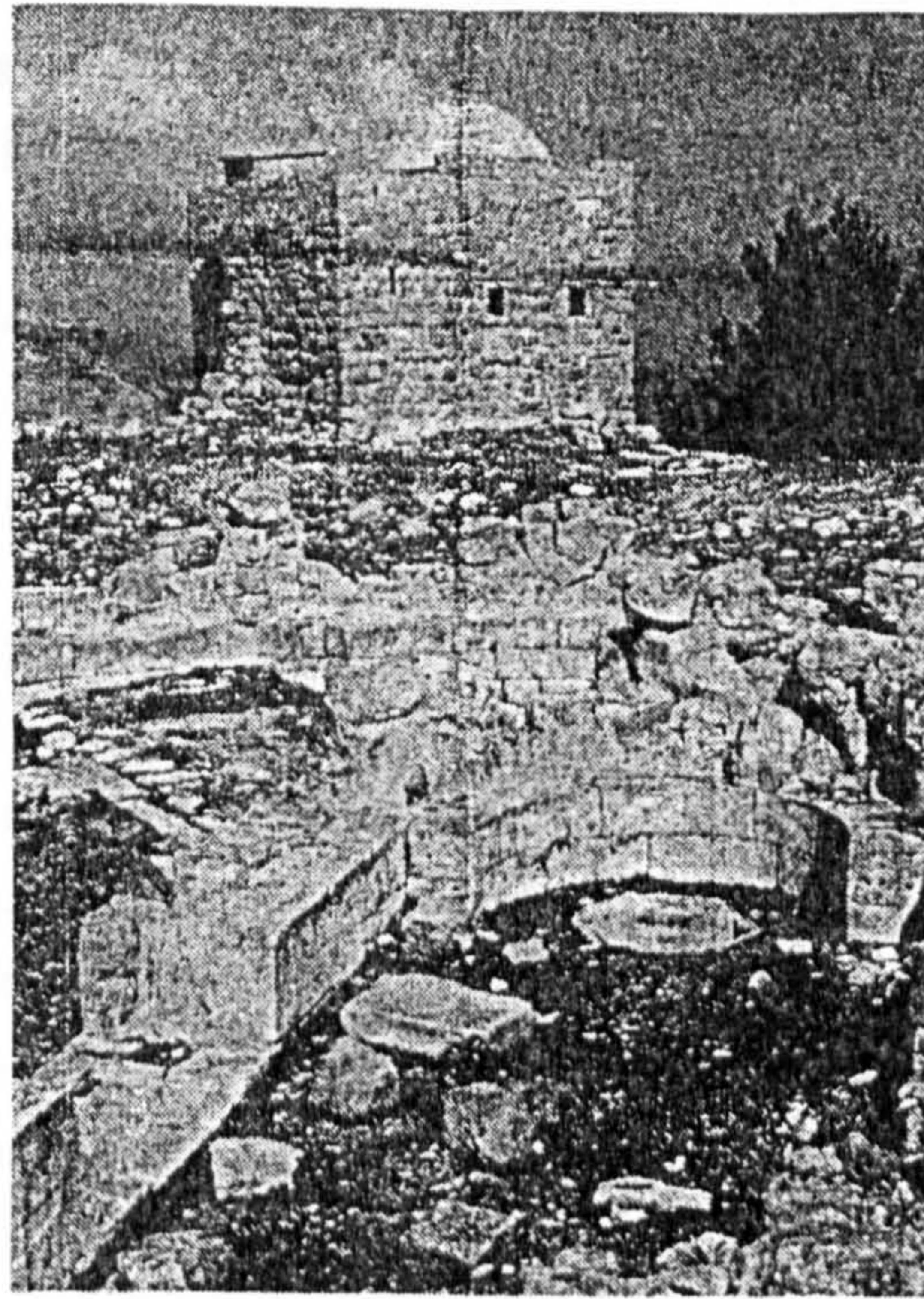
The Ottomans managed to take possession of Syria and Palestine from the Mamluks, after the battle of Marj Dabiq in 922/1517. Some of the Mamluks helped the Ottomans in this event. So the Ottomans rewarded and used some of them in governing the Empire districts. During this period Palestine was left to fend for itself under the feudal rule. The main concern of the governors (*Pashas*) was to meet their tax quota and to have a little over for themselves. Lack of effective control permitted petty chieftains to carve out independent domains. A sense of total insecurity led to a decline in population. Villages and fields were abandoned. Nablus became the capital of a district; *sunjuq*, under the control of a local governor. It was a part of Damascus province.

At the beginning of the 11th century/about 1592 AH, Nablus was governed by Prince Farrokh Ibn ^cAbdallah Al-Sharkasi, who was one of the Mamluks and the leader of Pilgrimage. He was known for his bravery and generosity. He built the *khan Al-Wakalah* in the western end of the City main bazaar; *Soq Al-Qumash*, called *Al-Wakalah Al-Farrokhiyyah*, after him. In 1051/1651 Mustafa Bayk, the leader of Pilgrimage at that time, erected the minaret of *Al-Jame^c Al-Kabir*, and a hospital near this mosque (Nimir, 1975), now this hospital is a *Al-Khayyat* family gathering place; *Diwan*. After the death of Mustafa Bayk, The Mamluks ruled Nablus and caused much trouble to the City. The City rebelled against the Mamluks and expelled them from it. Then all the Palestinian cities rebelled against the Ottomans who sent a big force and settled the problem.

Prince *Yosuf Al-Nimir* became the ruler of Nablus Region; *Jabal Nablus* (no dates, Nimir, 1975), who built a new palace on north eastern side of the City. It was a very beautiful and charming palace, built in the Islamic style, which became the resident of Nablus governors for at least two centuries. Around this palace many new buildings were built, which later became *Haret Al-Habalah* (Nimir, 1975).



A. Maqam ʿImad Al-Din on Mount ʿEbal. Source: (Jaussen, 1927.a).



B. Maqam Al-Shaykh Ghanim on Mount Gerizim. Source: Courtesy of Mr. K. Yaʿish, 1990.

Figure(3.5): Two examples of the watching buildings on ʿEbal and Gerizim summets.

Prince Yosuf engrossed himself in the economic revival of the City. He built a soap factory and encouraged trade movement and agriculture. He brought skilful craftsmen from Aleppo and Damascus to Nablus. Because of this Nablus became glorious and the inhabitants became wealthy. Evliya Tshelebi visited the town in 1058-60/1648-50, mentioned:

"It is a beautiful town situated in spacious valley between two mountains, stretching from east to west, and consisting of eighteen quarters and four thousand and sixty masonry built-houses, including a lofty government house and other buildings. There are no houses whatever constructed of timber in the city" (Celebi,1938).

Umar Agha, the grandson of Prince Yosuf was also a lover of prosperity. He built many public buildings and did many useful projects, such as a canal for Al-Qaryon spring. He restored the eastern and the northern parts of *Al-Jamec Al-Kabir*. He also built many water fountains; *Subul*, all over the City. He repaired roads, bridges, schools, mosques and Khans. He established neighbour watching groups to ensure the security and residents' safety, especially in the pilgrimage times, which encouraged economic and industrial revival in the City. The Caravans left it carrying cotton and wool products and iron, silver, and copper industries, and of course its famous soap. Nablus became an important educational centre and students from all the Empire came to study in it. So Nablus had flourished and these were its golden days (Nimir, 1975).

At this time, Nablus had many feudal palaces, mosques, schools, libraries, and teaching circles. Big families had meetings to discuss many different subjects. The merchants also had meetings with their chief; Al-Khawajah, to discuss economic subjects. If any woman entered the women's wing of these palaces; Al-Maqaseer in Al-Haramlik part, she could see the Princess and Khawaja's wives and daughters spending their times in handicrafts, surrounded by slaves and lady servants; keepers of the palaces and their children. If any visitor went around the City they could see the bazaars; Khans, the handicraft shops and soap factories, and the busy merchant stores.

Nablus then lived peacefully till 1177/1762-3 when it was attacked by Al-Zaher Al-Umar. Initially the inhabitants with the assistance of the villagers defended the City. After unsuccessful delegations, Al-Zaher attacked the villages to compel the villagers to leave Nablus and to weak its defences. But they noticed his trick and stayed in the City. Several days later and suddenly, Al-Zaher attacked the western side of the City. He used artillery, and destroyed the minaret of *Jamec Al-Khadrah* and some near houses, see figure (3.6). The inhabitants strongly defended the City and defeated him badly and obliged him to withdraw outside the City's walls (Nimir, 1975).

After this battle, a long disagreement between the big city families Al-Baykat (a part of Toqan family) and Al-Aghawat (a part of Al-Nimir family) was started. Some times it reached a point where they attacked each other, and in 1186/1772-3 and after a big clash, Al-Baykat were forced to leave the City, till 1198/1783-4 when they returned and made a peace agreement with Al-Aghawat (Nimir, 1975).

In 1201/1786-7 a shortage of the rainfall led to a big famine, which increased the internal troubles till food aid arrived from Malta. After this famine a fatal disease spread among people who died in thousands. Nablus lost about four thousand persons" (Nimir, 1975, vol.I, pp.203-4).

Nablus helped Ahmad Basha Al-Jazzar; the ruler of Acre, against Napoleon when he attacked Palestine in 1213/1799. Hasan Al-Nimir was the leader of detachment of Nablus district; *Jabal Nablus*, which helped in defeating Napoleon and fired his army in 'Azzon forests. As a result of this *Jabal Nablus* was called *Jabal al-Nar*; the mountain of fire (Nimir, 1975).

In 1219/1804-5, the disagreement between Al-Baykat and Al-Aghawat was renewed for governing of the City; *Al-Mutasallimiyyah*. The appointing of Mosa Bayk by the Ottomans as *Al-Mutasallim*, as a reward for the victory over Napoleon, which he and Al-Toqan wrongly claimed for themselves, increases the disagreement. This event made *Jabal Nablus* rebel against the Ottoman Empire, and caused a lot of troubles in Nablus. The Ottomans sent Mosa Bayk several detachments to protect him and his family; Al-Baykat.

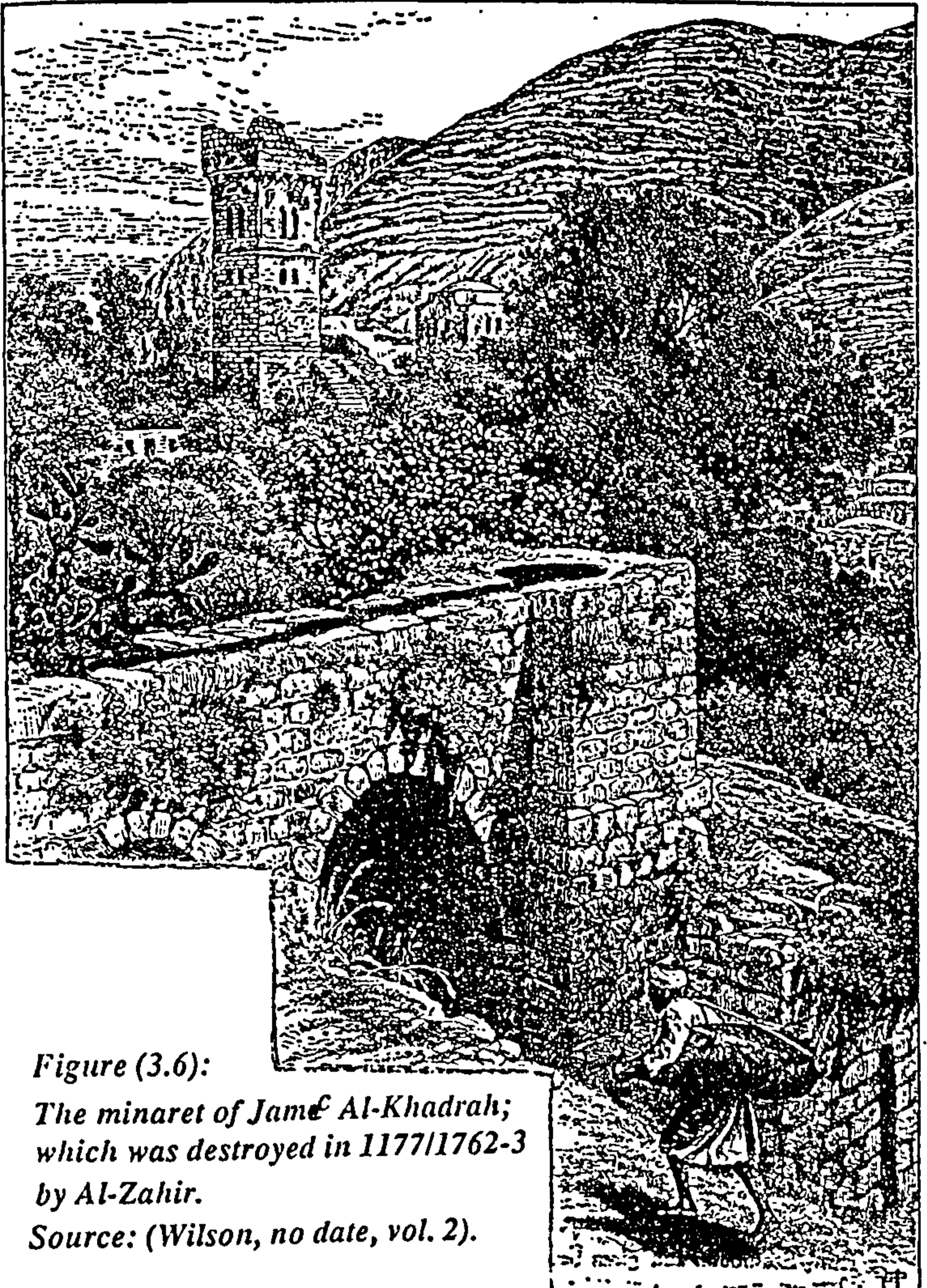


Figure (3.6):
The minaret of Jamc Al-Khadrah;
which was destroyed in 1177/1762-3
by Al-Zahir.
Source: (Wilson, no date, vol. 2).

Mosa Bayk allowed the Moors detachment to live in the City quarters. *Haret Al-Habalah* refused to house them, and became a refuge for all those oppressed by the Moors. Mosa Bayk left Nablus with his family, Al-Baykat, to Al-Junayd castle. This allowed the Moors occupy Al-Nimir palace and oppressed the inhabitants of *Haret Al-Habalah*. Many families, including Al-Aghawat, were obliged to leave the City to the near by villages, which later were captured by the Moors, also. After that Al-Aghawat gathered themselves and attacked Mosa's men at the City's gates. This made Mosa Bayk build two other gates in front of the two main gates in the east and west sides, and in between he built shops on both sides of the road. In 1228/1813 Al-Aghawat with the assistance of the villagers managed to recapture the City and killed the Moors. Mosa Bayk and Al-Baykat's men managed to escape. During this period the City economy was badly affected and the population was sharply decreased.

In 1233/1817-8 a peace agreement was signed between Al-Aghawat and Mosa Bayk who returned to the City full of hate and intending to take revenge from Al-Aghawat. So he deceived them and managed to kill some of them, and to destroy many of their buildings in *Hay Tel Al-Karim*; a part of *Haret Al-Habalah*. A big reinforcement came from the Ottoman Sultan, and managed to force Mosa Bayk and his men out of the City and to destroy Al-Junayd castle. Later Mosa Bayk came back with Al-Duroz (a religious minority in north Palestine) and suddenly attacked and sieged the City for about fifty days in 1237/1821-2. He was badly defeated, but managed to escape (Nimir, 1975). In 1239/1823-4 Mosa Bayk was poisoned and a peace agreement was signed between Al-Aghawat and Al-Baykat who were really ashamed of Mosa Bayk (Nimir, 1975).

In 1239/1823-4 and in 1246/1831 two small earthquakes happened in the City without any damages. But in 24th *Ramadan* 1252/1836 a big earthquake damaged the City and the people escaped to the mountains. About 48 persons were killed, and *Haret Al-Habalah* was the most affected part of the City (Nimir, 1975).

"No district in Syria has been more turbulent and less manageable to the Turkish Government, than that of Nablus and the surrounding villages; and no people in Palestine are so deeply imbued with the fanaticism of Islam" (Mills, 1864, p.95).

A civil war was started again between the big families of *Jabal Nablus*, in which ^cAbd Al-Hadi family of ^cArrabah (a village near Nablus) took part. This civil war remained from 1266/1849 to 1275/1858-9, so the Ottomans decided to govern the region directly and not to depend on these local families. So they made Nablus *Mutasarrefiyyah* and brought foreign men to be *Al-Mutasarref* (Dabbagh, 1965).

Although the great Khan of the town; *Khan Al-Tujjar*, was in a state of decay in the 1850s, its place had been taken by a large trade hall in the middle of the impressive

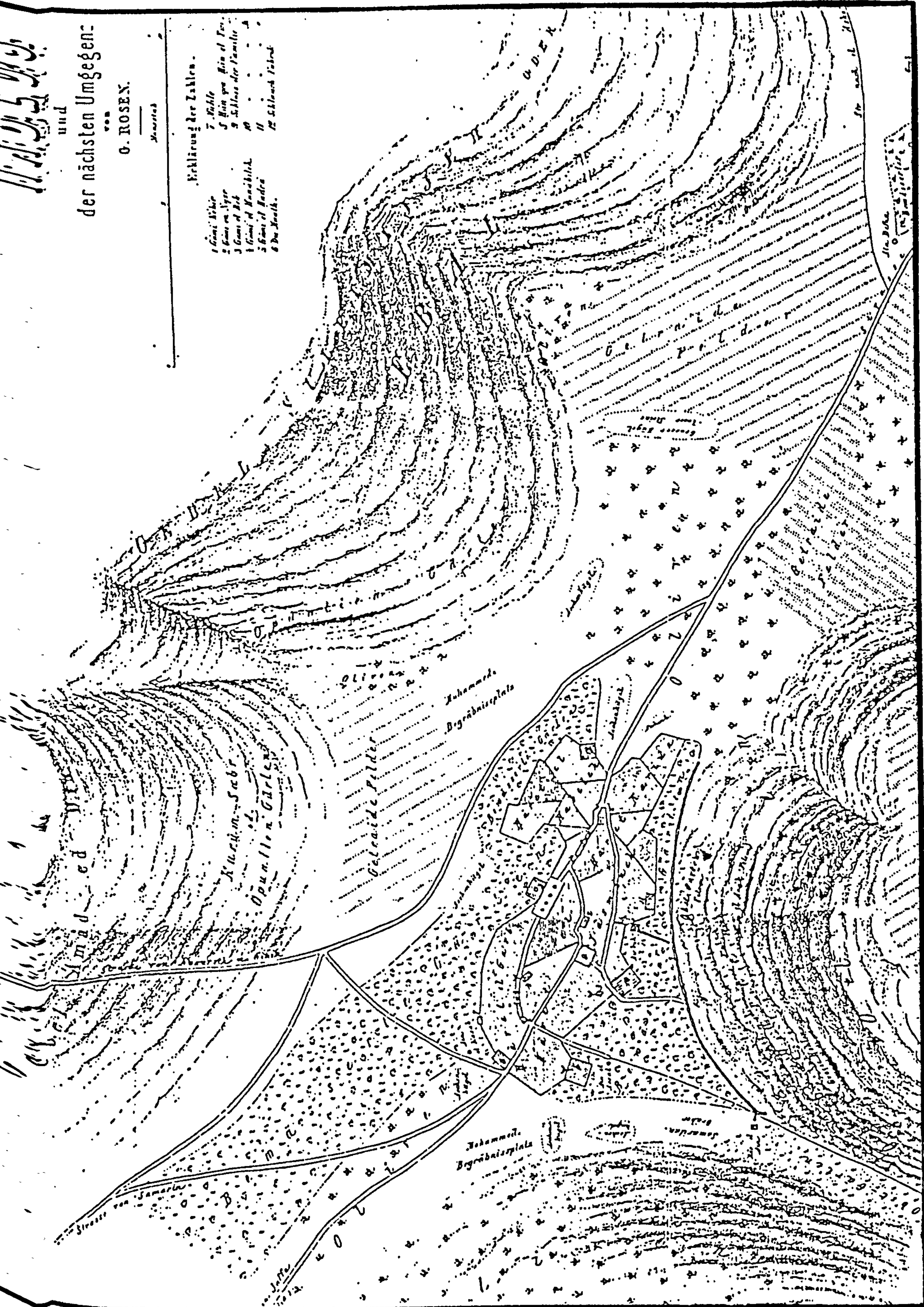


Figure (3.7): Rosen plan of Nablus in 1860. Source (Rosen, 1860).



Figure (3.8) The eastern Gate of the City in late eighteenth century. Source (Wilson, no dates, vol.2).

bazaar street that ran the length of the town; *Soq Al-Sultan*. At this period there was five mosques in the town, two of which were originally Christian churches (Mills, 1864, p.90). During 1270-80s/1860s, many travellers visited and described Nablus. When Mary Rogers reached Nablus valley, she said:

"Hills and valleys rain and sunshine chequered our way till, at about sunset, we reached the olive-groves of Nablus. Although I was wet, and cold, and tired, all my energy and delight returned when the beautiful valley between Mount Ebal and Mount Gerizim, and the well-built town of Nablus were in sight, with glimpses of the distant sea, where the sun was going down. I was surprised to see a quantity of mistletoe on the olive-trees. The great gates, which were on the point of being closed, were thrown back for us, and we road through dark arcades and narrow streets to the house of ..." (Rogers, 1865, p.241).

See how the charming beauty of Nablus and its valley made Mary forget her tiredness and the cold. During her wandering through the town, Mary Rogers described:

"One morning we walked through the stony arched narrow tortuous streets out at the nearest gate, and rose on to the raised road or terrace, which nearly encircles the town. He (her guide) led me to the hill beyond the

burial-ground, whence I could see the whole extent of Nablus, with its mosques and minarets, its irregular groups of houses with domes and terraced roofs, its dark archways and colonnades, and the gardens of lemons and oranges around" (Rogers, 1865, pp.258-9).

H. B. Tristram who visited Nablus about 1860s wrote:

"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 null stream of purest water ripples down the centre cellars, quite dark, vaulted and narrow; and so low, that the passengers can scarcely stand up right except in the centre of them. No windows can be seen, only the little low doors, all carefully fastened" (Tristram, 1866,p.141).

In 1258/1868, Nablus Municipal Council was elected for the first time, and Mr Muhammad Tuffaha Al-Husayni was the first mayor of Nablus (Nimir, 1975). The first step in town expansion was done by the Turkish governors who in 1292/1875 built the

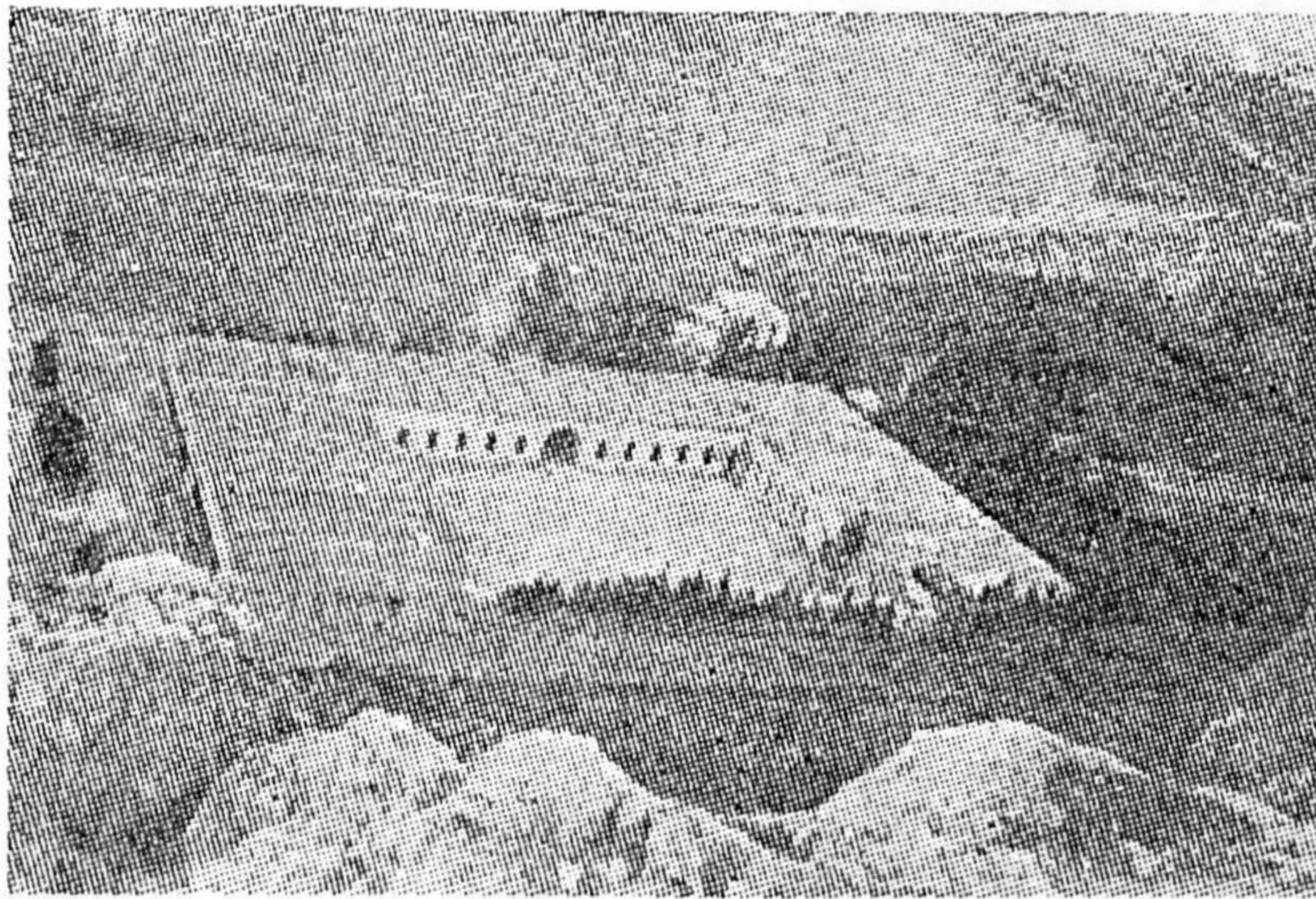


Figure (3.9), Al-Qashlah building in the eastern part of the City. Source: (Nimir, 1975).

Al-Qashlah building, see figure (3.9), in the eastern side of the town in the narrowest point of the valley, as an arsenal and a military resident for the Turkish army, nowadays it is an Israeli military administrative centre and a military prison. Beside which another building was built for arms stores, nowadays it is the offices of Works Department (Nimir, 1975). In the same year a Latin convent, and a Protestant school and a chapel were soon erected as were a new Khan, a new street led to the town centre opened in 1875 (Scholch, 1982, p.51).

In the time of Sultan ʿAbd Al-Hamid (1293-1327/1876-1909), the Hijaz; Arabia, Rail line reached Nablus, and the station was built east to *Jameʿ Al-Anbiya'*, as well as several residential buildings for its employees (Nimir, 1975). Nowadays all the railway buildings have vanished, except for a deserted one.

There was no public square in the City, in 1301/1883, *Al-Mutasarref* bought a part of the garden against *Jameʿ Al-Nasr*, and converted it into the main square of the town. Later, the Clock Tower was built on the silver anniversary of Sultan ʿAbd Al-Hamid (Nimir, 1975). See figure (3.10).

The City wall used to be rows of detached fortified houses (Khatib, 1985). No body dares to build outside this wall, because of the regional situation and lack of security. The presence of the governmental buildings outside the wall encouraged residents to build there, and the first house built outside the wall was *Dar ʿAbdalla Al-Taher* in 1305/1887. After that the town showed a steady expansion and improved its position as a centre of production and trade, and the merchants of Nablus continued to participate in the export of Palestinian products.

This economic rise of Nablus found another expression in building activity. In the same year; 1305/1887 a Christian monastery; *Dayr Mar Yosuf*, was built on the slopes of Mount ʿEbal. In 1306/1888, the National Hospital was erected also on the slopes of Mount ʿEbal. It consisted of two big rooms in the middle of a garden, with two other rooms near the entrance (Nimir, 1975). In 1307/1889, *Jameʿ Al-Khader* was a small *Zawiyah*; shrine. It was below street level, so Mr. Amin ʿAshor donated to raise its level and to convert it into a small mosque. Its octagonal minaret was allowed to be built on a piece of land belonged to the neighbouring church (Nimir, 1975). In 1311/1893, *Jameʿ Al-Anbiya'* was repaired and a new minaret was built by Mr. Ibrahim ʿAbdu.

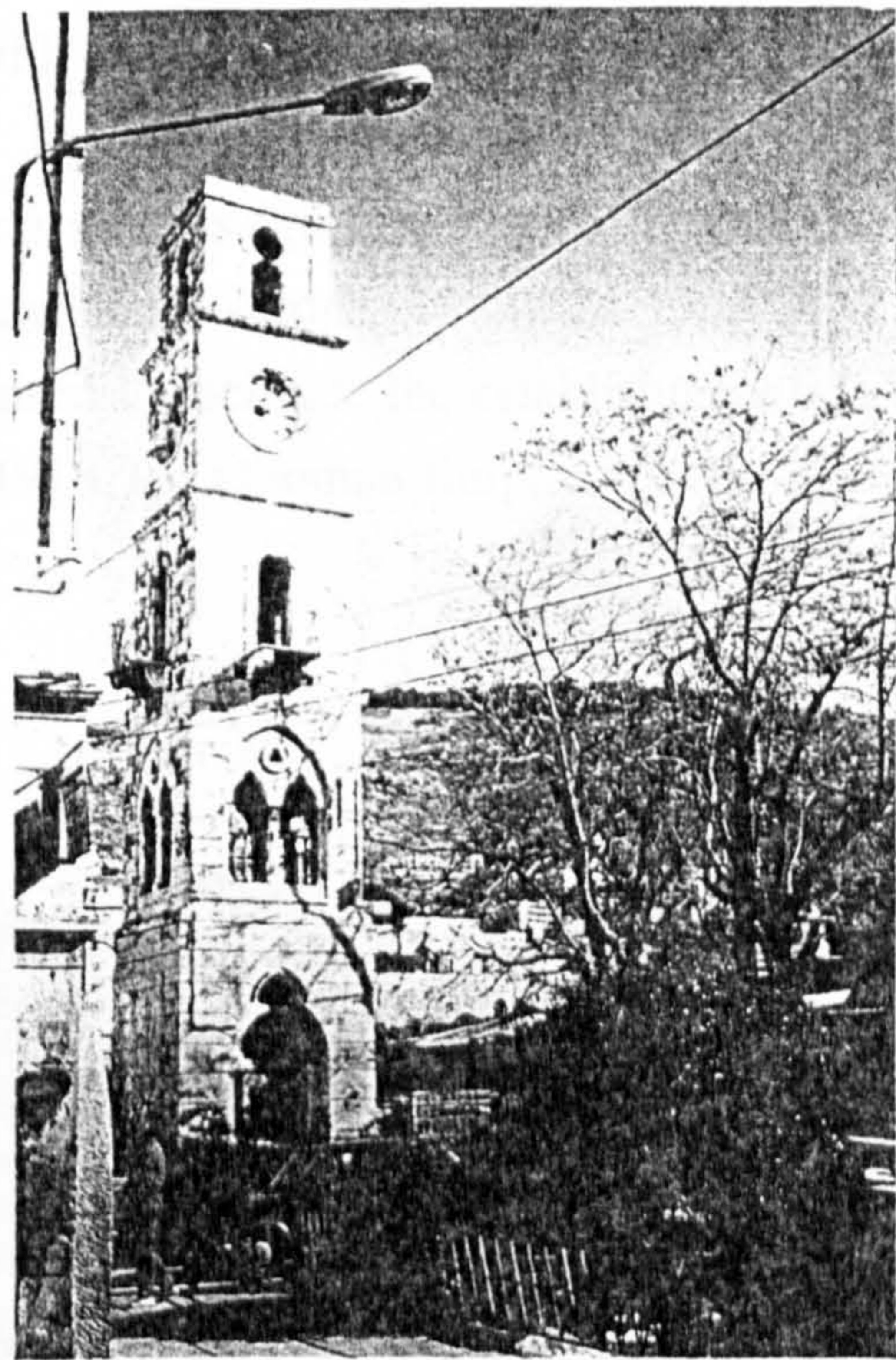


Figure (3.10): The Clock Tower.

In 1317/1899, an elementary school was built on the top of Khan Al-Tujjar (Nimir, 1975). In 1315/1897, the minaret of *Jameʿ Al-Khadrah*, which had been destroyed in 1177/1762-3 by Al-Zaher Al-ʿUmar was repaired, and a new minaret for *Jameʿ Al-Saton* was built with 12 faces. There was no minaret like it except that of *Jameʿ Fatimah* in Jenin (Nimir, 1975).

In 1319/1901, the English mission founded a dispensary, a doctors residence and a pension in *Al Showetreh* quarter in the western side of the town. Around this campus many residential buildings were built influenced by the European architectural style. In 1321-2/1904, the English mission built the *Rahbat Mar Yosuf* clinic, specialised in ear and eye treatments. An elementary school was later added (Nimir, 1975).

In 1329/1911, *Jamec Al-Hanbali* was repaired. Also in the same year two schools, *Al-Rashadiyyah Al-Sharqiyyah* and *Al-Rashadiyyah Al-Gharbiyyah* were erected, the first in the East and the second in the West of the City, sponsored by Sulayman Basha, *Al-Mutasaref*. Then he made the public park of *Al-Manshiyyah* with a building, first used as a cafe, but now it is the Municipal Library (Nimir, 1975). All these building activities were accompanied by a number of houses that bear witness to the growing prosperity of the City.

When the First World War was declared in 1333/1914 Nablus and the other Palestinian cities suffered from exhaustion and hunger. Nablus was the centre of the Ottoman's 7th army. Britain promised the independence for the Arab lands, in return for Arab support against the Ottomans, whom sided with Germany. But in 1335/1916 Britain and France deceived the Arabs in Sykes-Picot agreement, which divided the Arab territory into zones of influence; Lebanon and Syria were assigned to France, Jordan and Iraq to Britain and Palestine was to be Internationalised (Europa, 1988). In 1336/1917 Lord Balfour, The British Foreign Secretary promised to facilitate the establishment of a national home for the Jews in Palestine. In 1336/1918, the Ottoman Empire was brought to an end.

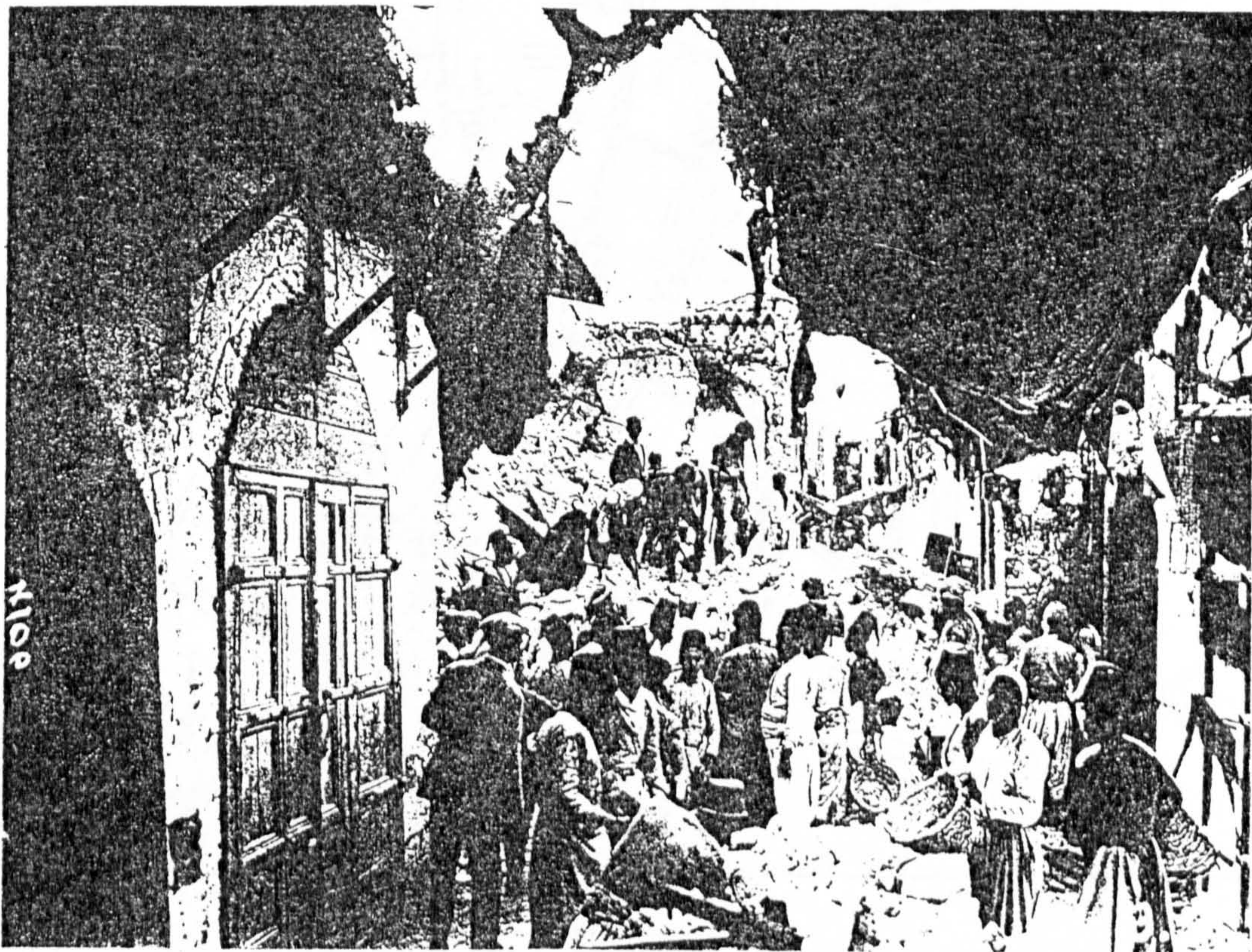


Figure (3.11), Turkish Prisoners Marching Through Nablus. Source (Graham-Brown, 1980).

3.8. *The British Occupation, 1336/1918-1367/1948:*

The British entered Nablus on 21st September, 1336/1918. A committee from the British leaders and the Nablus Municipality was formed to administer the City. Nablus became the capital of Sameria Region. The occupation did not remain for a long time, as it took another shape and become a mandate in 1341-2/1923. Sir Herbart Samuel, became the first High Commissioner (Nimir, 1975).

In September 1926 Jaussen visited the city and draw a plan; figure (3.12) and took a photograph; figure (3.13). On 15th *Muharram*, 1346/11th July 1927 the region suffered a major earthquake, and Nablus was very badly affected; see figure (3.14), about six hundred houses were demolished and about 50 persons were killed, and thousands of people became homeless. After that Nablus Municipality built a camp to re-house the homeless, in *Haret Al-Jabaliyyah*, in the eastern side of the town near *Rijal Al-^cAmod*, which was called later *haret Al Mankobeen*; the afflicted quarter. Initially their houses were of straw mat, then metal, and later of stone. After this earthquake a famine happened, which destroyed the agricultural products and many farmers were bankrupted (Nimir, 1975).



Figure(3.14): the destruction of the 1927 earthquake in the centre of Nablus.

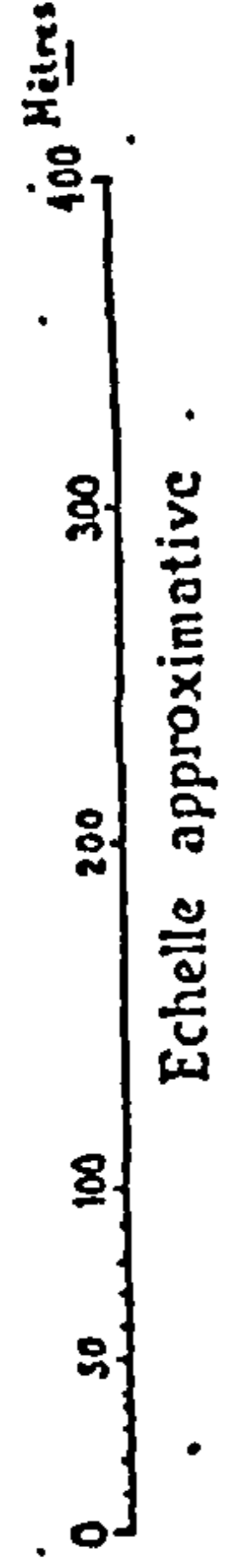
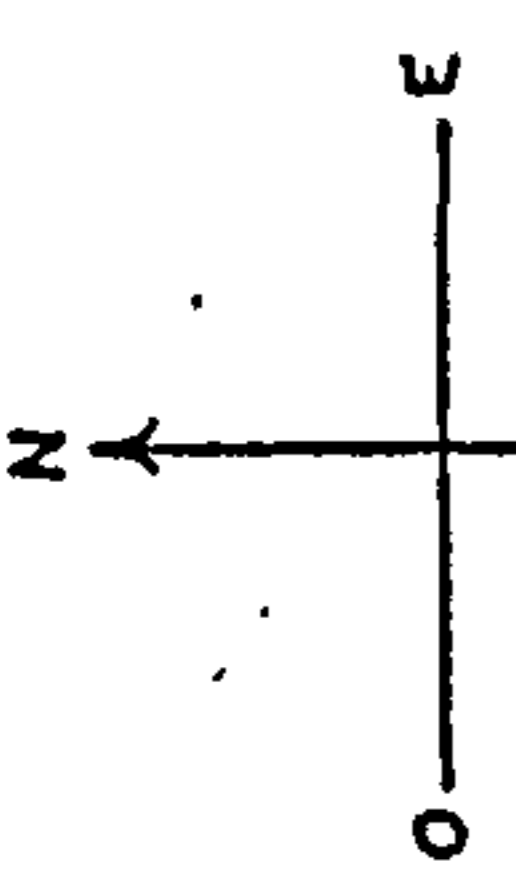
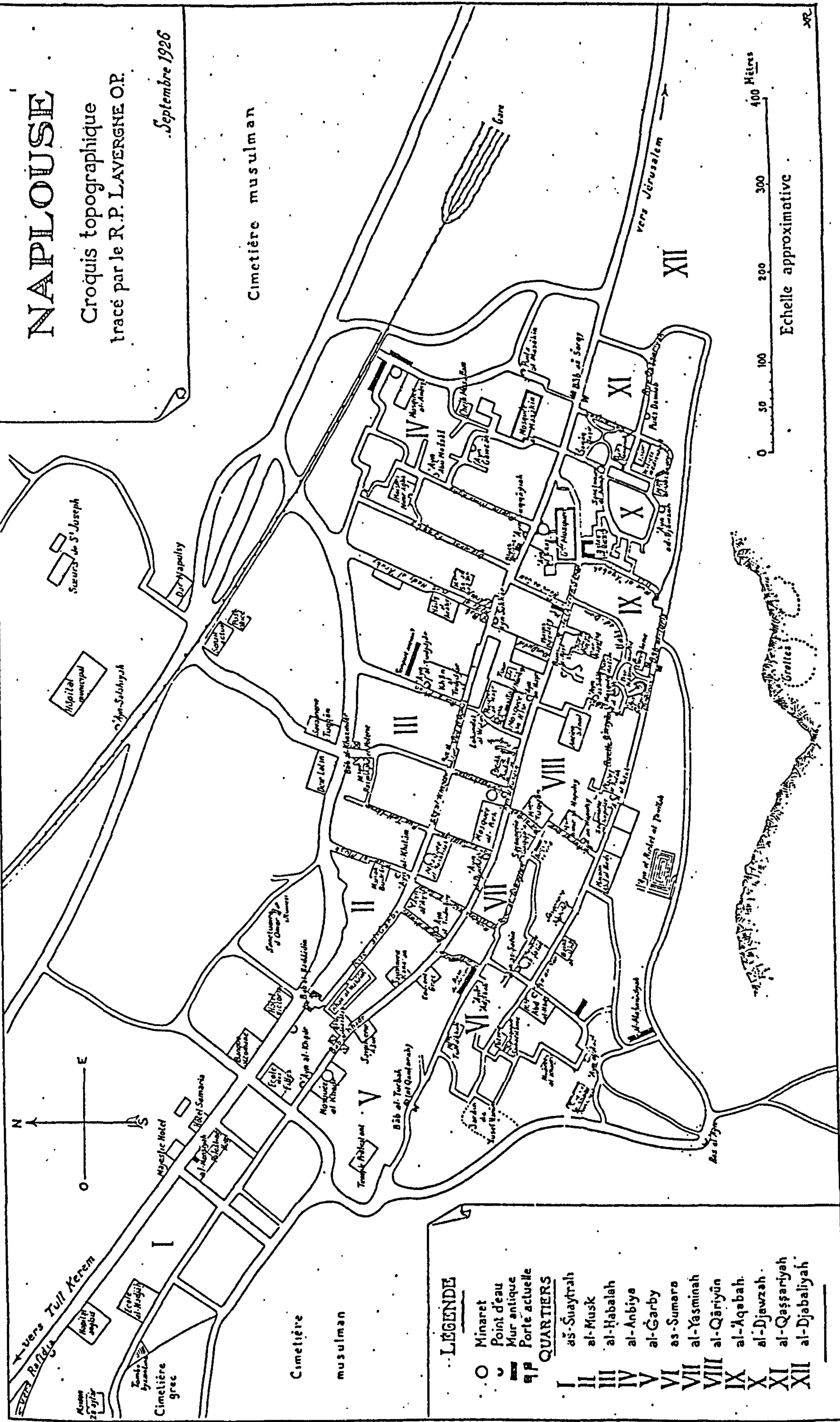
Source: (Graham-Brown, 1980).

NAPLOUSE

Croquis topographique
tracé par le R. P. LAVERGNE O.P.

Septembre 1926

Cimetière musulman



LÉGENDE

- Minaret
- ◡ Point d'eau
- Mur antique
- Porte actuelle

QUARTIERS

- I as-Suaytrah
- II al-Musk
- III al-Habalah
- IV al-Anbiya
- V al-Garby
- VI as-Sumara
- VII al-Yasminah
- VIII al-Qāriyūn
- IX al-Aqabah
- X al-Djawzah
- XI al-Qaṣṣariyah
- XII al-Djabaliyah

Figure (3.12): Jausan's plan of Nablus in 1926. Source: (Jausan, 1927.a).



PLATE 10. Excavations at Nablus in 1926. Source: (Jausen, 1927.a).

In 1351-2/1933 the British authorities bought for Nablus Municipality half of the City water sources and the first public water-pipe network with few storages and a sewage network were established (Nimir, 1975). In 1353/1935 a big flood covered the historic city, and water rose for about two metres and caused a lot of damage in the properties. In the same year a committee was shaped to rebuild *Jamec Al-Nasr* that was destroyed in the last earthquake. The new mosque building was built on the first floor over commercial shops (Nimir, 1975).

During this period the British government worked on executing "Balfour Declaration", and encouraged the Jewish immigration to Palestine. In 1355/1936 the Palestinians rebelled against the British and held a general strike (continued to six months) to protest against land confiscation and the Jewish immigration. In 1358/1939 the British government published a White Paper, restricting Jewish immigration and offering independence for Palestine within ten years, which was rejected by the Zionists. Then the Jews organised terrorist groups and launched a bloody campaign against both the British and the Palestinian people. The British government turned the problem to the United Nations which in 1367/1947 recommended the partition plan of Palestine under which the Palestinians were allocated of 47% of the land. The Jewish acceptance was nullified by a flat rejection on the part of the Arabs (Europa, 1988).

At this period the first expansion of the city was made towards the South, until it reached the high slopes of Mount Gerizim, which were not that far. Another expansion started towards the north direction, till it faced the high slopes of Mount 'Ebal. The real and the observed expansion of the town was in the east-west direction on the comfortable slope lands (Khayyat, 1985). It was noticed that the City expanded towards the West in this period, as a result of the strong relation with the coastal cities, mainly Haifa city; Palestine's harbour, see figure (3.15). In early 1367/1948 the British planning authorities approved the comprehensive plan of Nablus city and defined the boundaries of the municipal lands (Nablus Municipality, 1987), see figures (3.16) and (3.17).

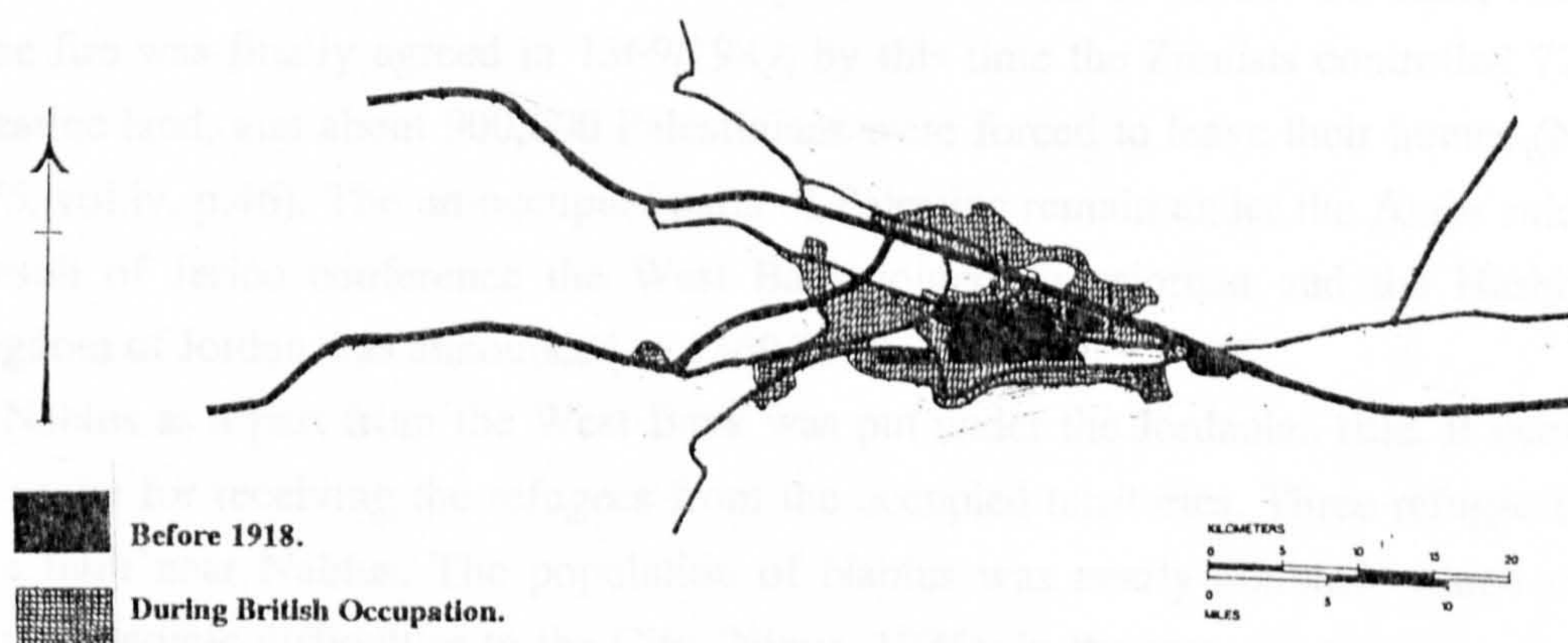


Figure (3.15): Expansion of the built up area of Nablus During the British occupation.
Source: after (Benvenisti & Khayat, 1988).



Figure (3.16): Nablus Municipal boundaries in 1948. Source: Nablus Municipality, 1989.

3.9. The Jordanian Rule, 1367/1948-1387/1967:

The United Nations agreed the partition of Palestine between the Arabs and the Jews in 1367/1947. The British withdraw their forces from Palestine on 14th May 1367/1948. A war broke out as a result of the next day announcement of the Jewish state; Israel. A cease fire was finally agreed in 1369/1949, by this time the Zionists controlled 77% of Palestine land, and about 900,000 Palestinians were forced to leave their homes (Nimir, 1975, vol.iv, p.46). The un-occupied parts of Palestine remain under the Arabs rules. As a result of Jerico conference the West Bank joined Transjordan and the Hashimiyet Kingdom of Jordan was announced in 1369/1950.

Nablus as a part from the West Bank was put under the Jordanian rule. It became a big centre for receiving the refugees from the occupied territories. Three refugee camps were built near Nablus. The population of Nablus was nearly doubled, which caused many economic difficulties to the City (Nimir, 1975). In the same year there were 3700 housing units in the town (Khatib, 1985, p. 44).



Figure (3.17): An aerial photo of Nablus in 1944. Source: Courtesy of Mr F. Ya'ish, 1991.

During this period and as a result of the disconnection between the West Bank and the occupied parts of Palestine in 1367/1948 war, the City expansion moved towards the East Bank (trans-Jordan), where the new relations have been established, see figure (3.18) (Khayyat, 1985). In 1382-3/1963 Nablus city boundaries was extended up to 18,040 Dunum (1 Dunum=0.1 hectare). The villages of Balatah, ʿAskar, Al-Junayd and Rafidya were added to the municipal boundaries of Nablus city, see figure (3.19). At that time there were 6500 housing units housed about 8000 families (Khatib, 1985, p. 44).

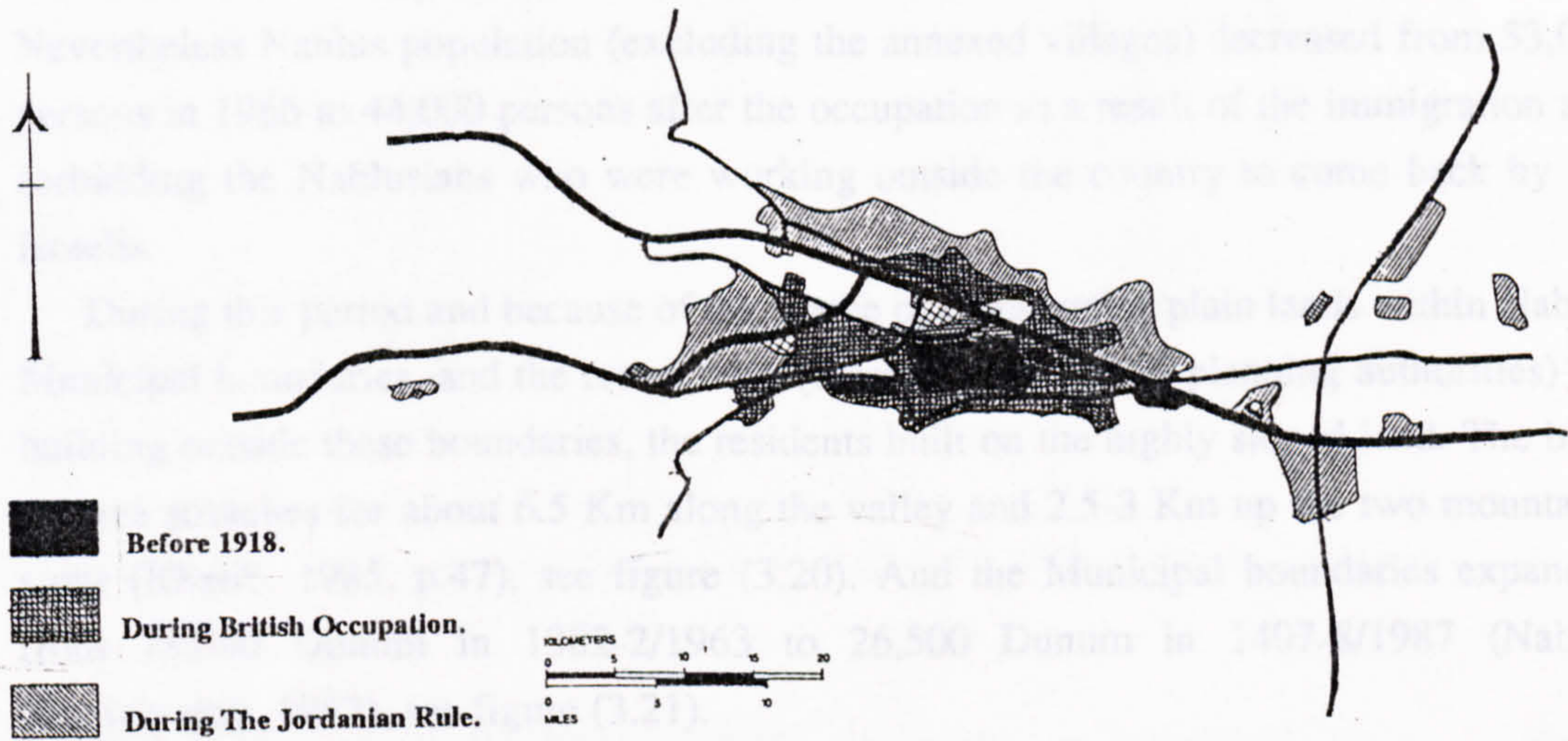


Figure (3.18): Expansion of the built up area of Nablus During the Jordanian Rule.
Source: after (Benvenisti & Khayat, 1988).

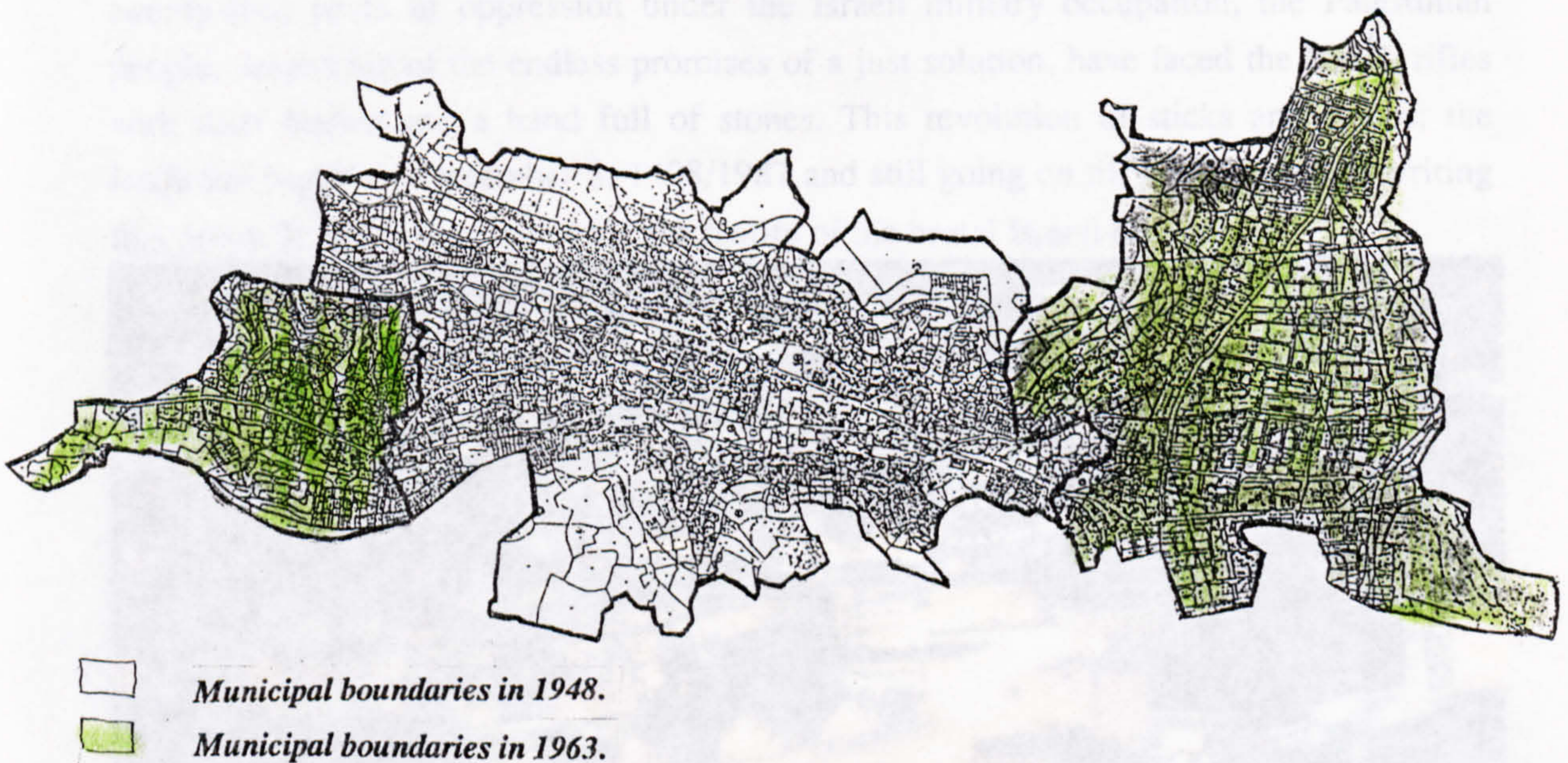


Figure (3.19): Expansion of Nablus Municipal boundaries in 1963. Source: Nablus Municipality, 1989.

3.10. The Israeli Occupation, 1387/1967-nowadays:

In 1387/1967 Israel launched "the six days war" against the Arabs, and seized the West Bank, Gaza Strip, the Syrian Golan heights and the Egyptian Sinai peninsula. In June 1387/1967 the Israeli soldiers and vehicles entered Nablus from the East, carrying the Arab nations flags, which fortunately, reduced the immigration from the City. Nevertheless Nablus population (excluding the annexed villages) decreased from 53,000 persons in 1966 to 44,000 persons after the occupation as a result of the immigration and forbidding the Nablusians who were working outside the country to come back by the Israelis.

During this period and because of the scarce of comfortable plain lands within Nablus Municipal boundaries, and the restrictions (forced by the Israeli planning authorities) for building outside these boundaries, the residents built on the highly sloped land. The built up area stretches for about 6.5 Km along the valley and 2.5-3 Km up the two mountains slopes (Khatib, 1985, p.47), see figure (3.20). And the Municipal boundaries expanded from 18,040 Dunum in 1382-2/1963 to 26,500 Dunum in 1407-8/1987 (Nablus Municipality, 1987), see figure (3.21).

As a result of the October war in 1393/1973, between the Arabs and Israel, Israel and Egypt signed the Camp David peace agreement, by which Sinai returned to Egypt. After twenty-four years of oppression under the Israeli military occupation, the Palestinian people, despairing of the endless promises of a just solution, have faced the Israeli rifles with their bodies and a hand full of stones. This revolution of sticks and stones; the *Intifadah* began on December 8, 1408/1987 and still going on till the moment of writing this thesis. It has shown the world the reality of the brutal Israeli occupation.

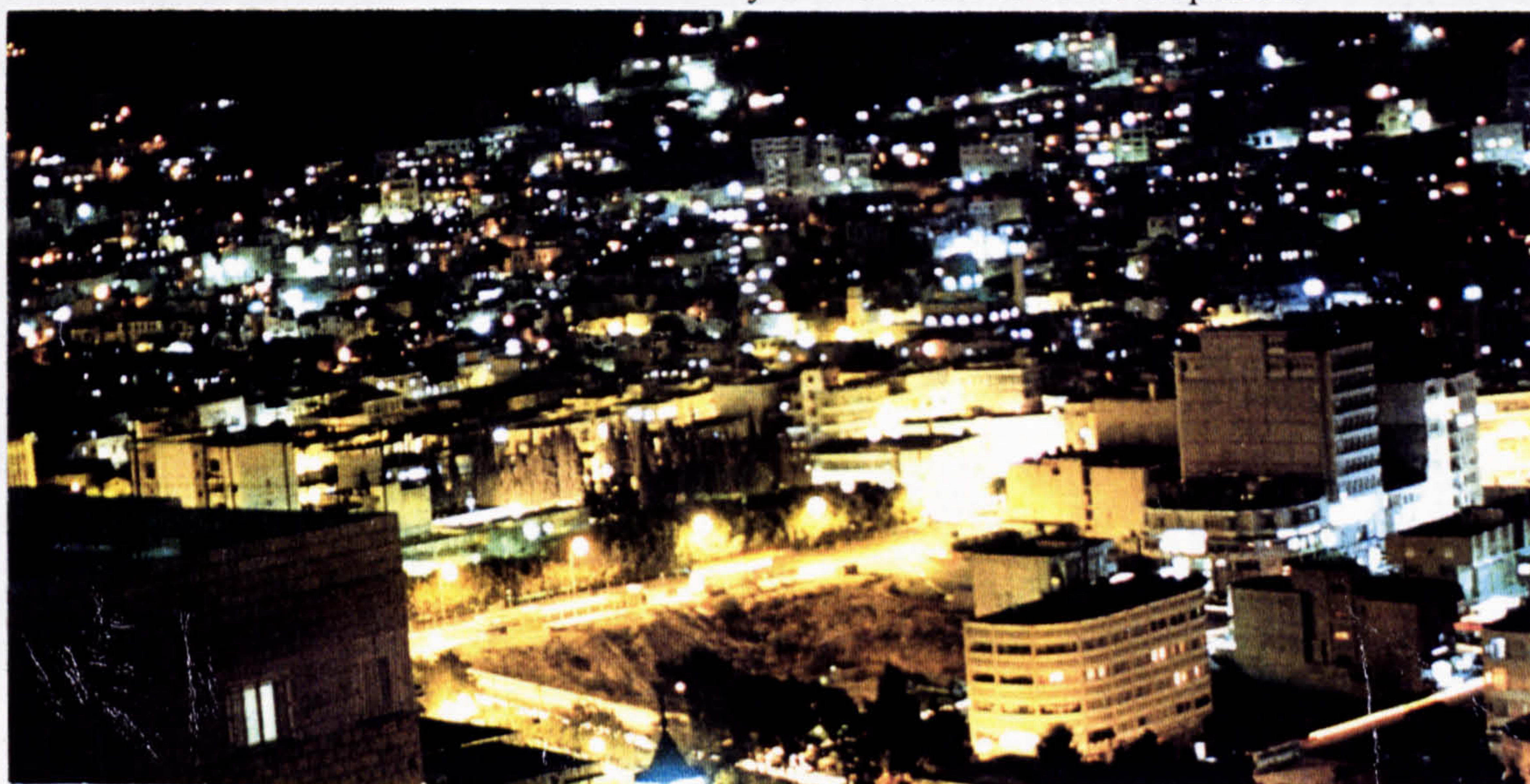
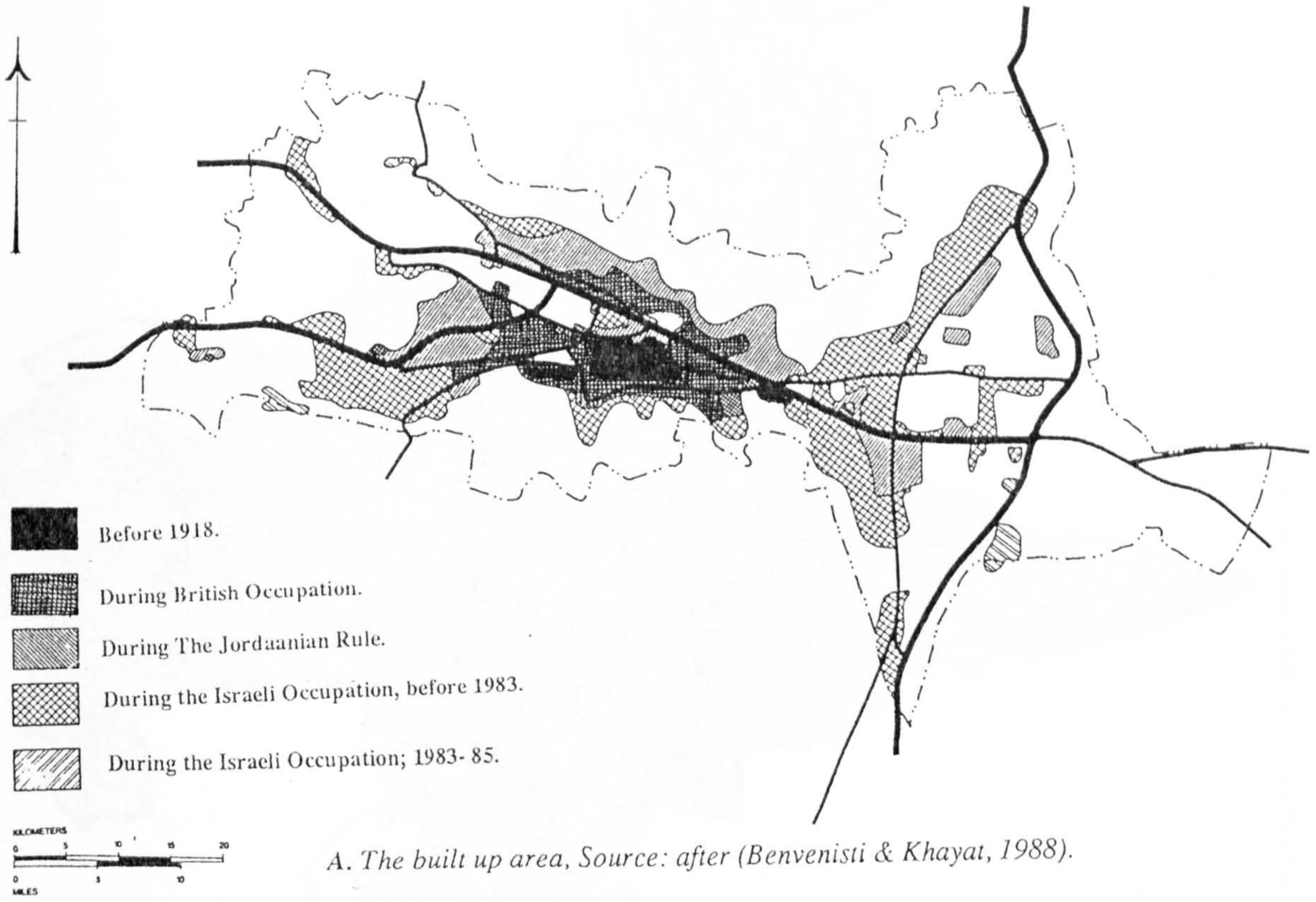


Figure (3.22): Nablus City at night in 1986. Source: Nablus Municipality, 1986.

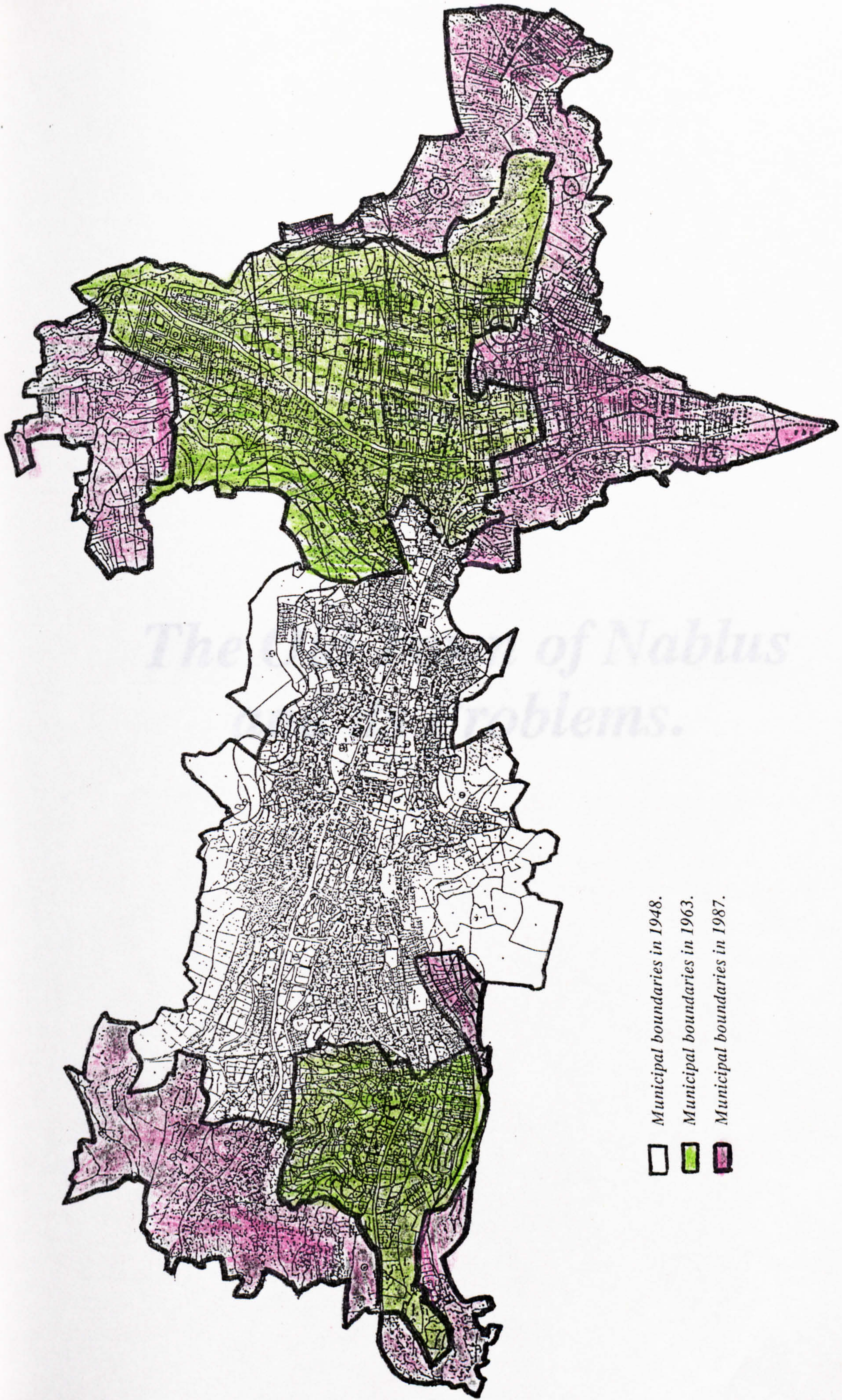


A. The built up area, Source: after (Benvenisti & Khayat, 1988).



B. An aerial photograph of Nablus in 1984. Source: (Khayat, 1985).

Figure (3.20): Expansion of the built up area of Nablus During the Israeli occupation.



The ... of Nablus ...

- Municipal boundaries in 1948.
- Municipal boundaries in 1963.
- Municipal boundaries in 1987.

Figure (3.21): Nablus Municipal boundaries after expansion in 1987 Source: Nablus Municipality.

Part Two

*The Old Town of Nablus
and its Problems.*

Chapter Four

The Old Town of Nablus

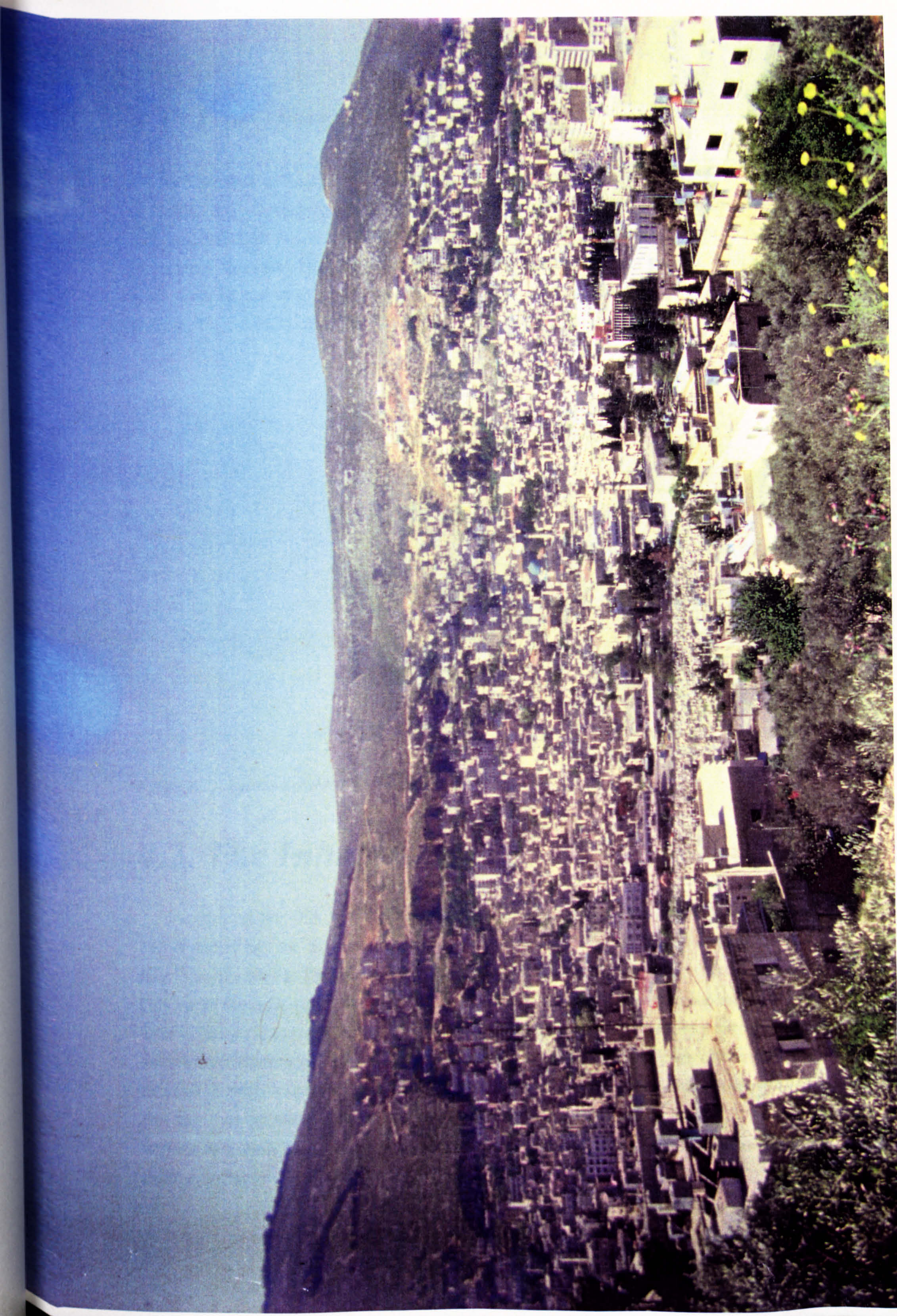


Figure (4.1): The Old Town of Nablus within the City.

4.1. Location:

As described in the Nablus historical development chapter, the Old Town is the origin of Nablus city. Nowadays it is located near the new City Centre. Because of this special location, the Old Town is a very important as a commercial centre. The Old Town's importance increases because of its special urban fabric and street pattern, which will be dealt with in the coming paragraphs. The built area of the Old Town is about 350 Dunum. Figure (4.2) shows the Old Town's location within the City.

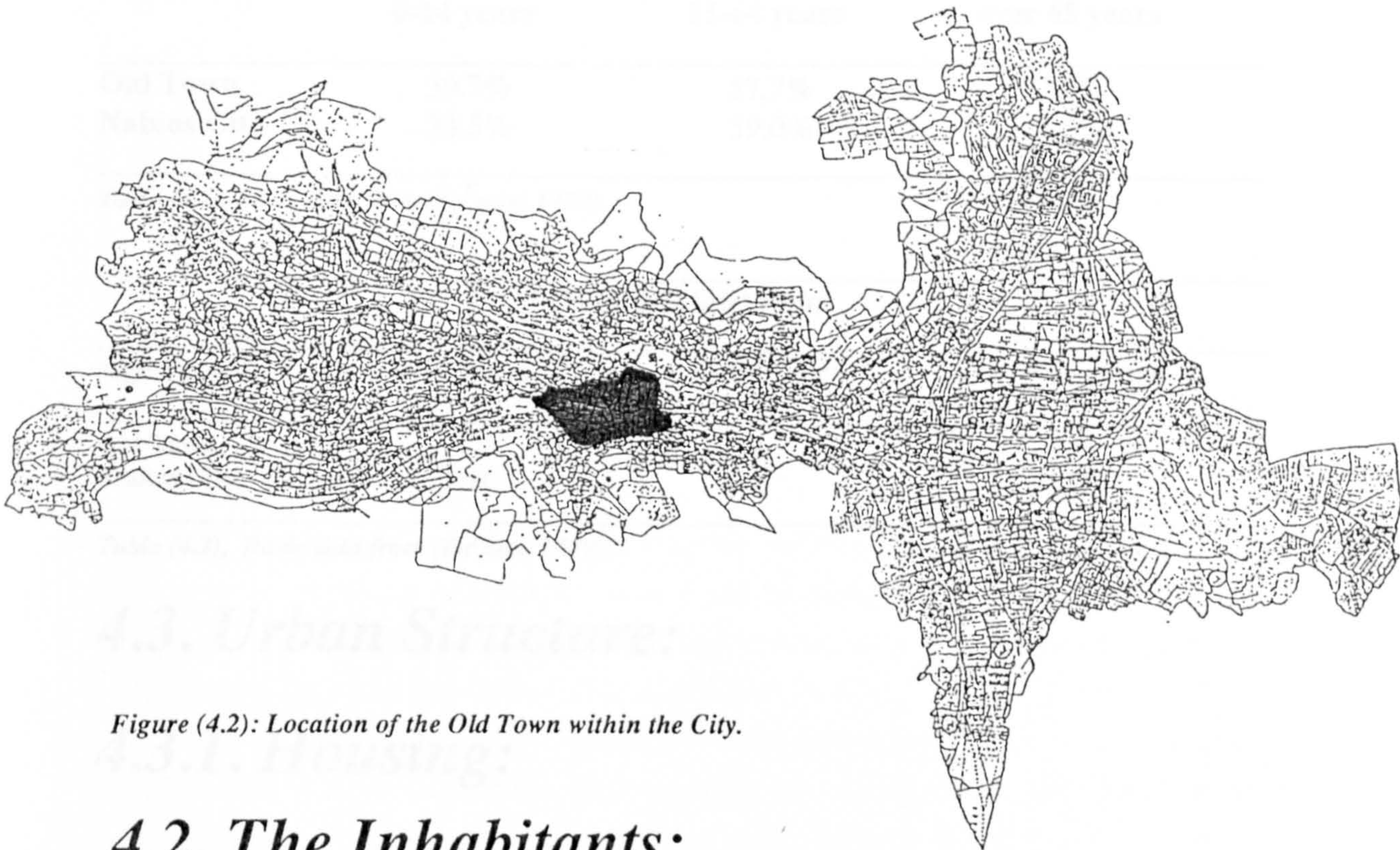


Figure (4.2): Location of the Old Town within the City.

4.2. The Inhabitants:

Nowadays, the Old Town's population is about 15,000 person (Nablus Municipality, 1989) and it has the higher population density among the other districts within Nablus city (Khatib, 1985). The demographic structure of the Old Town is similar to that of the City, with the difference that the younger active people are moving out of the Old Town. This is further discussed in chapter five. Social relations among the Old Town's residents are stronger than those among the new City suburbs, as the inhabitants of the Old Town meet each other every day during their work, pray, shopping, and other daily journeys. But the new suburbs' inhabitants are forced to use the motor vehicles to reach their various destinies. Because of this, social bonds became more limited within work and family circles, even neighbours might not know each other.

59% of Nablus inhabitants are within the working age, (15-65 years old) (Za^cnon, 1989). About 2.5% are elderly persons, over 65 years old, which is a very small portion in the society, but which is increasing as a result of the rising in medical care (Khatib, 1985), see table (4.1). In the Old Town the female's percentage is slightly higher than it is in the City, see table (4.2). This high female percentage could be resulted from the work and education status, which force many of the males to leave the country for better opportunities.

<i>Population Age</i>			
	0-14 years	15-64 years	over 65 years
Old Town	39.7%	57.7%	2.6%
Nablus City	38.5%	59.0%	2.5%

Table (4.1), Basic data from (Za^cnon, 1989).

<i>(Female/Male) ratio</i>			
Age Period	0-14 years	15-64 years	over 65 years
Old Town	1.2	1.29	2.71
Nablus City	1.02	1.08	1.78

Table (4.2), Basic data from (Za^cnon, 1989).

4.3. Urban Structure:

4.3.1. Housing:

4.3.1.1. Traditional Houses.

The traditional courtyard house is the most popular in the past up to the beginning of the twentieth century. Most of these buildings consisted of more than one storey. The upper floors have their own open courtyard, which form a terrace over looking the main court located on the ground or the first floor. When each floor consists of one or more housing units, then screen walls were built on the edges of upper courts to prevent over looking to the lower ones. The following paragraphs deal with the different architectural elements of the traditional houses:

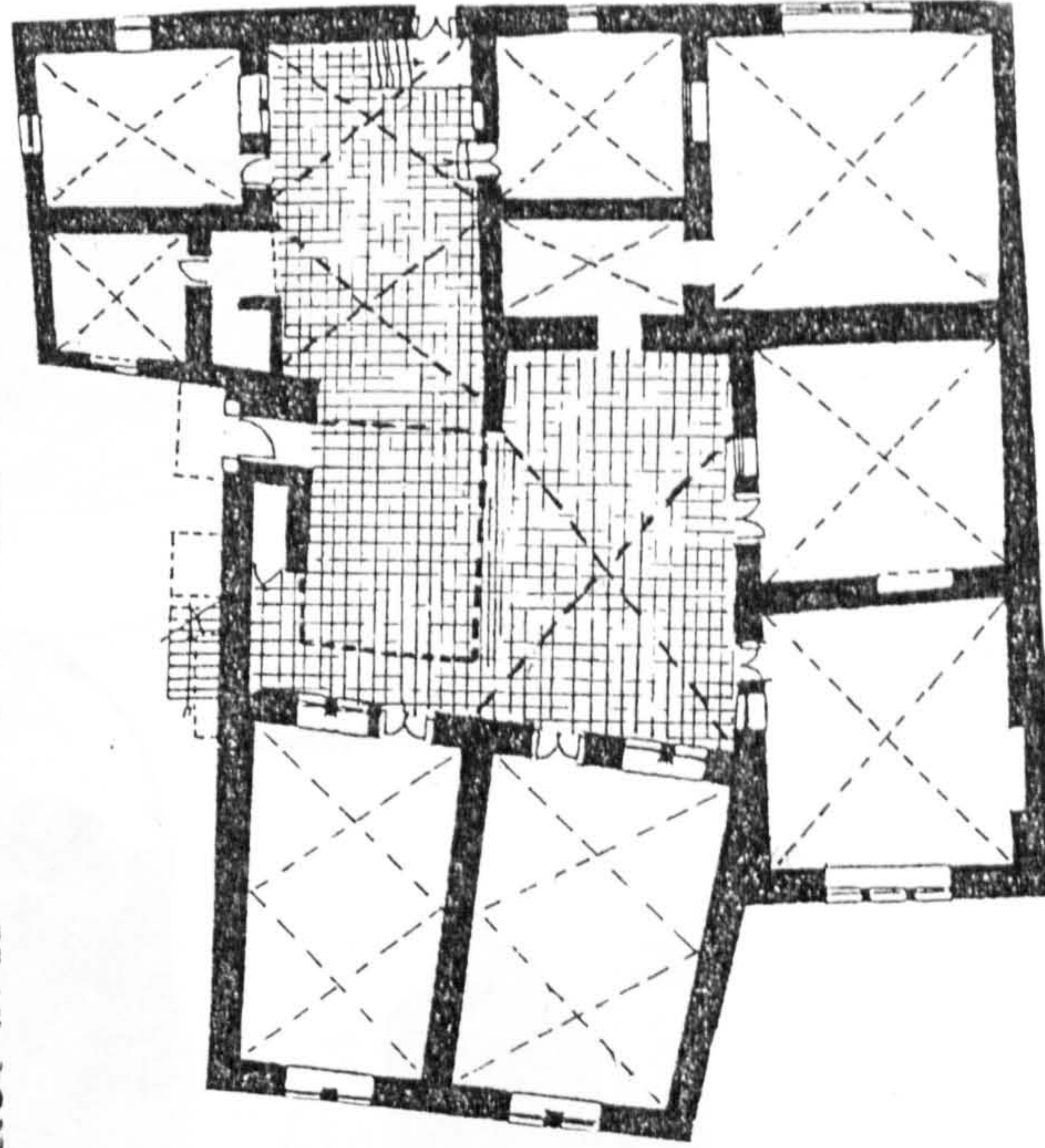
I. Layout and interior arrangement:

Religious and cultural rules of the Nablusian society, climatic and security factors were the main reasons that played an important role in providing the traditional houses with the following special elements and characteristics:

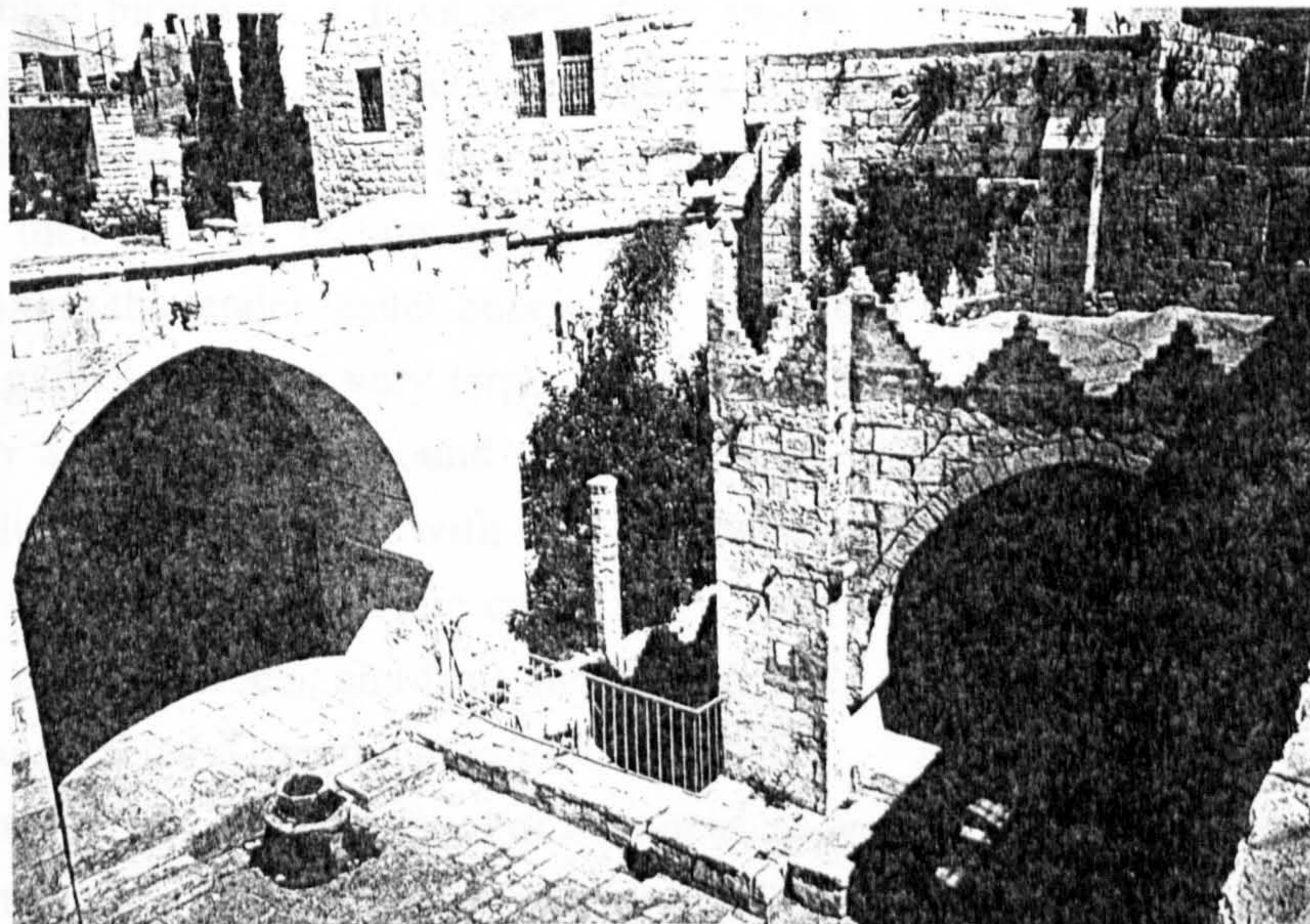
1. These traditional buildings are characterised by their inward looking, towards the house courtyard; *Wasat Al-Dar*. Some parts of the court are covered, as shown in figure (4.3). This courtyard is usually located at a central position near the entrance of the building. It provides the houses with a comfortable internal environment; calm and cool air during the long, hot and dry days of summer, but which could be considered as a health hazard in winter. Within the courtyard, women were able to move freely without any fear to be seen by the neighbours, as the building and the court walls guaranteed this as well as, overlooking is forbidden in Islam.
2. Around this court many rooms of different uses are gathered; a guest room, bed rooms, and a utility room, which includes a kitchen, and a storage space. Every room has a single door opening into the courtyard. Usually the availability of these specialised rooms depends on the economical situation of the house owner, but they are normal in the big houses and palaces. The rooms are of large size enough to accommodate nuclear families within each of them. In this vaulted construction larger rooms have higher ceilings than small ones.
3. The division into a sector reserved for the men and their guests; *Al-Salamlik*, and into a rather private sector reserved for women and the family; *Al-Haramlik*, provides the total freedom and privacy for both men and women, each within their own domain. The larger the house is the more clear this division will be.
4. As the walls are massive structures, large or small niches in the inner walls are found. These are used as cupboards. Various types of cupboards are distributed quite irregularly in the walls. The smaller niches (*Khazaneh*, pl. *khazayn*) are sometimes divided by sets of shelves and closed by wooden doors. Large space; *rakzeh* do not have partitions or doors, see Figure (4.4). They are from two or three metres wide and 40-60 cm deep, and are used to store bedding. In some houses small cupboards are found below the window bench; the inner sill of the window serves as a seat. (Canaan, 1933, pp.11-12).
5. Many of the middle class houses and, generally, all the rich houses and palaces have private gardens. Mary Rogers, in the early 1860s, visited one of them gardens and described it. She wrote:



B. A courtyard within a middle-class house. Notice the covered and the un-covered parts.



A. An example of the courtyard in plan.



C. A courtyard within a high-class house; Al-Nimir Palace. Notice the large areas of both covered and un-covered parts. Source: Courtesy of Dr Burgoyne, 1987.

Figure(4.3): Examples of the traditional courtyard; Wasat Al-Dar.

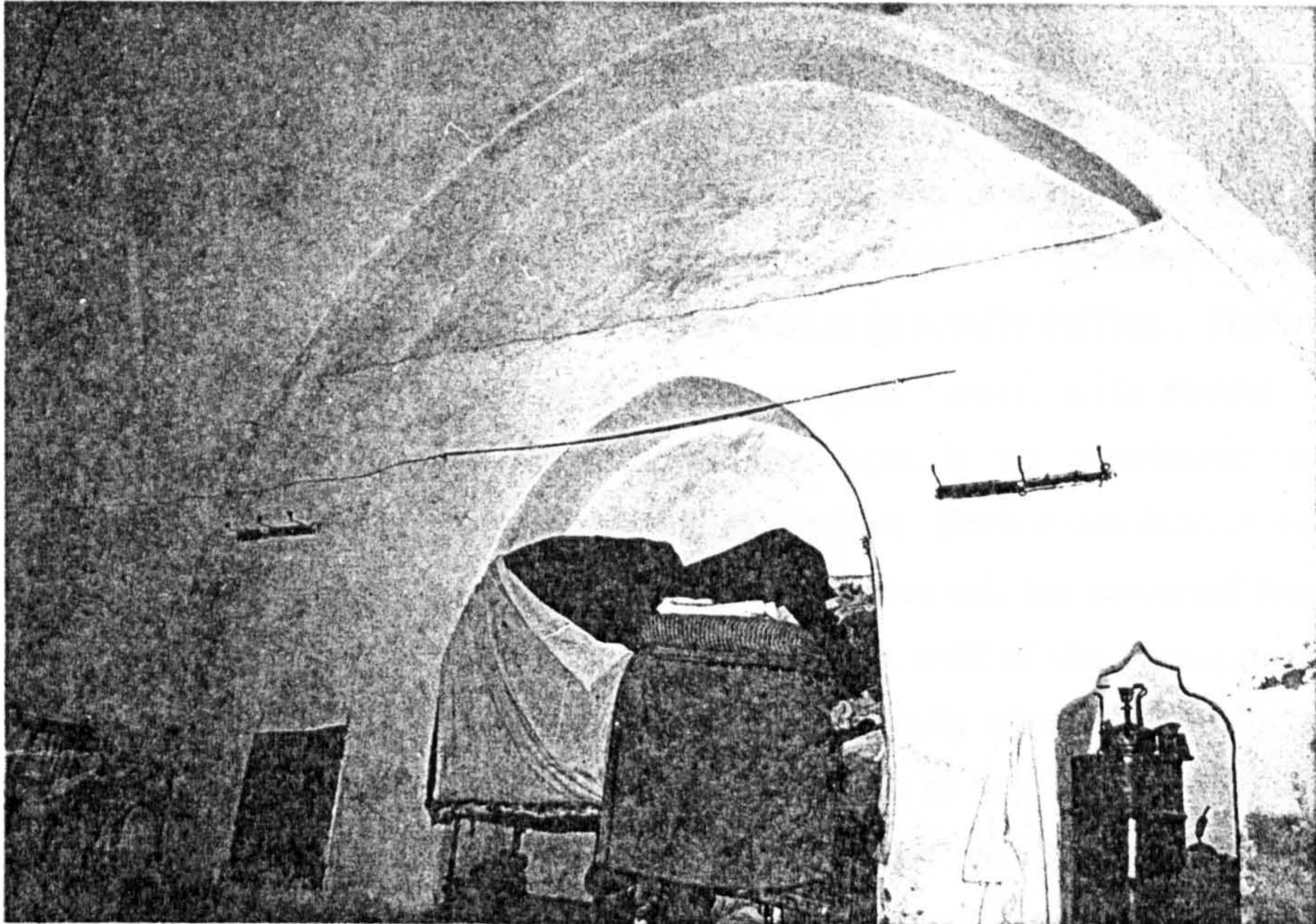


Figure (4.4): Traditional wall cupboards.

"As we left the house, .., and went into a spacious enclosure, where lemon, citron, orange, and quince-tree made a pleasant shade, and apple and almond-tree were full of blossoms. The ground was completely carpeted with the cluttering heart - shaped leaves of the violet, and sprinkled with its blue blossoms. I have seen them in our own wild - wood walks, crowding lovingly together in groups, or springing up round the Trunks of ancient trees, but I never saw such a profusion of these sweet flowers as I did then in that Nablus garden. We could not move a step without crushing the tender leaves beneath our feet. We were led into the centre of the garden, where a very large squared pool or reservoir had been made, with a stone parapet round it. On the south side there was a pleasant vaulted stone chamber, with a wide spreading archway opening close on the edge of the pool. Here carpets and cushions were spread, and coffee and pipes, sherbets, and fruit and flowers were brought for us. This is the beau-ideal of Oriental afternoon enjoyment - a lulling narghile in an arched recess, near to a pool or stream of sparkling water in the midst of a fruit garden, carpeted with violets, in the spring, and with white everlasting flowers in the summer and autumn. These delights are the chief subjects of many of the modern Arab songs and poems" (Rogers, 1865, pp.270-1).

The description of John Mills who visited a Nablusian house in 1864 summarised most of the characters of the Old Town's traditional houses. He wrote:

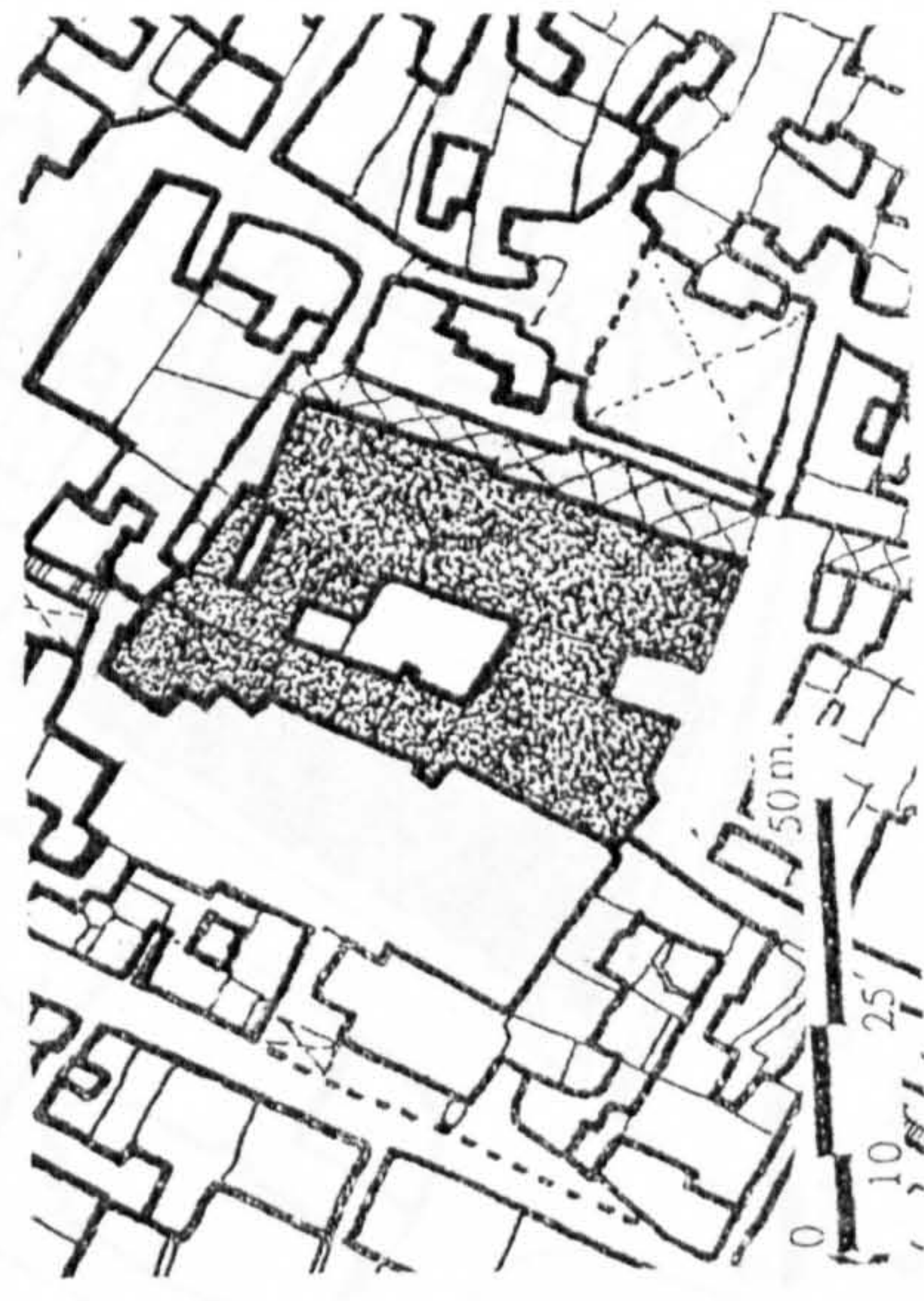
"The entrance from the street was through a heavy strong door. It was usually strongly barred on the inside, to prevent any one entering without being first opened by the inmates. A heavy iron knocker was attached, and two or three tremendous blows with this would generally suffice... Having entered, we find ourselves in a small irregular court, with rooms of various size and purpose surrounding it. There is no communication between the different rooms, but some exceptions. Each room having one door, and that opening to the court, which is uncovered, but screened from the dosevation of all but the inmates by the high wall of the house on all sides. ..., the family room, where the family generally take their meals and entertain their friends.., close by the door, is a part of the floor formed into a square, some inches lower than the general floor; this is the atabeh, or the place where they take off and leave their shoes. .. The floor was made of a mixture of mud and lime. The ceiling was a vaulted one; it was plastered and whitewashed, and like the walls (at all events when new), was without either inscriptions or adornments, which are common in the East. No timber was used for any part, except for the frame of the door and the lattice work of the window. There was no chimney to the room, nor to any other room... No chimneys are wanted... The room was warmed, when necessary, by bringing in a brazier, in the form of a large dish placed on a stand filled with charcoal" (Mills, 1864, pp.107-9).

"The palaces of the noble families of Nablus, fortresses with iron gates. It was said that the largest building, the Toqan (Al-Bayk) Palace, could accommodate 1000 soldiers" (Scholch, 1982, p49), with stables for their horses, see figure (4.5), (4.6) and (4.7). In the early 1860s, the new palace of the Governor, planned by Mahmod ^cAbd Al-Hadi himself, see figure (4.7), was described as:

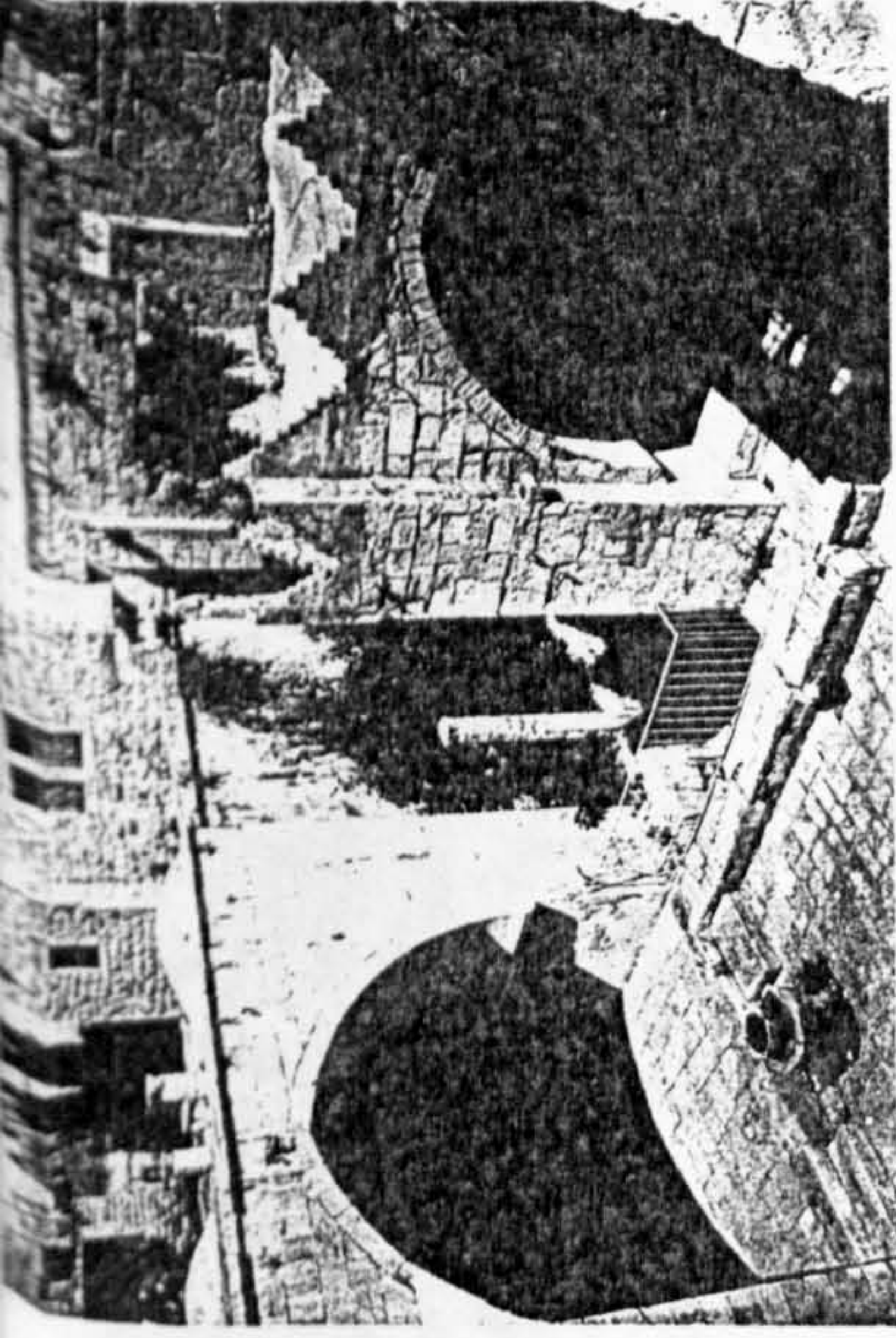
"the handsomest house in the city, which is worthy of notice as a good example of modern Oriental architecture uninfluenced by European taste. This house was erected in the year 1855 by Mahmod Bayk Abd Al-Hadi, of Arrabeh, who was the Governor of Nablus. Its spacious court surrounded by arched corridors and lofty reception rooms, are paved with marble. The white walls of the principal rooms are relieved by arabesque borders of good design in two shades of blue, some being painted in fresco, others simply stencilled" (Wilson, no date, vol.2. p.12).



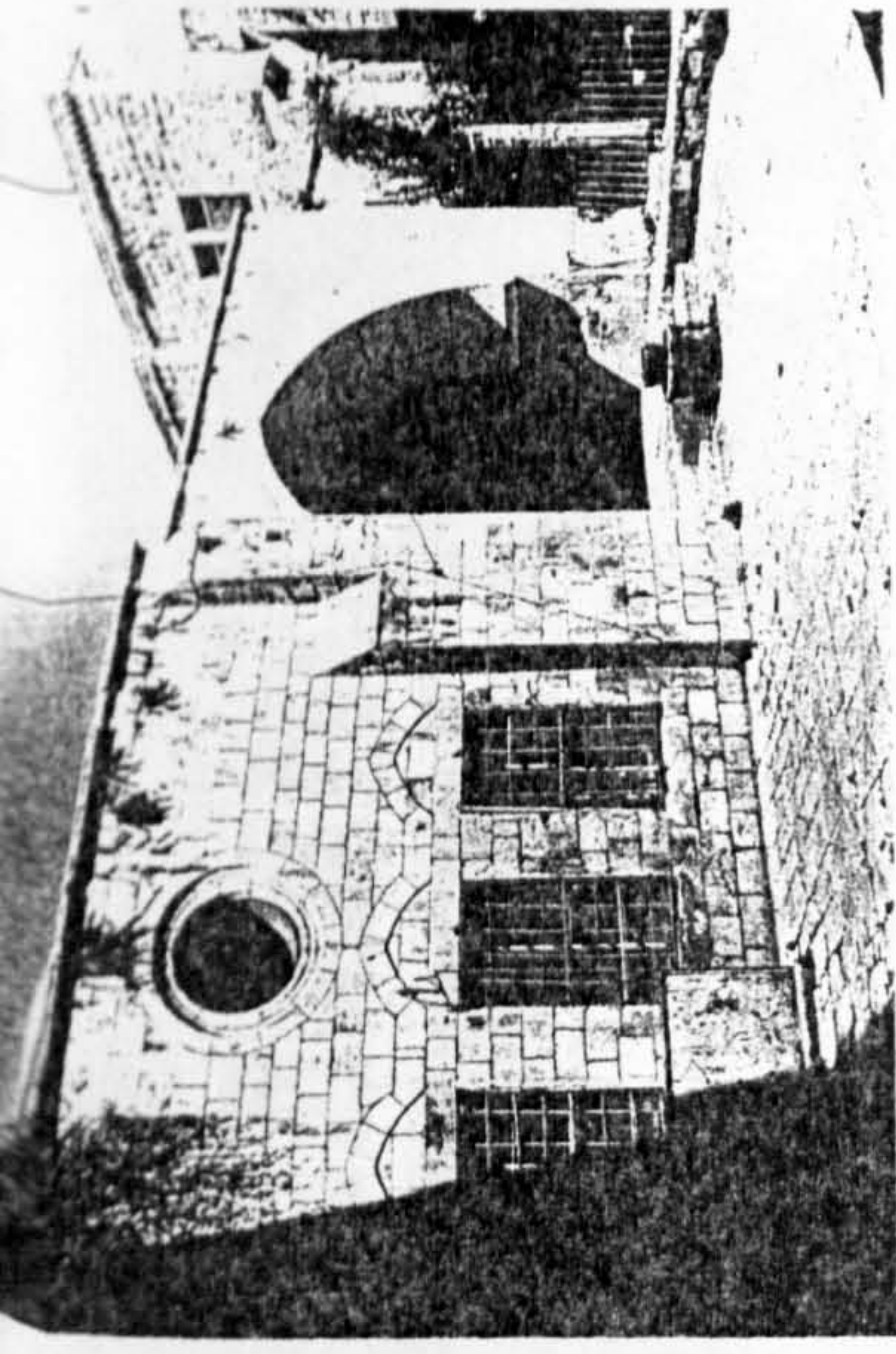
A. Location within the Old Town.



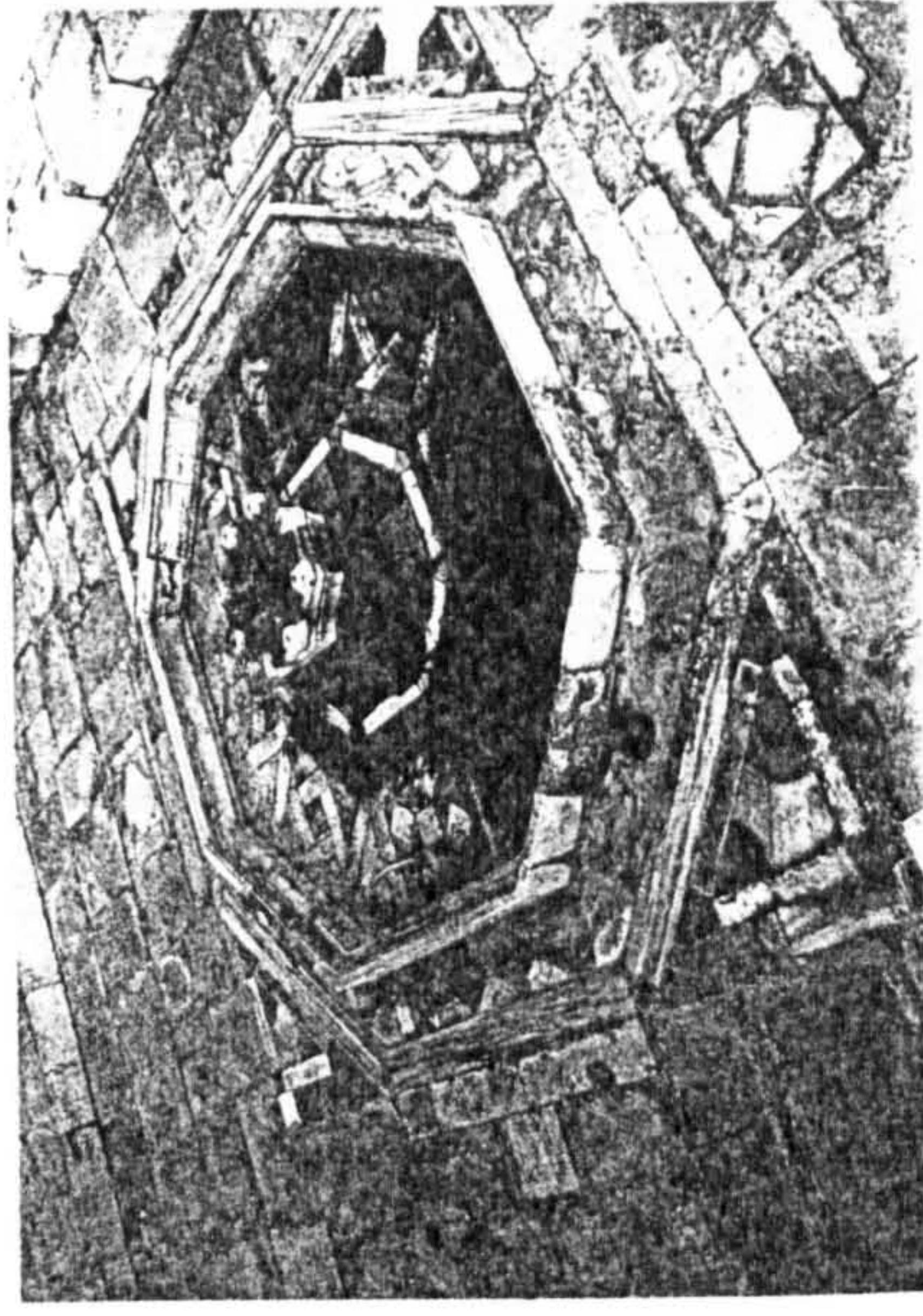
B. Site plan.



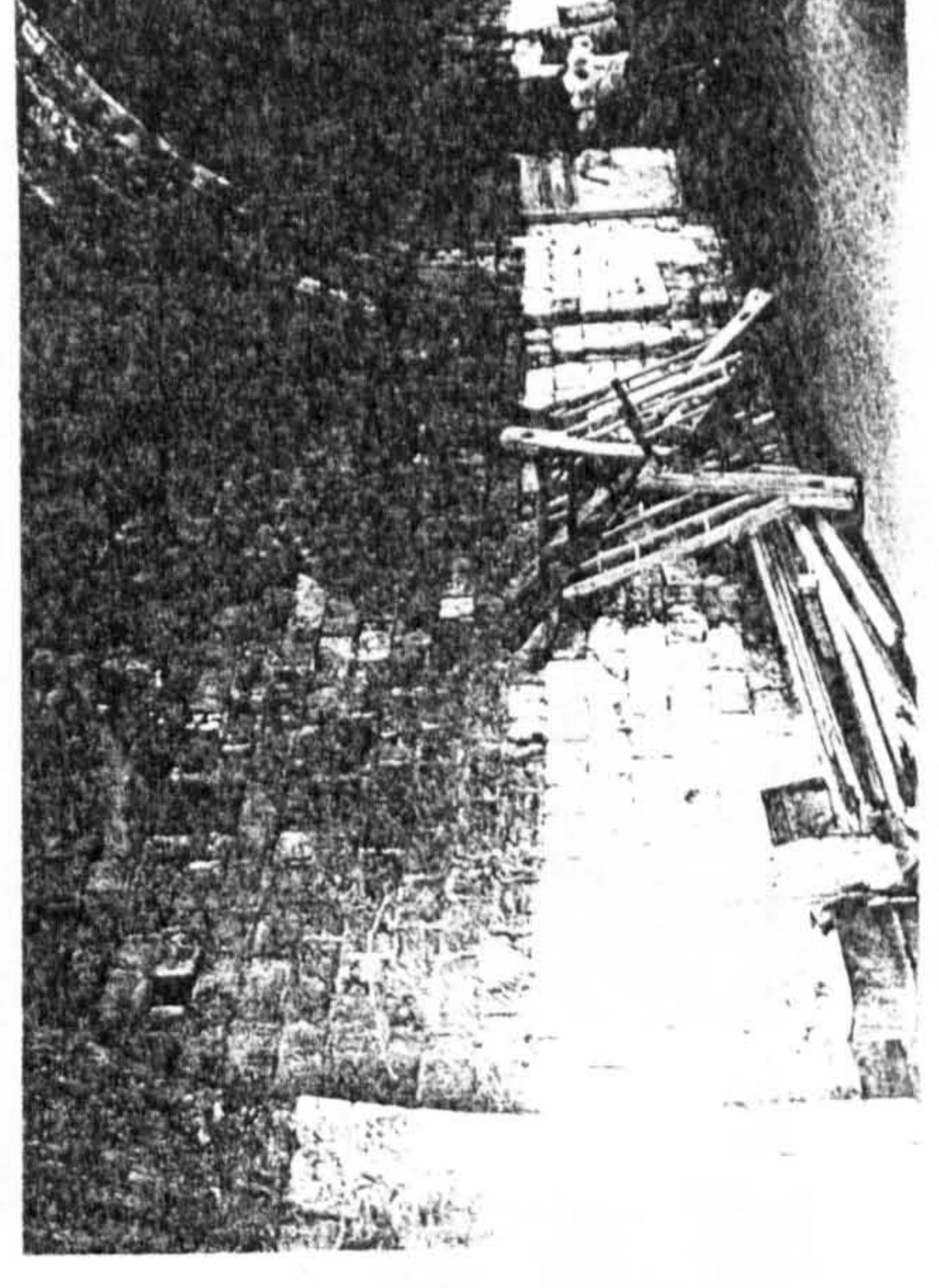
C. The main entrance.
Figure (4.6): Al-Nimir Palace.



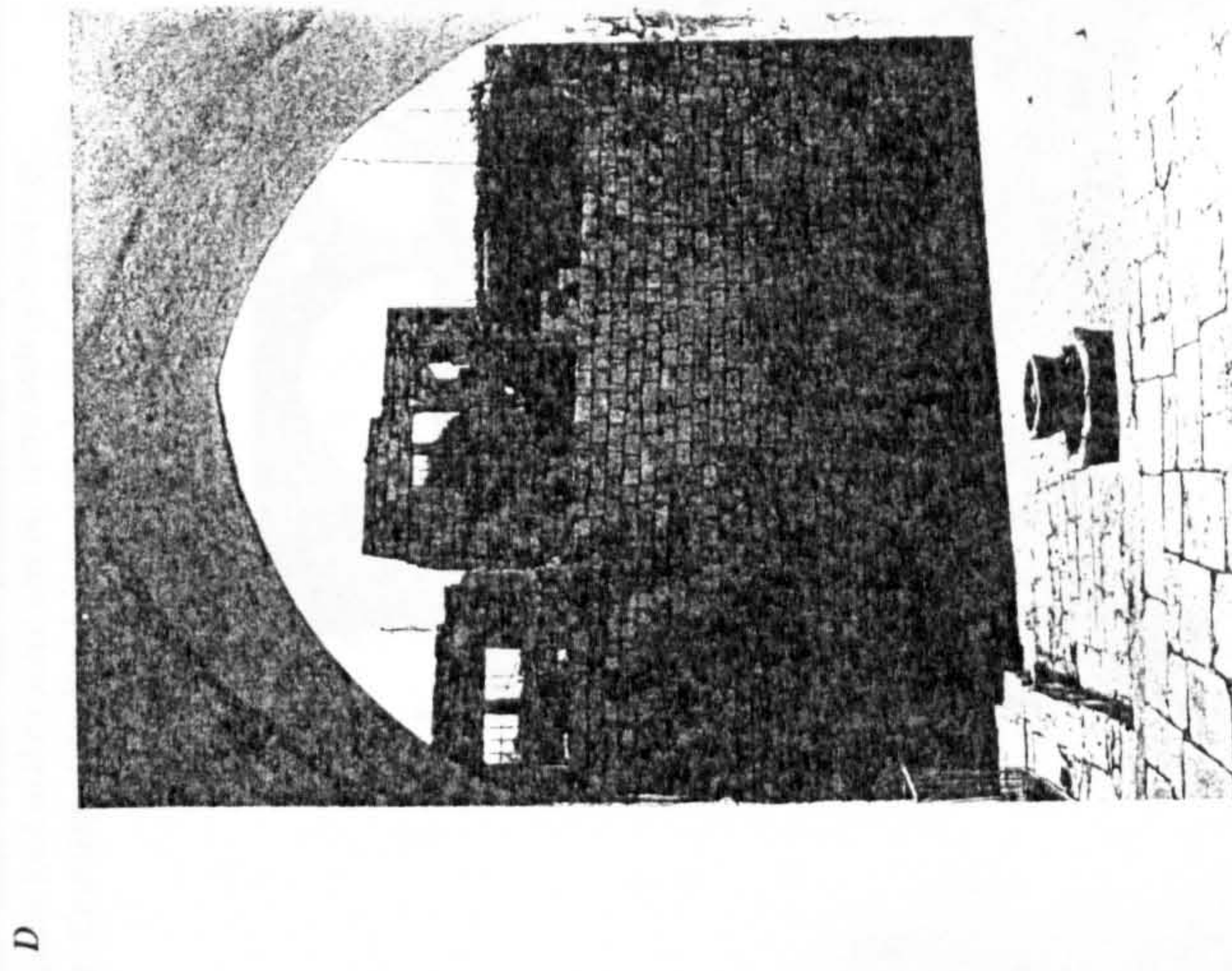
E



G



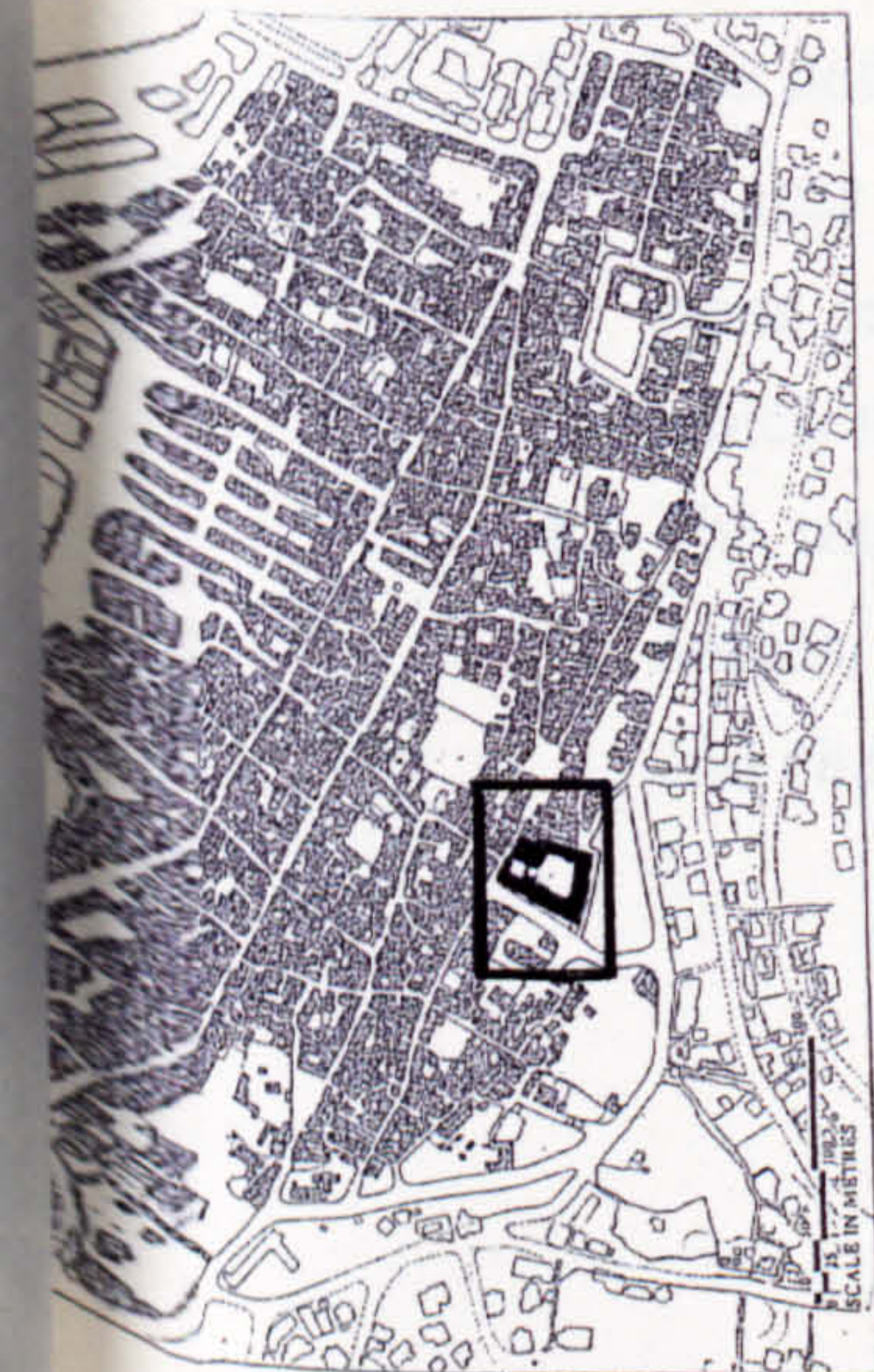
H



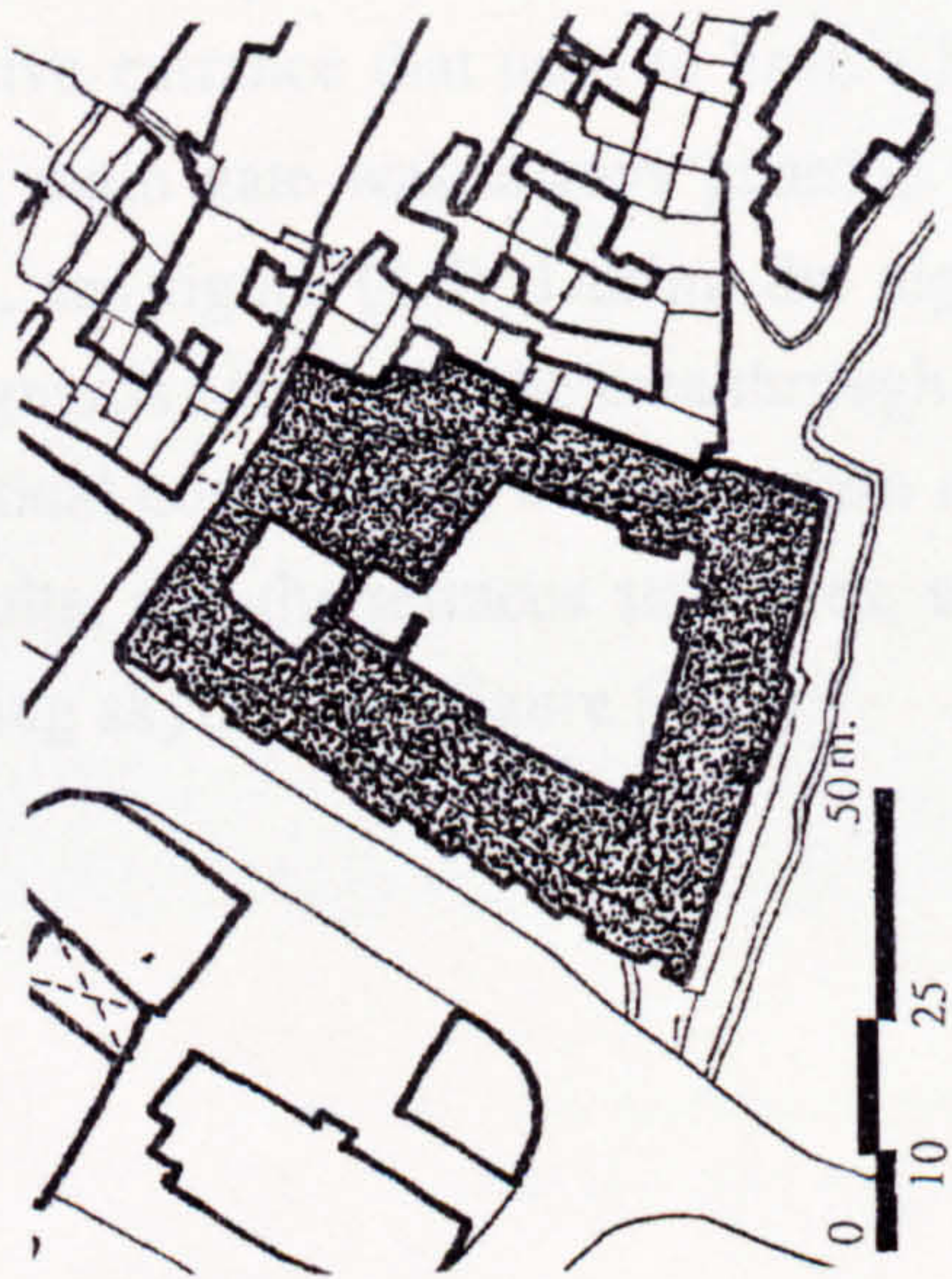
F

D, E & F. Views within the Salamlik main courtyard.
G. The fountain within the summer Majles area.
H. Near by vaulted street on the eastern side, where the main palace store places used to be loaded from, now they are workshops.

Source of all plates: Courtesy of Dr Burgoyne, 1987.



A. Location within the Old Town.



B. Site plan.



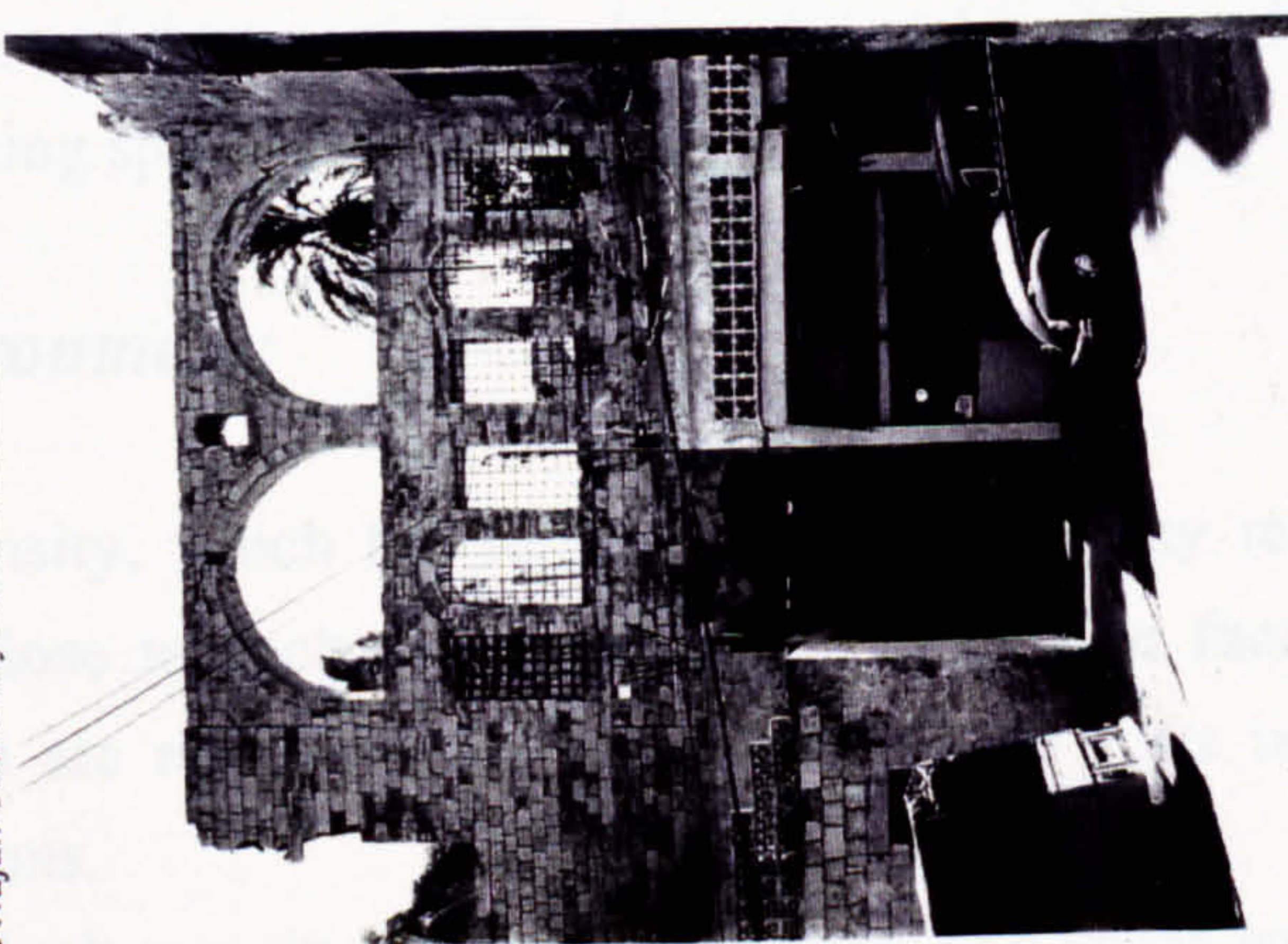
D. A closer look to the palace and the surrounding buildings. Source: Courtesy of An-Najah University Arch.al students, 1989.



E. Near by street on the western side of the palace. Source: Courtesy of Mr F. Yef'ish, 1991.



C. General view from the northern slopes of Mount Gerizim. Source: Courtesy of An-Najah University Arch.al students, 1989.



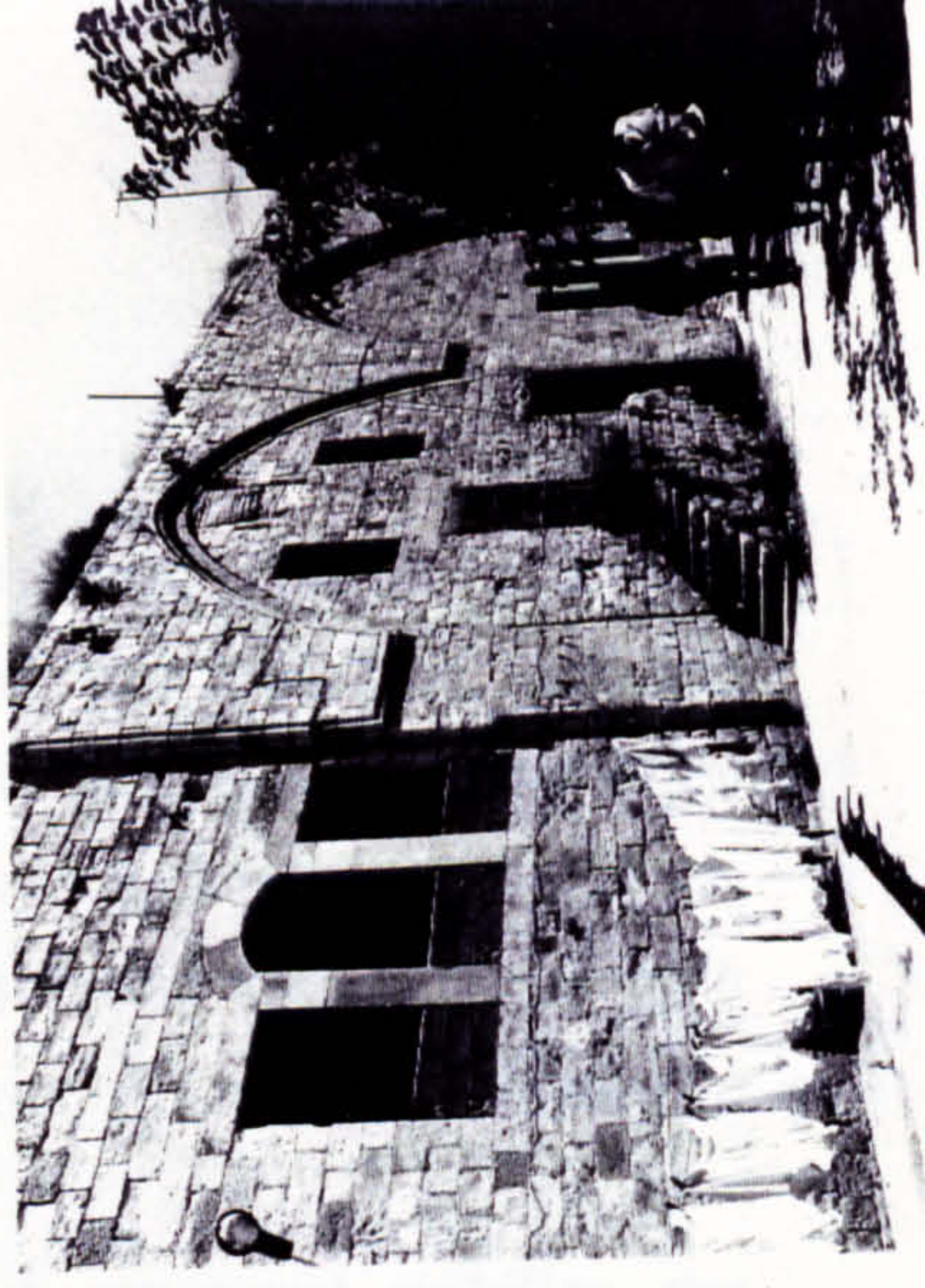
F & H. Parts of the west elevation. Notice the new additions (shops) in plate F. Source: Courtesy of - F. Dr Burgoyne, 1987; H. An-Najah University Arch.al students, 1989.



G. West elevation. Source: Courtesy of An-Najah University Arch.al students, 1989.



H



I. Inside the Salamlik main court. Source: Courtesy of Dr Burgoyne, 1987.

Figure (4.7): cAbd Al-Hadi Palace.

II. Structural elements:

1. Heavy structural elements: This was resulted by two main factors: (1) The characteristics of the available building materials - stone, soil and lime, and the dependence on mud and lime adhesive ability to join the different structural elements; (2) The structural stability and safety force the mason to enlarge structural elements; These heavy structural elements provide a good thermal isolation and a comfortable interior environment, by which these traditional houses remained relatively cooler in summer and warmer in winter.
2. Arched and vaulted structures: For the above mentioned, structural stability, the building mason was forced to use the most stable structural shapes from the different spherical structures, such as the cross and barrel vaults, and domes for building roofing, and arches for openings' lintels. Also because of the same stability factor, it is noticed that most of the openings in the traditional buildings have a vertical form, to reduce the opening span.

III. External environment:

1. High building density, which has resulted from the security reason that demanded people to build close to each other, see figure (4.8). The fact that the traditional building materials are relatively fire proof reduced the risks inherent in such high density constructions.
2. Solid facades for both security and privacy factors. The inside court helped, for some extent in solving the lighting and ventilation problems in these buildings. Because of this no windows could be found on the exterior elevation of the ground floor but the most essential ones with the smallest possible size. The windows of the upper floors could be screened by metal screens.
3. The defensive entrance that used to have a heavy strong door, usually kept close. In palaces the main gate was always guarded by strong men, seated on both sides on stone seats, see figure (4.9). During the nights there is a special guard room, from which the guards can watch the area through *Al-Tallaqat*; slit windows.
4. The traditional construction methods were reflected on the external environment by domes, vaults, and the terraces structures, which provided the town with its special and charming skyline, see figure (4.10).

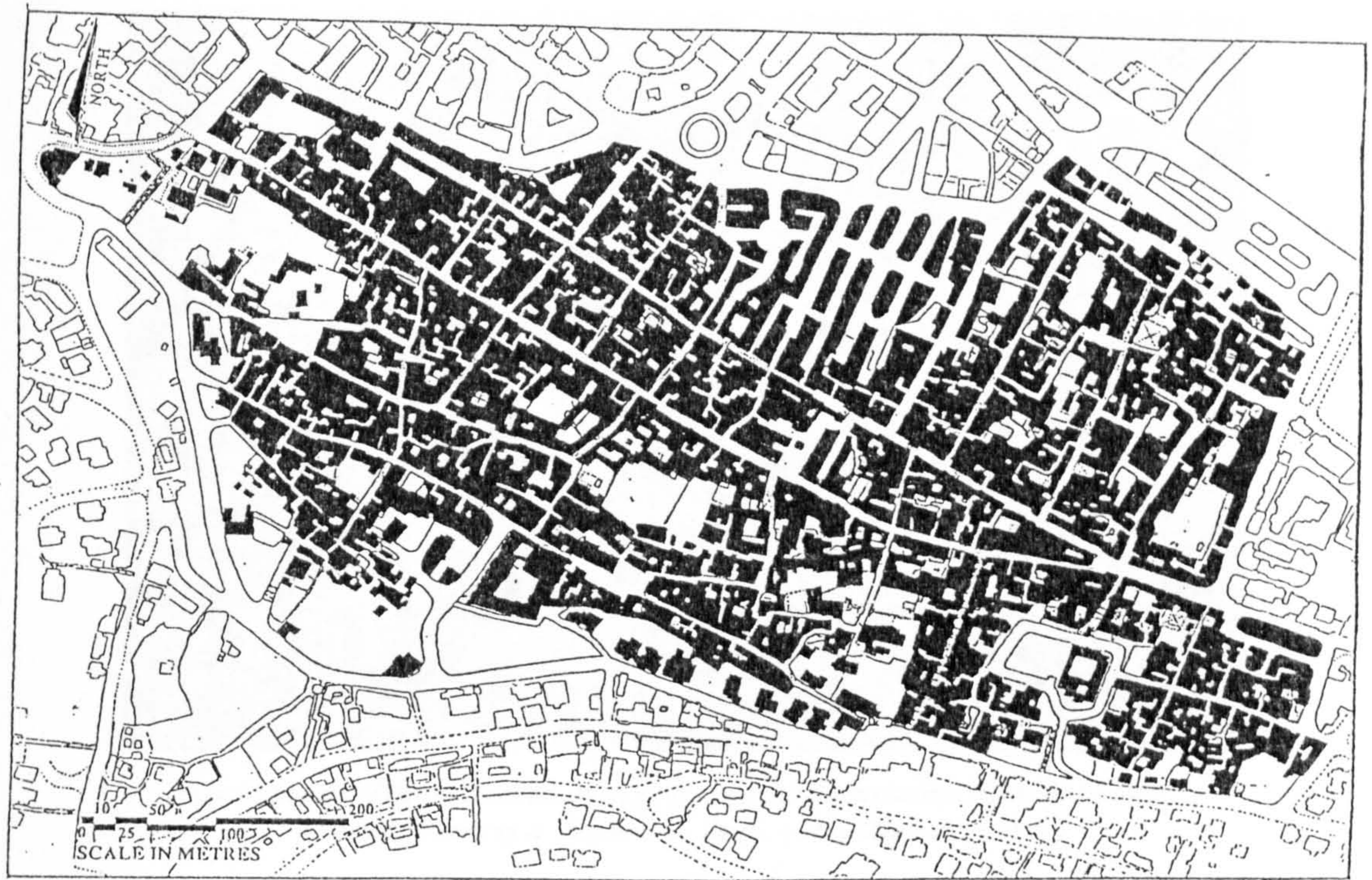
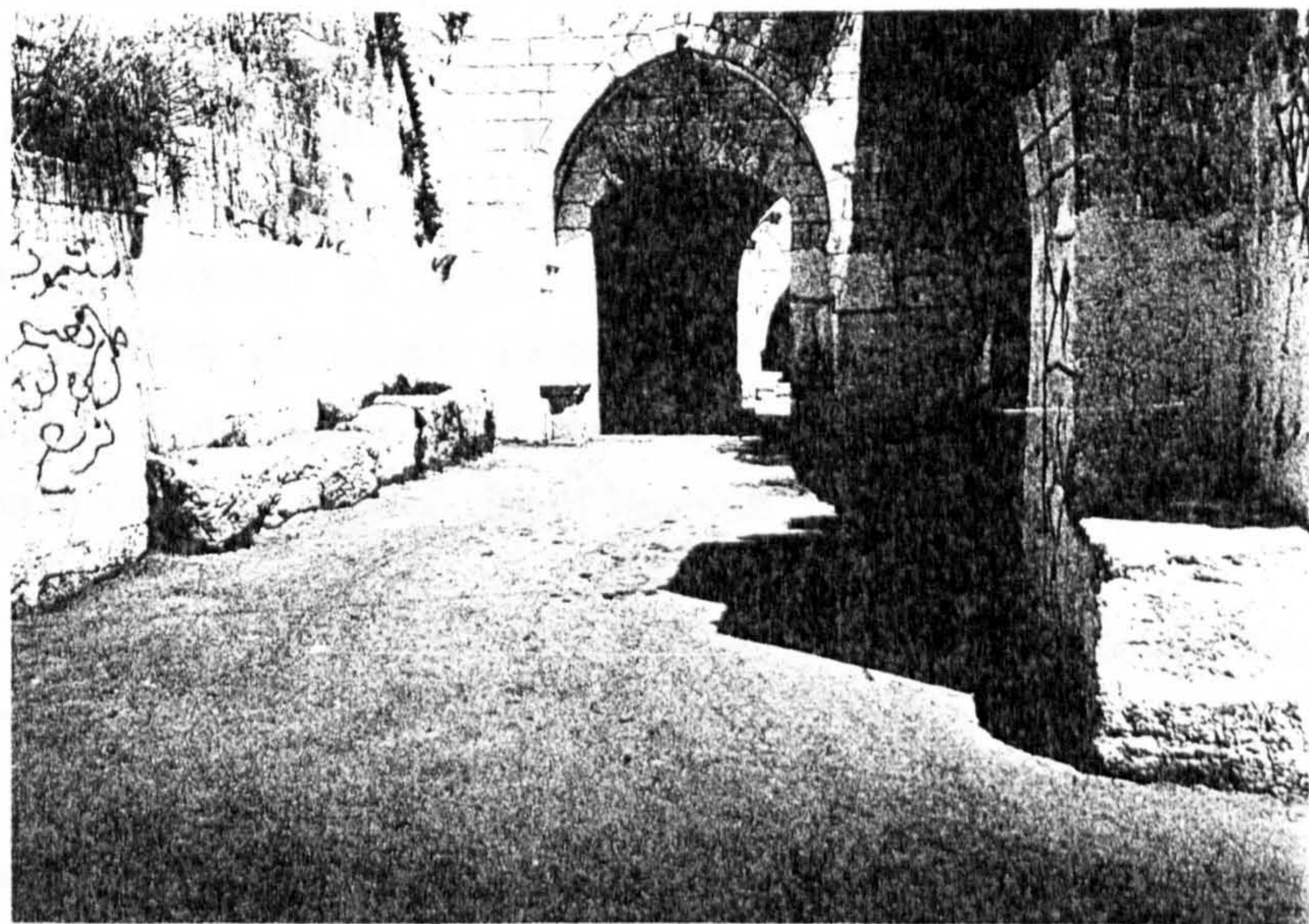


Figure (4.8): The high density of the built up area of Old Town.



*Figure (4.9): The Defensive entrance of Al-Nimir Palace.
Source: Courtesy of Dr. Burgoyne, 1987.*



*Figure (4.10): The traditional arched and vaulted structures of the Old Town.
Source: Courtesy of An-Najah Univ. Arch. Students, 1989.*

4.3.1.2. The Town Quarters and Neighbourhood Character:

The Old Town is divided into six quarters; *Harat* pl. *Harah*. Each one contained several neighbourhoods; *Ahwash* pl. *Hawsh*. Each *Hawsh* gathered several families or one big family. For each *Hawsh* there was a defensive gate, which used to be closed at sun set every night, and the families' men alternated in guarding their *Hawsh* through the nights. Figure (4.11) shows the main town quarters, which are:

1. **Haret Al-Qaysariyyah:** In Syria, the term *Al-Qaysariyyah* was used as the equivalent of *Khan* (Sauvaget, 1948, p.30); which was a kind of merchants' accommodation. This quarter lies in the south eastern end of the Old Town. It was said that on this site, the Roman city of Neapolis was originated (Nimir, 1975, vol.1, p.47).
2. **Haret Al-^cAqabah:** The quarter of the steep road, lies to the western side of *Haret Al-Qaysariyyah*, in the southern end of the town.
3. **Haret Al-Qaryon:** Also called *Al-Dabborah*, Jaussen visited Nablus in 1926, he was told by the local inhabitants in this quarter that its name derived from an old Roman building (Jaussen, 1927.a). This quarter lies next to *Haret Al-^cAqabah* to the West, also in the southern end of the town.
4. **Haret Al-Gharb:** The Western quarter, as it lies in the western end of the town.

Jaussen mentioned that it had two names, *Al-Gharby* and *Al-Fwakhir*. This quarter extended further north to include what Jaussen mentioned as *Haret Al-Musk* (Jaussen, 1927.a), as it was a *Hawsh* and not a *Harah*.

5. **Haret Al-Yasmineh:** Deriving its name from the flower jasmine. This quarter is in the central part of the town nearer to the western end and at the eastern side of *Haret Al-Gharb*. This quarter used to have a Samaritans community, which Jaussen classified their neighbourhood as a separate quarter, *Haret Al-Sumarah* (Jaussen, 1927.a), while it was just a part of this quarter.
6. **Haret Al-Habalah;** the terraced quarter, as its land used to be divided by loose stone walls, which in Arabic called *Habalah*, It lies at the north eastern end of the town. This quarter was greatly expanded in the 11th AH century, when Prince Yosuf Al-Nimir, the Governor of the town then, bought a house within a piece of land, then he converted it into the palace, which still exist there, and after him his followers and army leaders built their houses around it. Then the town wall was extended, and two more gates were added (Nimir, 1975, vol.1, p.97), to become sixteen gates. This quarter contained what Jaussen mentioned as *Haret Al-Anbiya'* as an independent quarter.

1. *Haret Al-Qaysariyyah*
2. *Haret Al-^cAqabah*
3. *Haret Al-Qaryon:*
4. *Haret Al-Gharb*
5. *Haret Al-Yasmineh*
6. *Haret Al-Habalah*

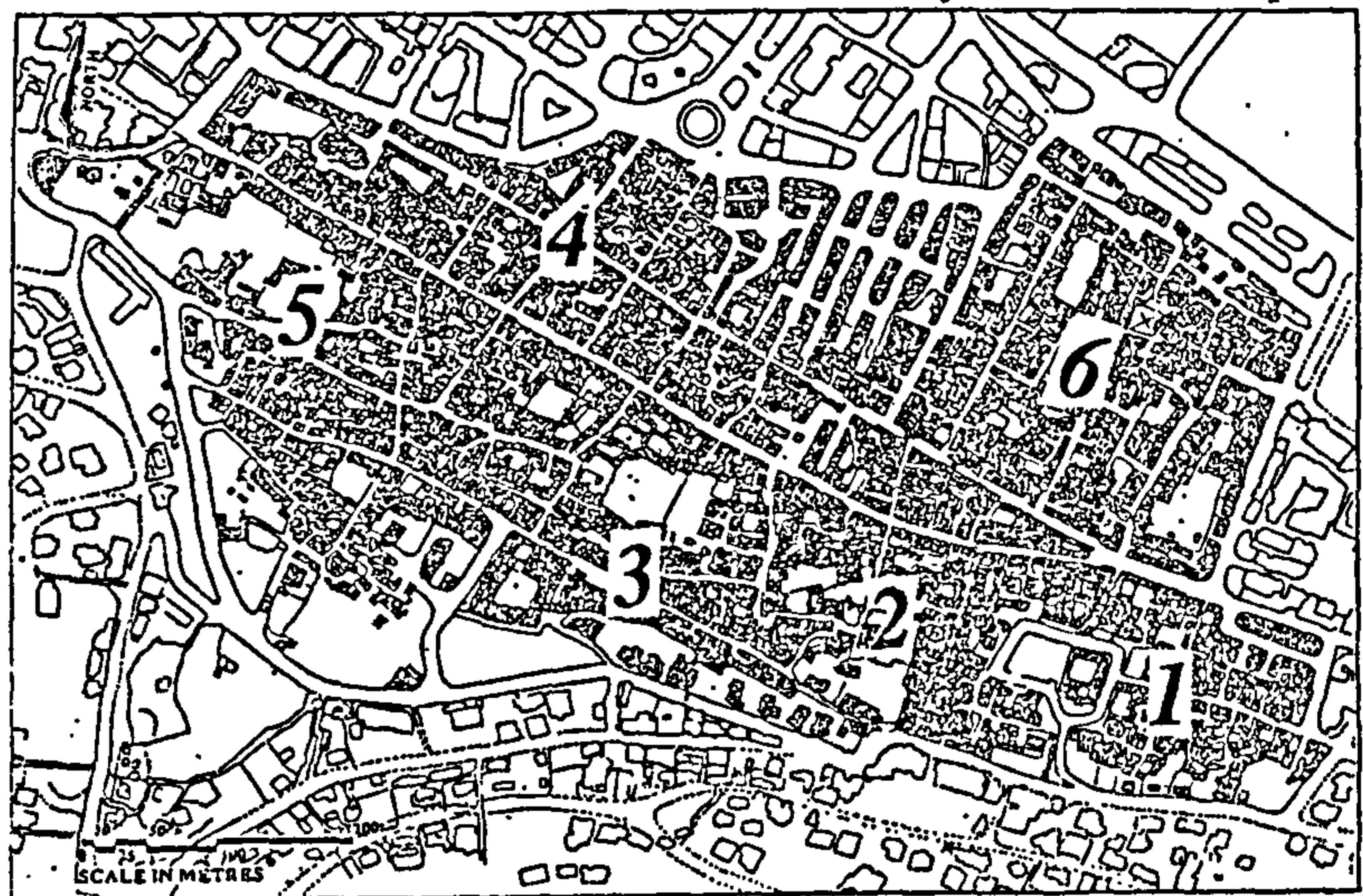


Figure (4.11): The main Old Town quarters.

The traditional neighbourhoods correspond to the climatic, social and cultural conditions of the area. They provide a gradual transition, in small steps, from the public space of the *Soq*, via the principal pedestrian and the semiprivate roads to the dead end lanes; *Ahwash*, which have the private houses. This gradual transition was encouraged by the availability of the following elements, and the more elements from the main public streets the residential units have the more privacy they will benefit, see figure (4.12):

- A. The long winding approach off the public road, the semi-public path, called *Jaddah*, around which *Al-Ahwash* are gathered.
- B. The narrow approach off the *Jaddah* to the semi-private lane of *Al-Hawsh*, where the houses are gathered around with a gate placed at *Al-Hawsh* entrance.

- C. The indirect entry of the houses from *Al-Hawsh* lane, as the houses' gateways open to a solid wall, or a stair case leading up to the first floor.
- D. The use of the level differences, see figure (4.12)(D), as the houses are usually situated at the first floor there must be a stair case, it is usually steep, narrow and badly lit, if it is a covered one, see figure (4.12)(G).

Usually most of these elements were available to most of the Old Town's houses, but it might be noticed that houses in the commercial streets had lost some of these elements, and the further the house is from public roads the more privacy its inhabitants will have. So, according to their location, the Old Town's houses are of two kinds, see figure (4.12):

1. Buildings within commercial streets built over handicraft and commercial shops, see figure (4.12) plates (B) and (C). These houses are entered directly from the public streets, through strong doors and steep staircases that provide the maximum privacy to the residents, see figure (4.12) plates (F) and (G).
2. Houses within residential areas away from public streets, usually have stores in ground floor at the outer edges of the house. The windows are sufficiently open to look through, and to observe anything from the outside, but too high from the street for anyone to look in, see figure (4.12) plates (D) and (E).

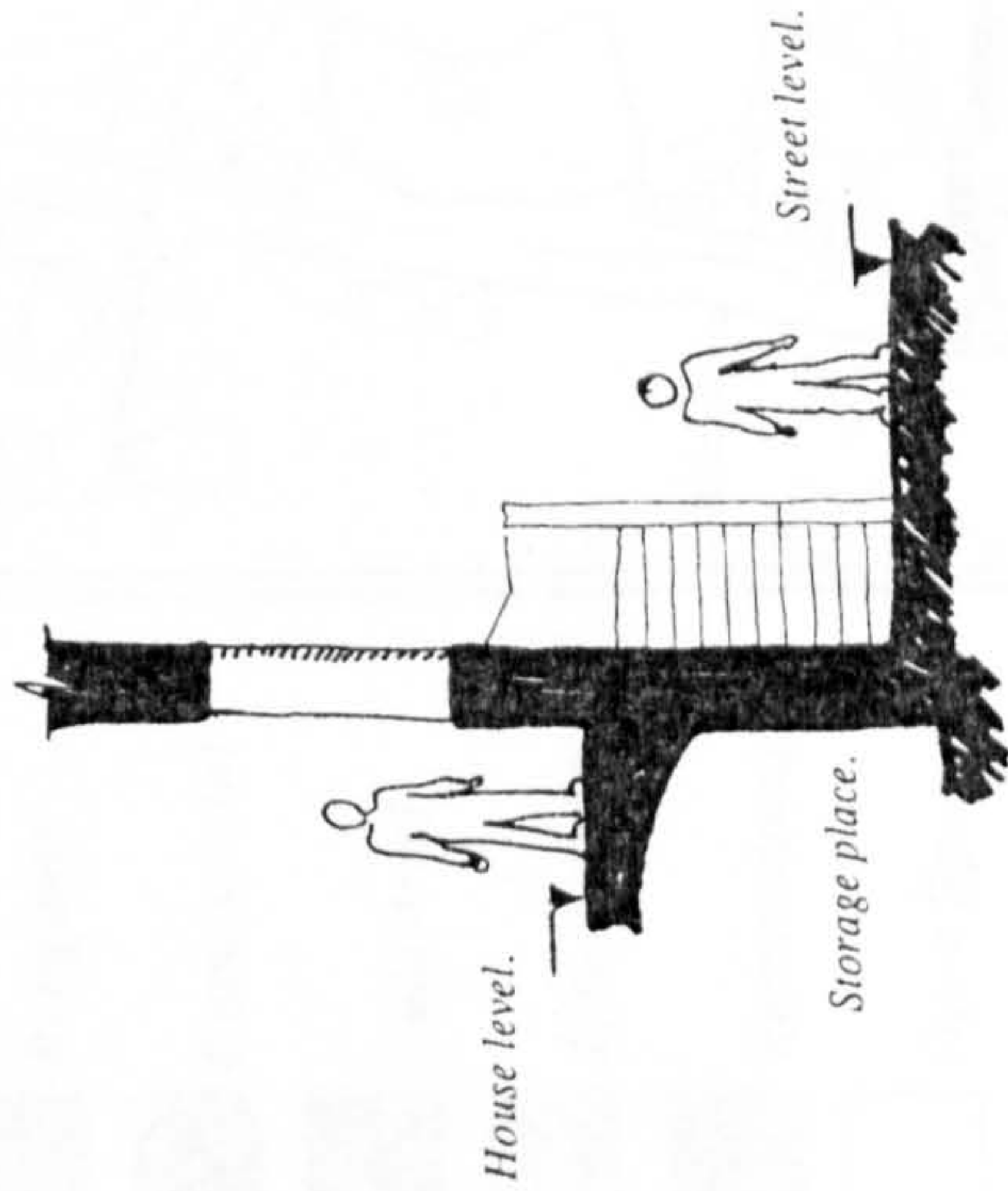
4.3.2. Public Urban Elements:

The Old Town, till the late nineteenth century, used to be a complete town and to have all the public facilities; religious, administrative, educational, commercial, industrial, health and recreational institutions. But nowadays, it is a small part of the Nablus city, but a very important one. All the administrative buildings; local authorities and regional government buildings have been moved out to the new areas, at the first stages of the town expansion, as described in the town historical development, chapter three. The old hospital near Al-Jame^c Al-Kabir had been converted into residential use. The remaining part of Jame^c Al-Masakin that used to be a Crusader's hospital is a commercial store.

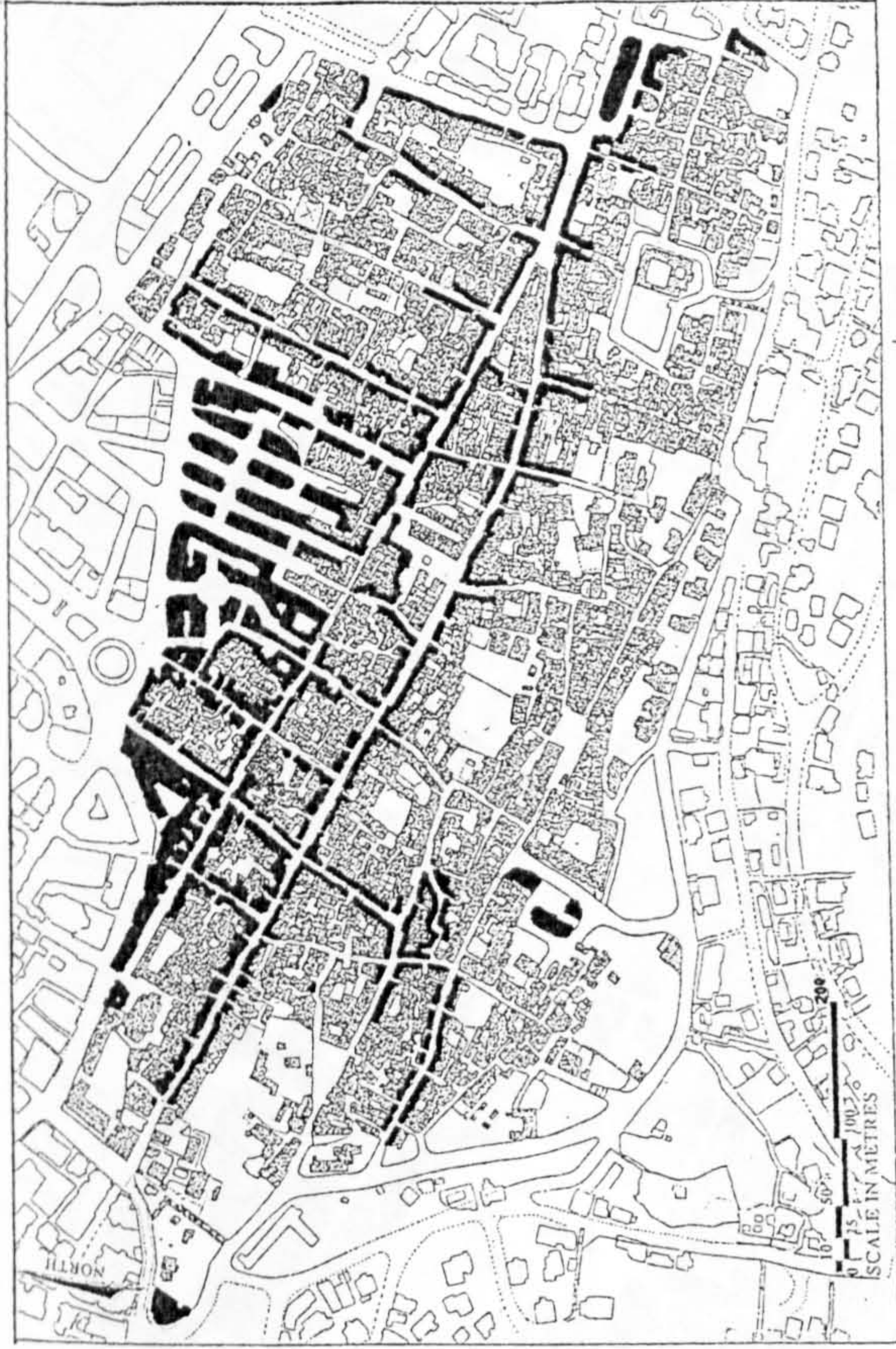
The Old Town's land use pattern, could be described as not clearly defined due to the mixing of functions within the same building and among the different floors of each one, particularly within the commercial core of the town. Commercial and handicraft functions are located on the ground floors, and usually mixed together with the houses located on upper floors. Other functions are usually found in individual buildings, like Soap factories, and the bath-houses. Figure (4.13) shows the land use plan of the Old Town.



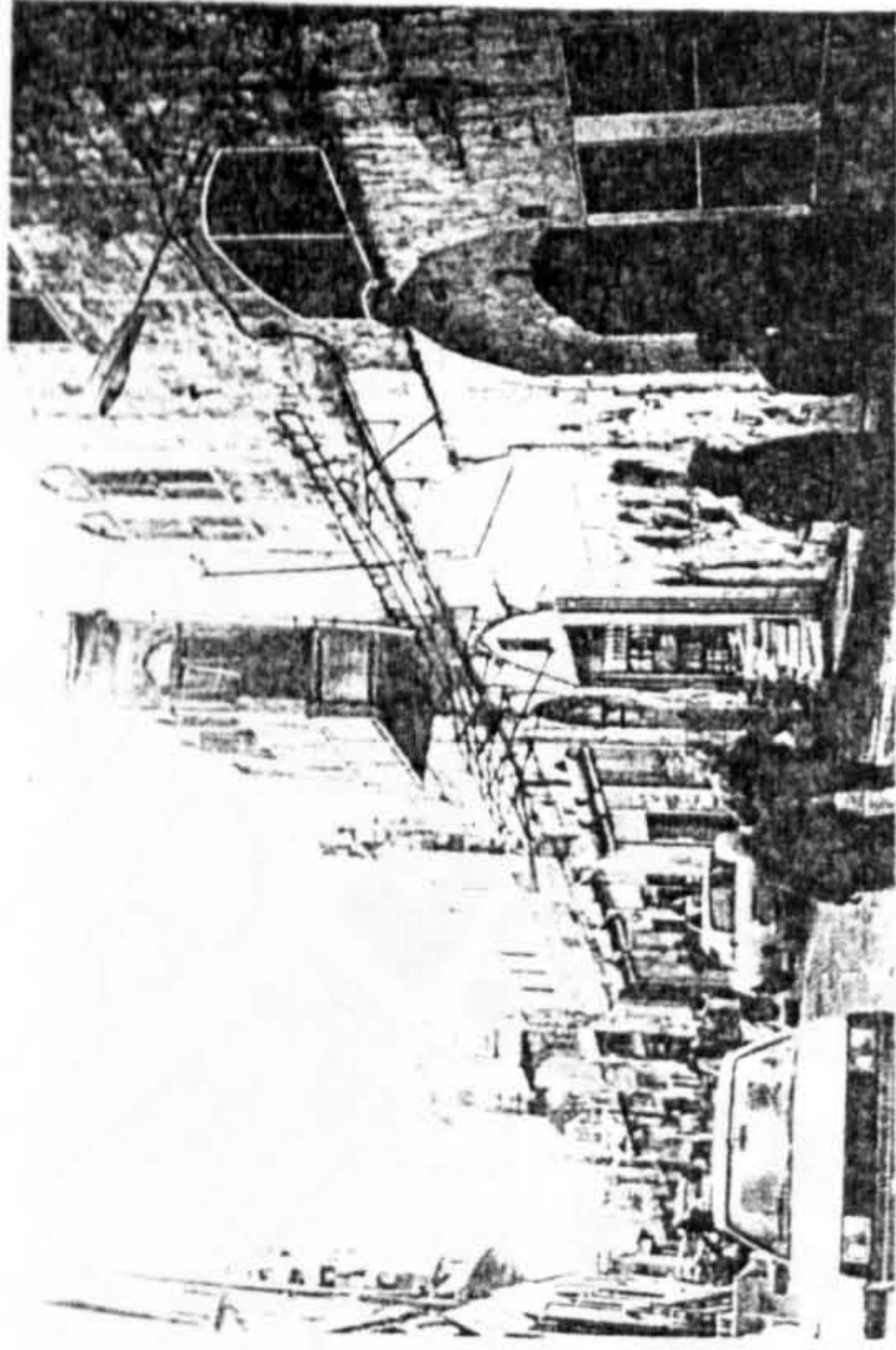
A. The traditional elements of the gradual transition from the main public streets into the private lanes.



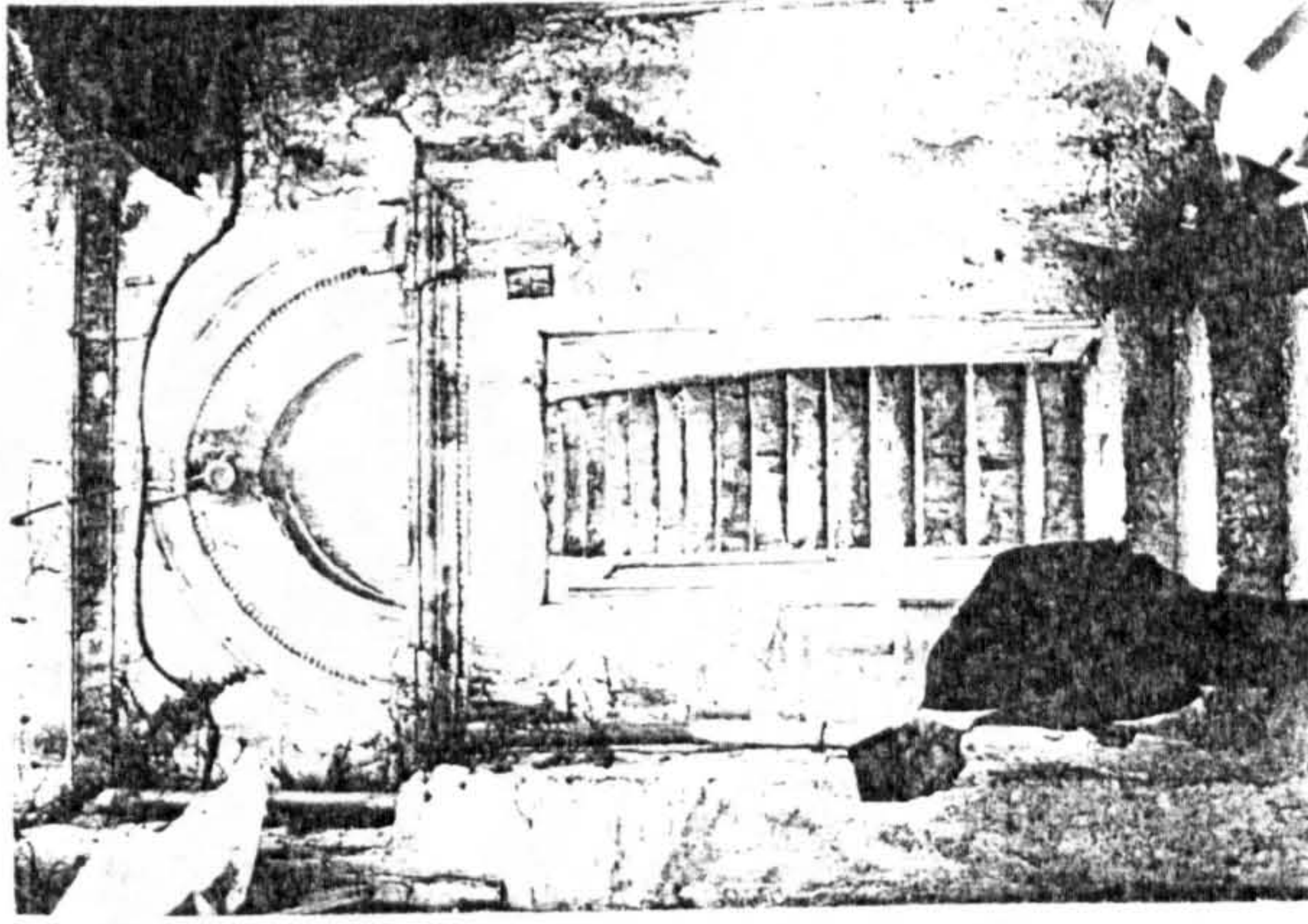
D. A cross section in a housing unit built over a store place. Notice the level difference between the house and the street.



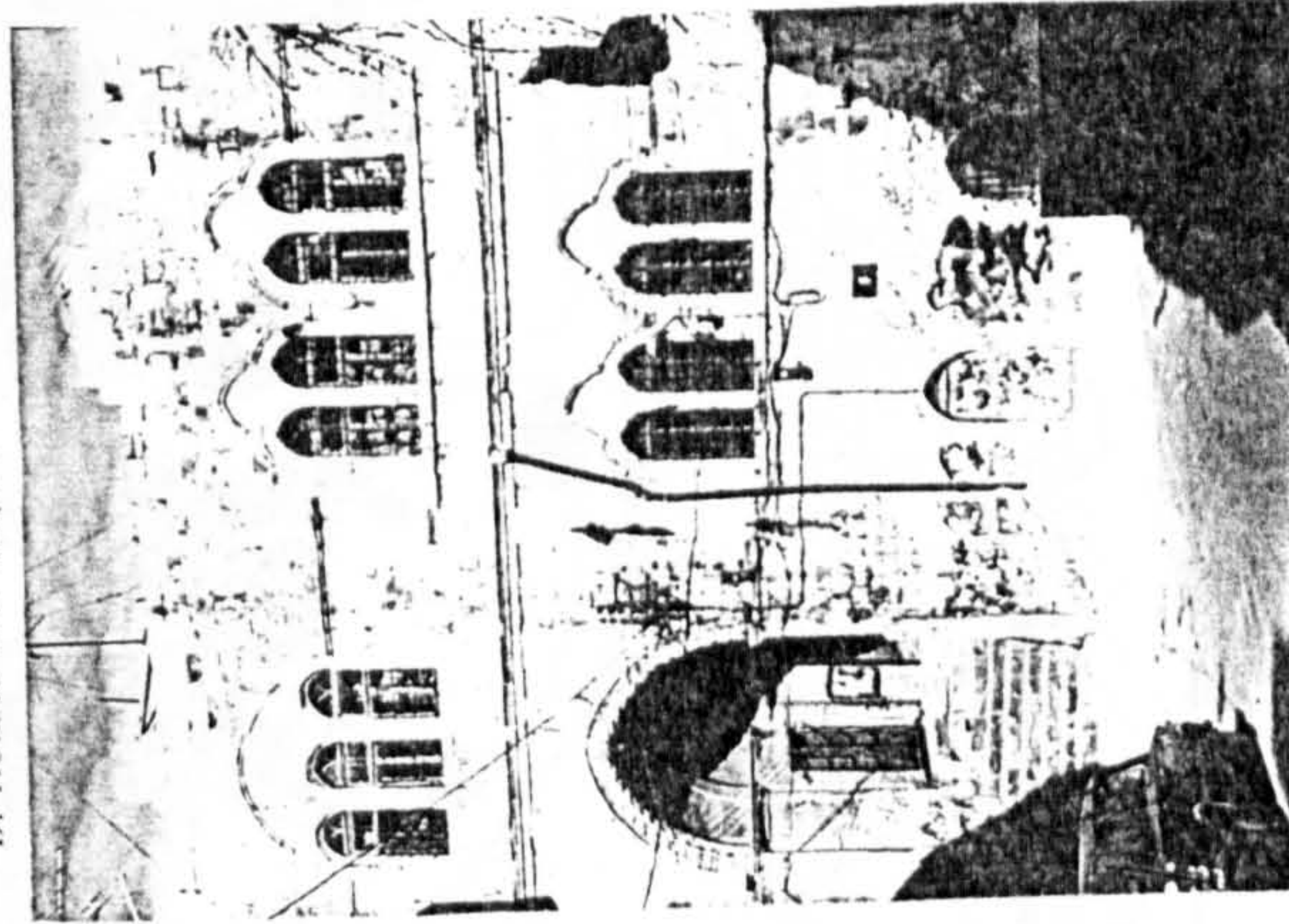
B. Houses over shops (in black). While most of the others are over storage places.



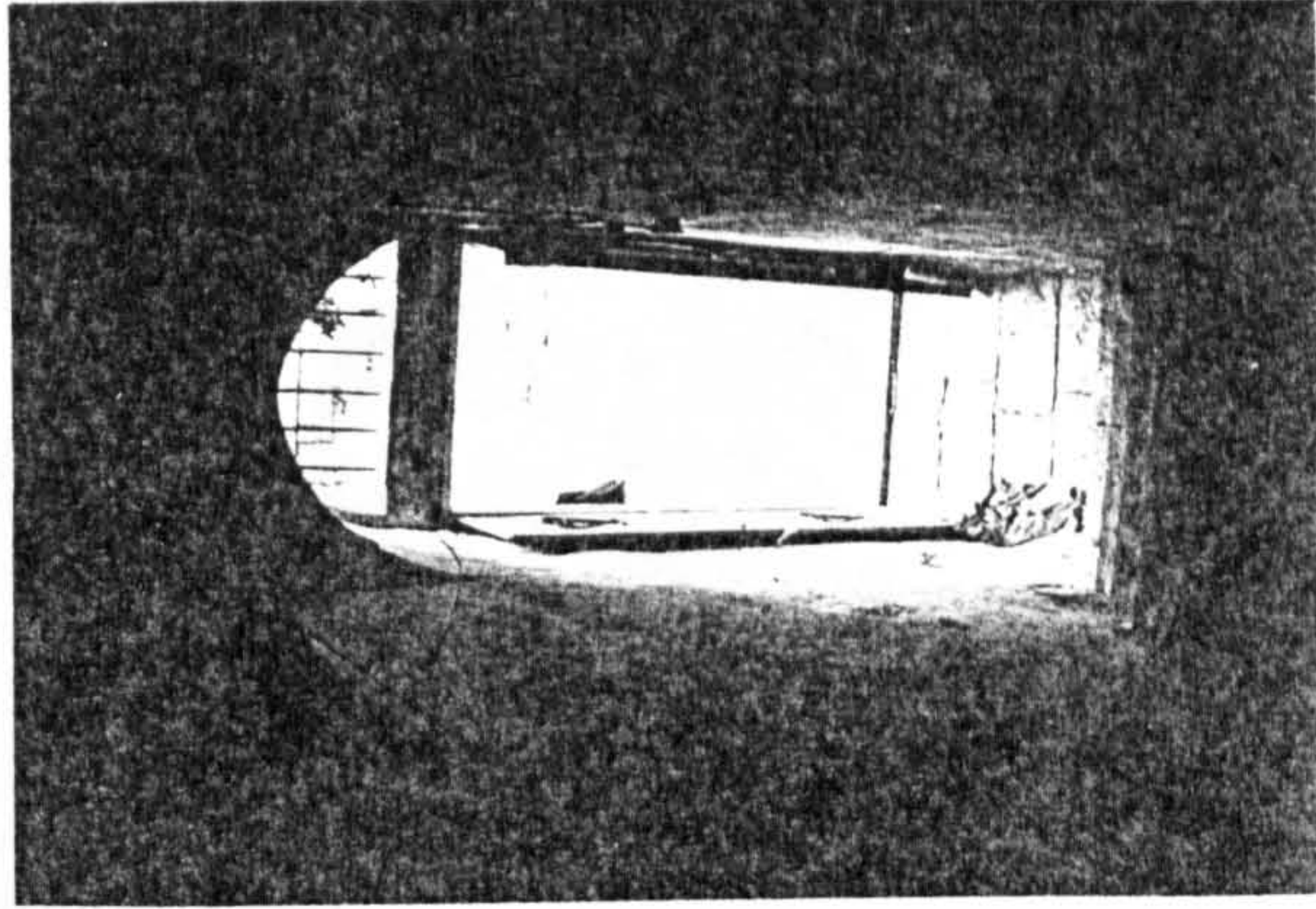
C. Houses over commercial shops in Al-Nasr street one of the two main streets in the Old Town.



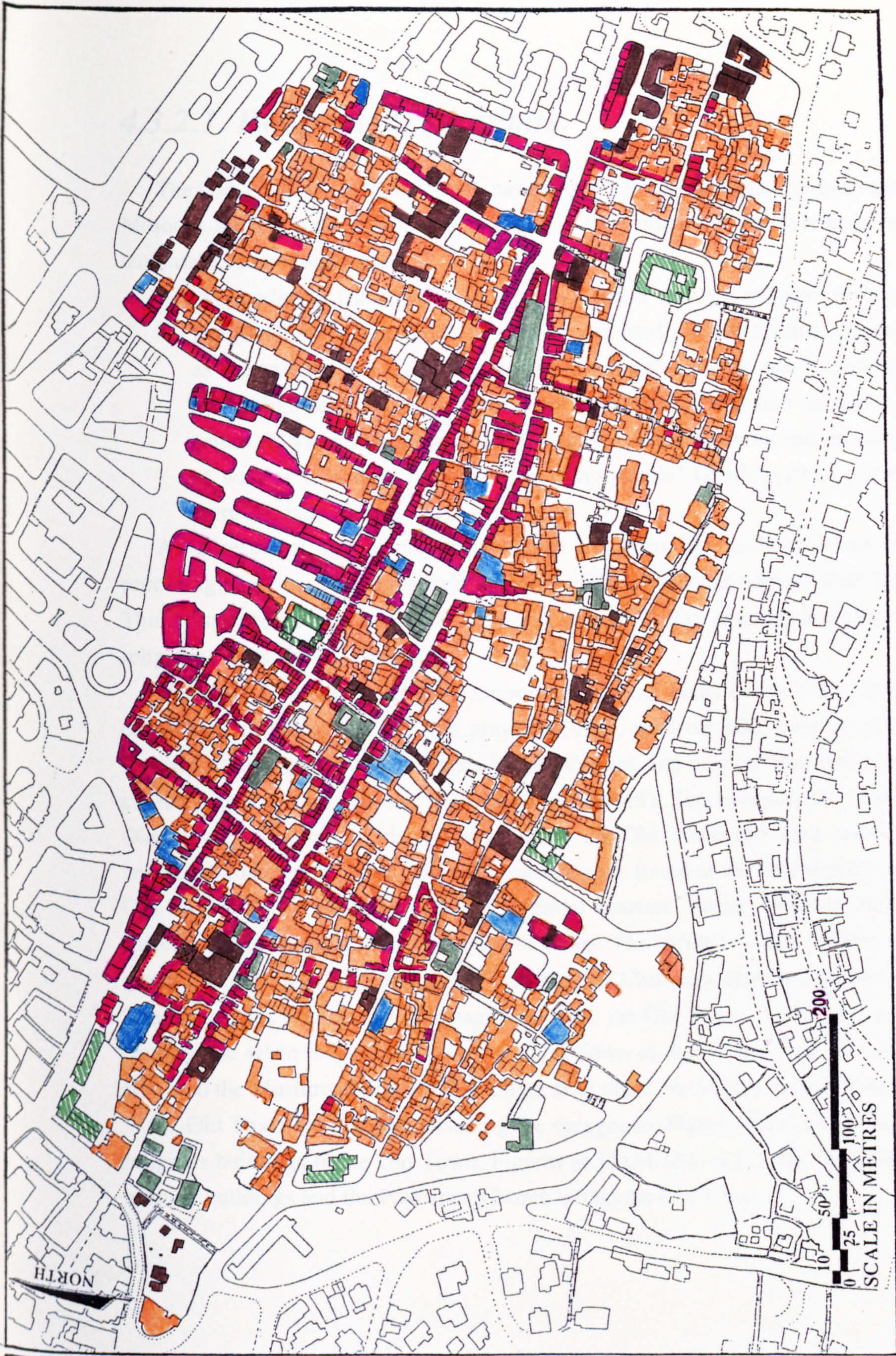
F. An un-covered staircase leads up to a housing unit within commercial streets. Source: Courtesy of Dr. Burgoyne, 1987.



E. A residential building within a residential street. Notice the storage doors on the street level and the height of the windows. Source: Courtesy of An-Najah University Archal students, 1989.



G. A covered stair case. Source: Courtesy of An-Najah University Archal students, 1989.



- Residential
- Religious
- Commercial
- Industrial
- Educational
- Recreational
- Open Spaces.

Figure (4.13): The land use plan of the Old Town.

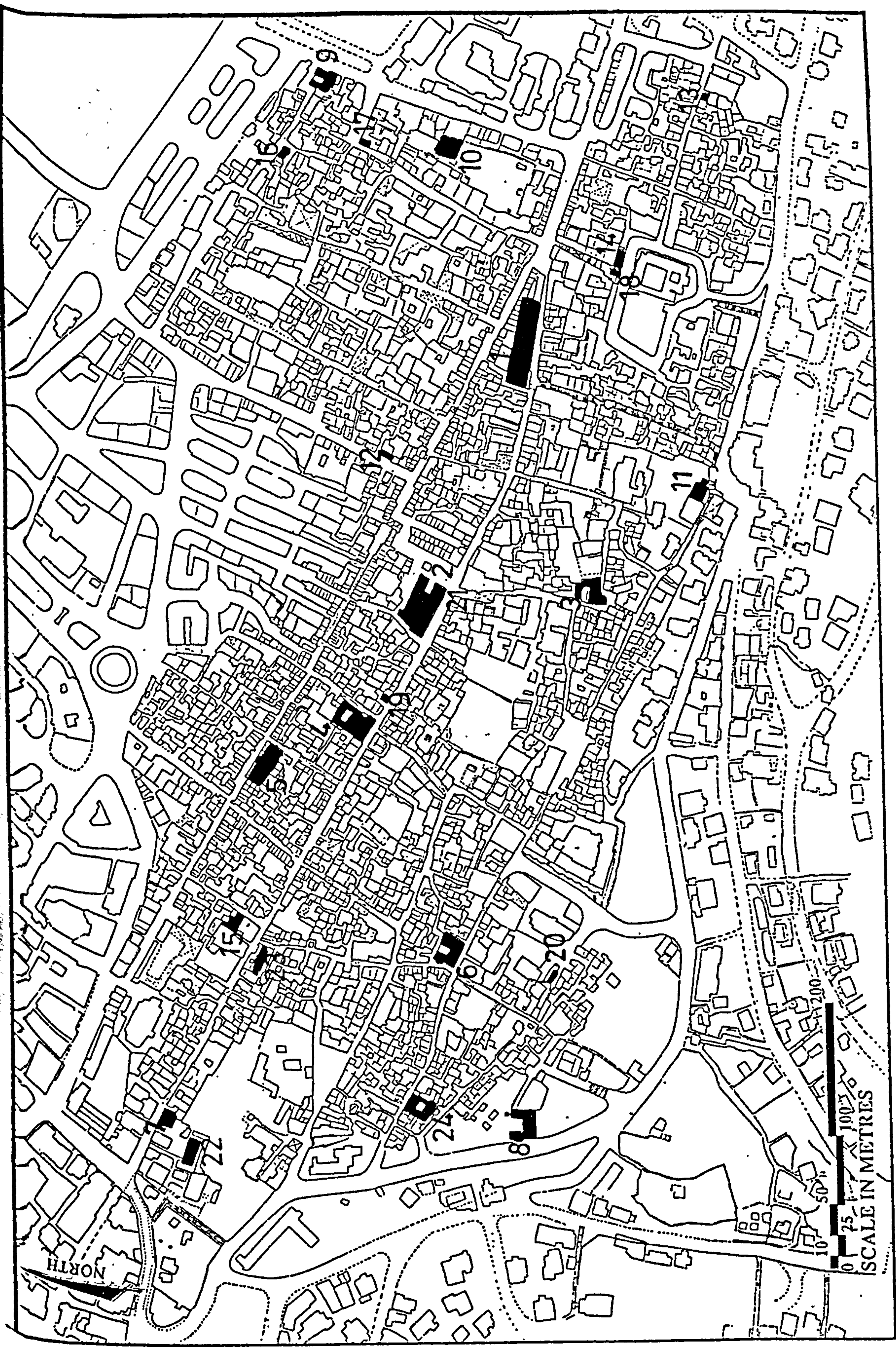
4.3.2.1. Religious Institutions.

The Old Town as an Islamic town has many religious buildings, mosques and shrines. Mosques are the most important, and usually they dominate the townscape with their landmarks; domes and minarets.

"In medieval Islam, religion, law, education and government were so integrated that an orthodox Moslem would hardly try to distinguish them as separate entities. Therefore, the classic Jamec; mosque was to function as a religious entity, a court of justice, and intellectual and educational centre. It was also a place of secular activity, such as eating and drinking, as well as providing recreation for many people" (Ziadeh,(1953) quoted from (Ismail, 1969, p.142).

As a result of the town expanded and the need for public services multiplied accordingly, most of the mosque's functions were distributed among other institutions. Thus, mosques became predominantly sanctuaries for the practice and observance of religious duties (Ismail, 1969).

The daily five prayers used to control the working hours in the town. The working day started at dawn, after the first prayer; *Al-Fajr*, until the after noon prayer; *Al-Asr*, for men attending educational circles in the mosques, and until *Al-Maghreb* prayer at the sunset, for other men (Nimir, 1975, vol.2, pp.309-19). Ten mosques are existing in the Old Town. Many of the historic mosques in the Old Town had been converted from ancient churches or temples. The main mosques are found in the commercial core of the Old Town. Others were found near residential quarters. Beside mosques there are five shrines; *Zawayah*, pl. *Zawiyah*, in the Old Town. The shrine is a place where an Islamic group proceeds with their liturgies. There are two Christians churches in the Old Town. The Samaritans used to have a synagogue within the Old Town. At the beginning of this century and when they moved out of the Old Town to the western side of the city, they sold it to the Muslims (Nimir,1975), called after them. Nowadays most of their buildings in the Old Town are deserted including the synagogue. Figure (4.14) shows the different religious buildings in the Old Town. Figures (4.15),(4.16), (4.17) and (4.18) show three mosque buildings and the Protestant Church within the Old Town.

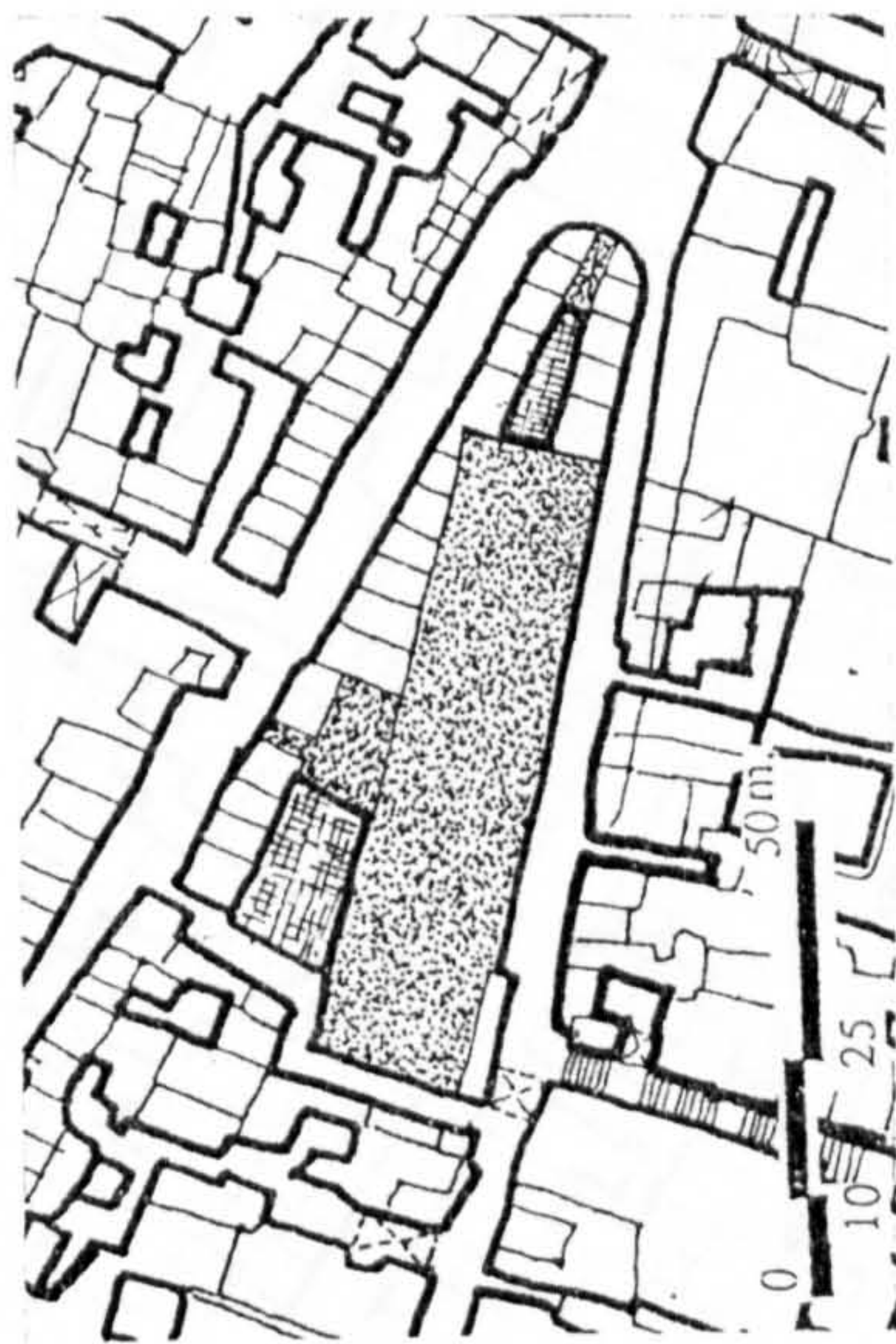


1. Jame^c Al-Kabir.
2. Jame^c Al-Nasr.
3. Jame^c Al-Tinah
4. Jame^c Al-Bayk.
5. Jame^c Al-Hanballi.
6. Jame^c Al-Saton
7. Jame^c Al-Khadir.
8. Jame^c Al-Khadrah.
9. Jame^c Al-Anbiya^c.
10. Jame^c Al-Masakin.
11. Jame^c Afaj.
12. Jame^c Sa^c d Ad-Din.
13. Zawiyet Al-Umarl.
14. Zawiyet Rifa^c iyyah.
15. Zawiyet Al-Tobani.
16. Maqam Al-Shaykh Badr.
17. Maqam Al-Shaykh Musallam.
18. Maqam Al-Khadir.
19. Maqam Al-Shaykh Badran.
20. Maqam Al-Shaykh Mas^c od.
21. Turbet Muhammad Tab^c a.
22. The Protestant Church.
23. The Greek Orthodox Church.

Figure (4.14): Religious buildings within the Old Town.



A. Location within the Old Town.



B. Site plan.

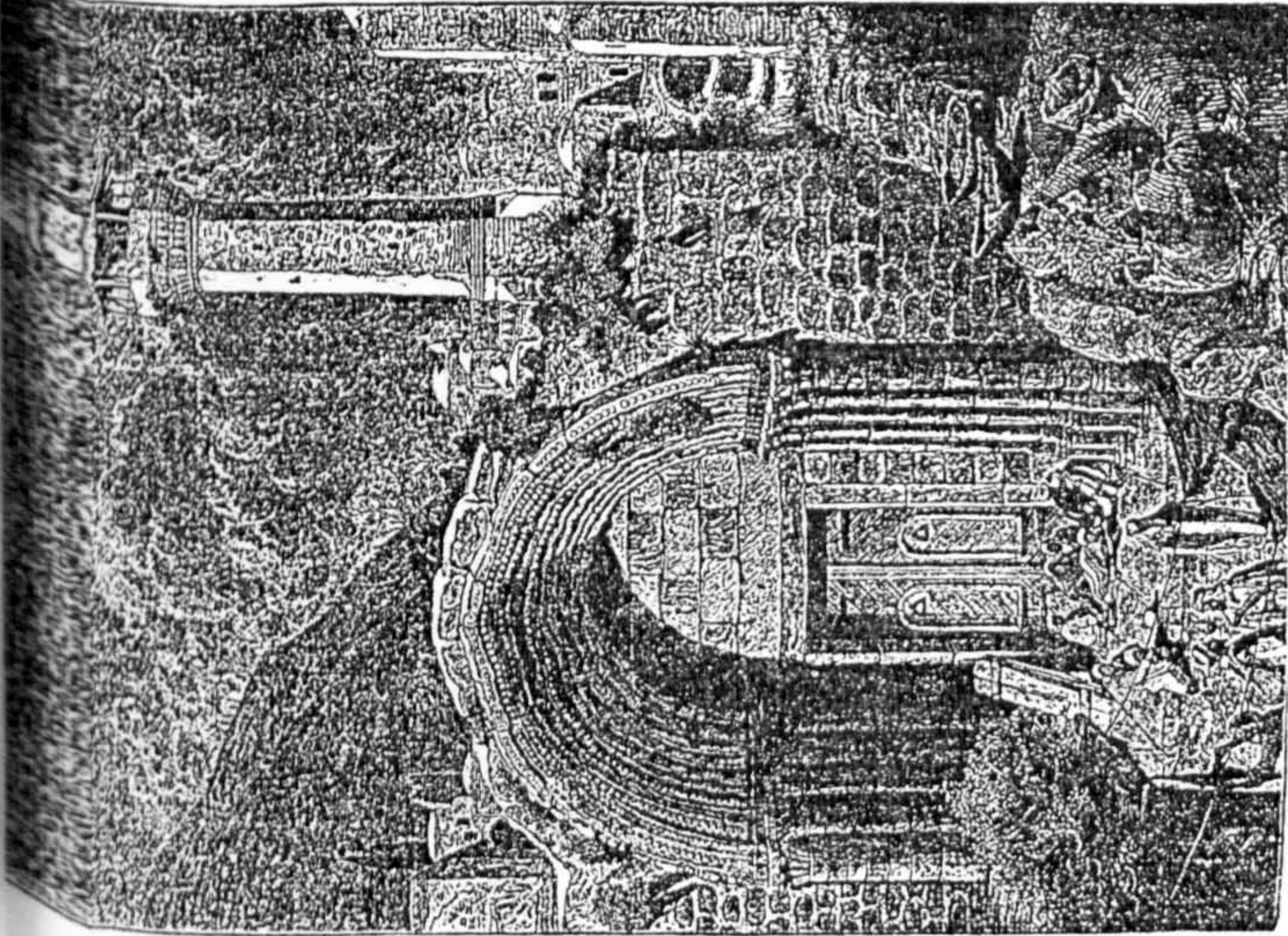
It is the largest mosque in the town, and so it was named; "The Great Mosque". It was a Byzantine church built by Emperor Justinian in the sixth century (Beshawy, 1984). The existing western portion seems to be a remnant of that basilica, as all the columns except one at that end have Corinthian capitals of perhaps a little earlier date than the one found in the church on Gerizim (Conder, 1882, p203), which was built also by Justinian in AD 531.

The Crusaders who found the basilica in ruins (Beshawy, 1984), rebuilt it as "Church of Resurrection" in 562-3/1167 (Benvenisti, 1970, p.165). They built it with a handsome gateway at the eastern end, which now is the main entrance of the mosque.

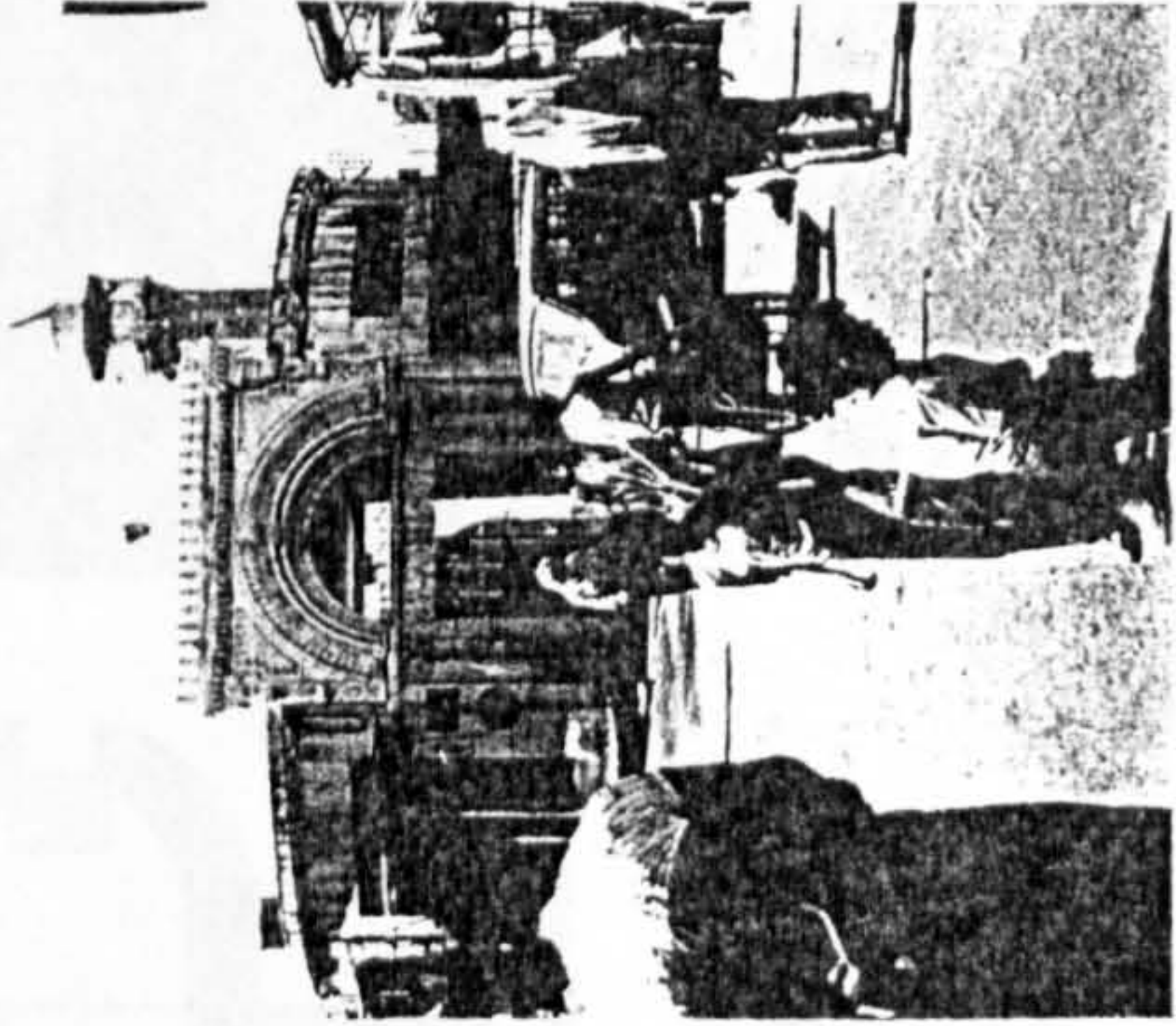
After 583/1187, when Salah Al-Din recaptured the town after the battle of Hattin, Muslims converted this church into a mosque and called it "Al-Masjed Al-Salahy Al-Kabir". The mosque was affected by the 1346/1927 earthquake, especially the eastern entrance, which nearly collapsed and later it was restored with the rest of the building by the Islamic Endowment Department.

The aisles are narrow, and if they were wider, the mosque would have had the dimensions of the Umayyad mosque of Damascus (Celebi, 1938, pp.138-9). Also the existing huge square pillars (1.5-2.0 metres each side), counted as 13 pillars, decrease the efficiency of the prayer hall. The old prayer niche, which was the church entrance (Celebi, 1938, p.139), was very spacious and used to hold twenty persons, but the existing one is smaller (about 2 metres wide).

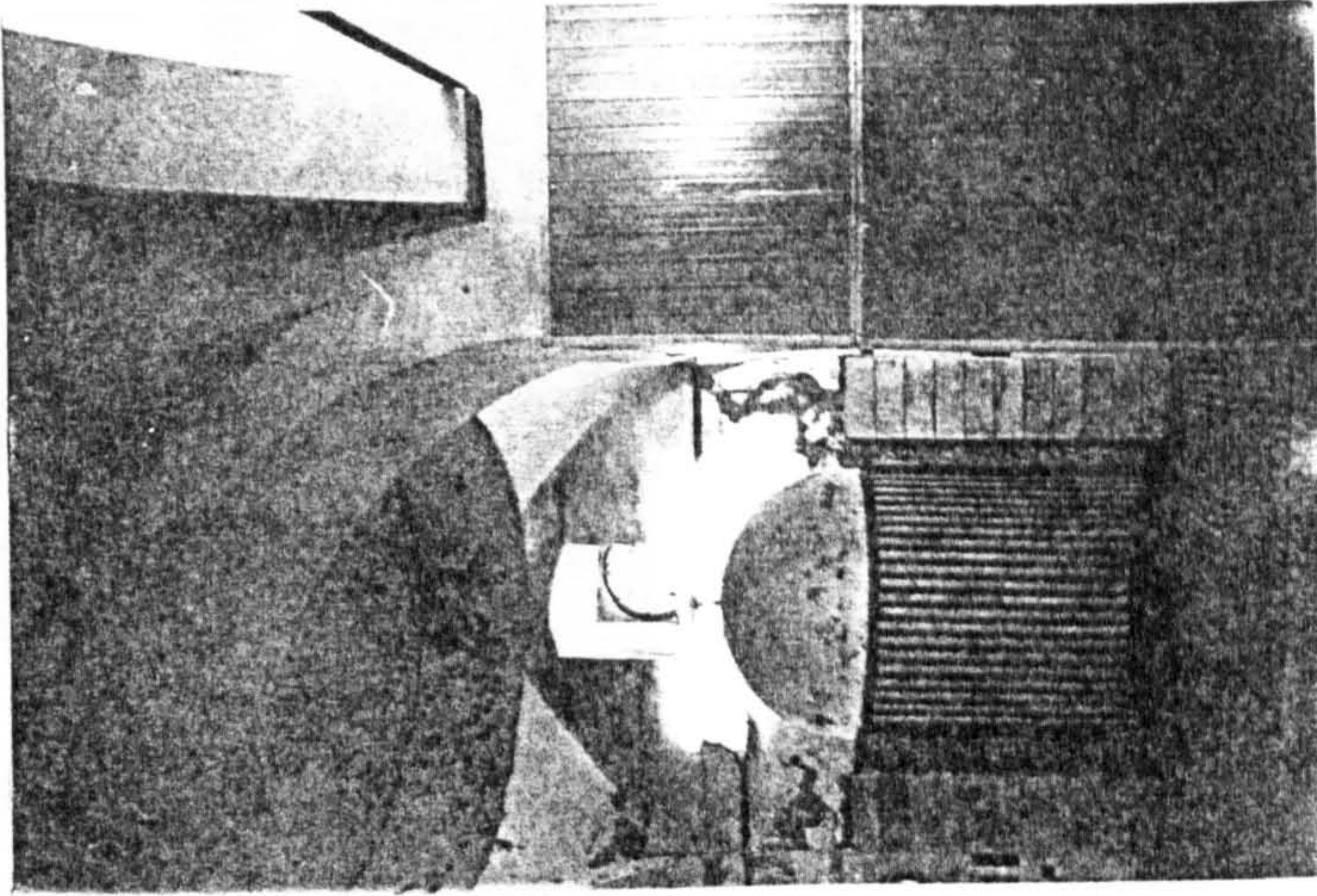
Figure (4.15): The Great Mosque; Jamec Al-Kabir.



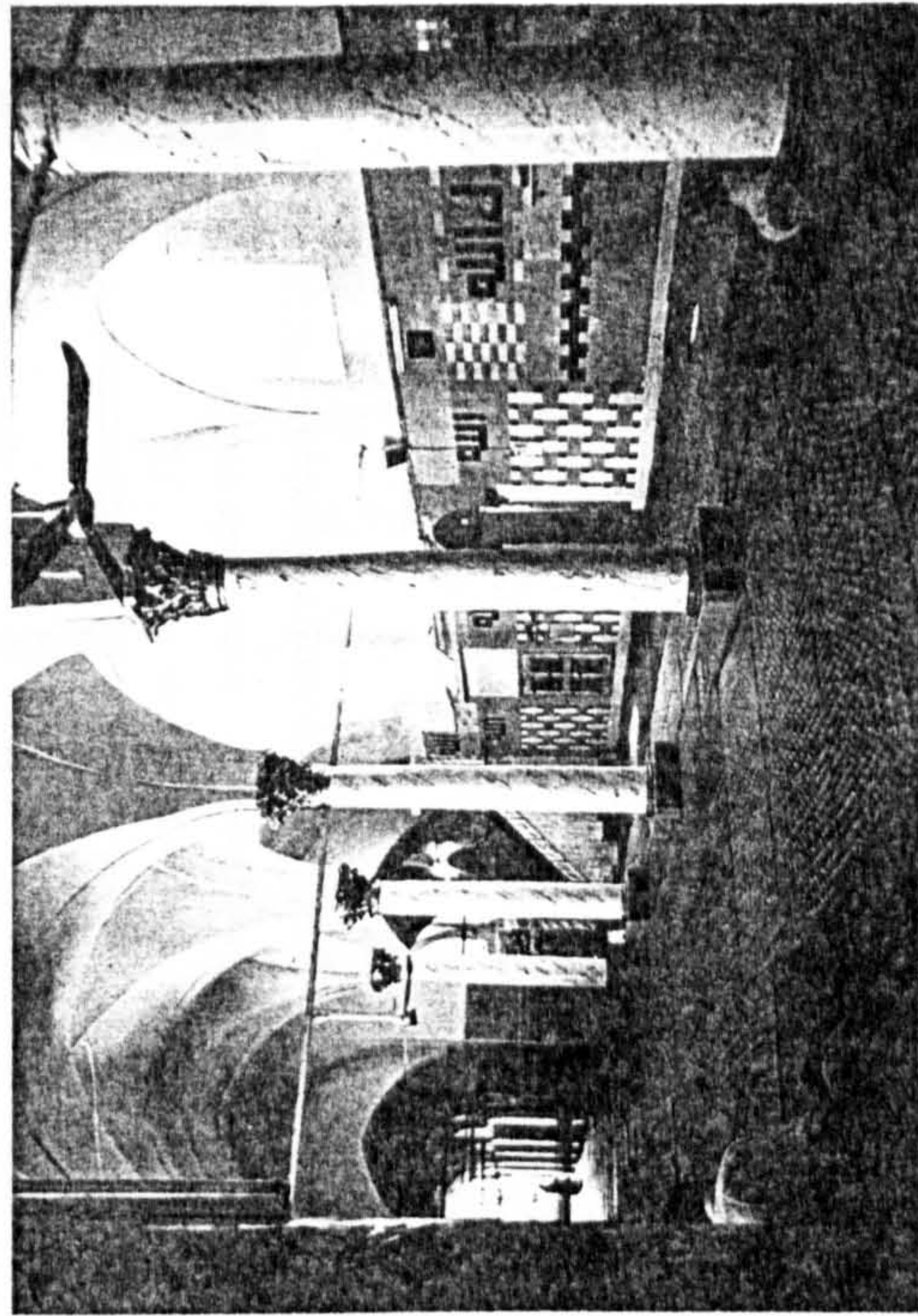
C. The eastern entrance of the Great Mosque in 1860s. Source: (Wilson, no date, vol.2).



D. The eastern entrance of the Great Mosque in 1989.



E. The Minaret. Source: Courtesy of Dr Burgoyne, 1987.



F. An interior view. Source: Courtesy of Dr Burgoyne, 1987.



A. Location within the Old Town.

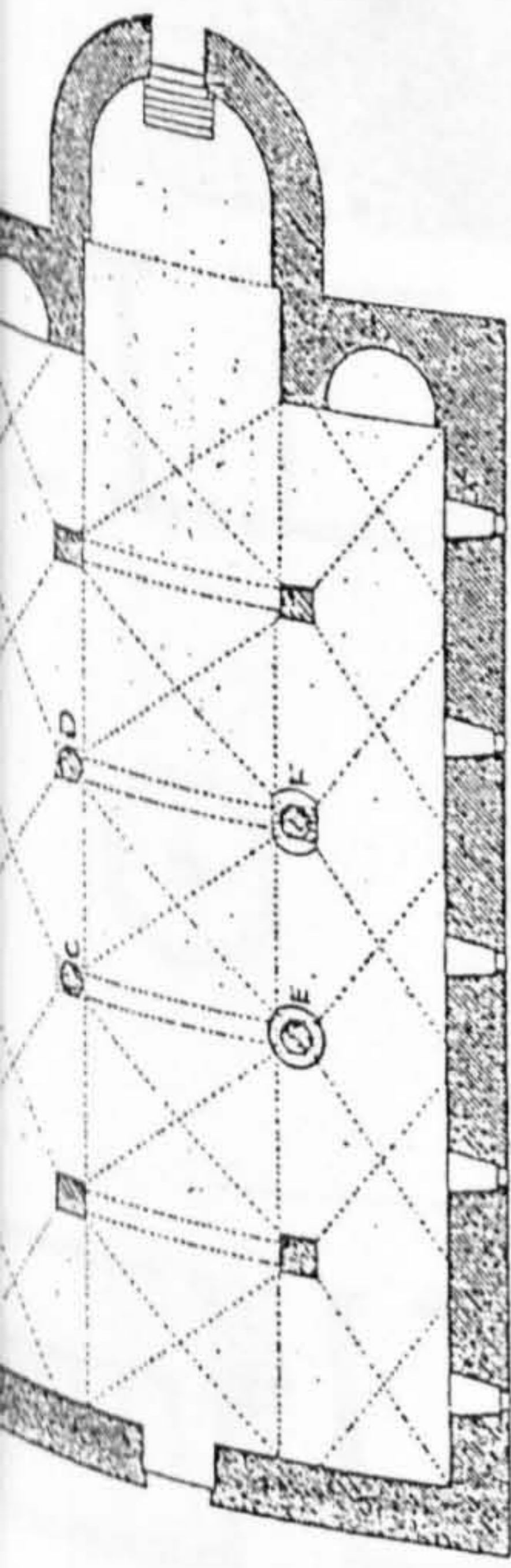


B. Site plan.

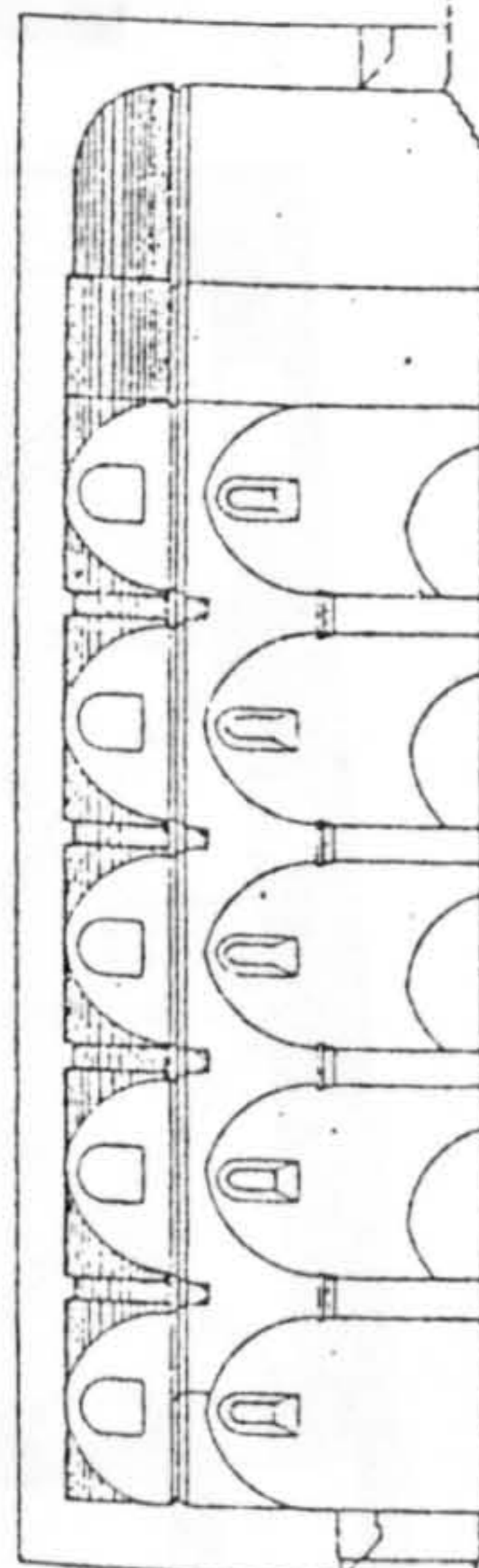
This mosque is one of the important landmarks in the Old Town. It is on the main town square; Sahet Al-Manarah. Initially the building was a Roman Temple (Fanni, unpublished paper), and in the second century it became a Byzantine monastery (Celebi, 1938, p.139), then the Crusaders restored it as the church of the Templum Domini (Benvenisti, 1970, p.165). It was converted into a mosque when Salah Al-Din recaptured the town. It was called "Jamec Al-Nasr"; which means "the Victory mosque". In its east-southern part, Muslims parried their martyrs. (Dabbagh, 1964, pp.225-6).

The original building used to be a rectangular building with three aisles. The eastern entrance was by the central apse, which was opened through a flight of six steps up to the street. The arches were pointed. The walls of the aisles were each pierced with five narrow windows with wide reveals (Celebi, 1938, p.139). In 1346/1927 earthquake the mosques were completely collapsed and remained like so till 1354/1935 when the Higher Islamic Council rebuild it over commercial shops.

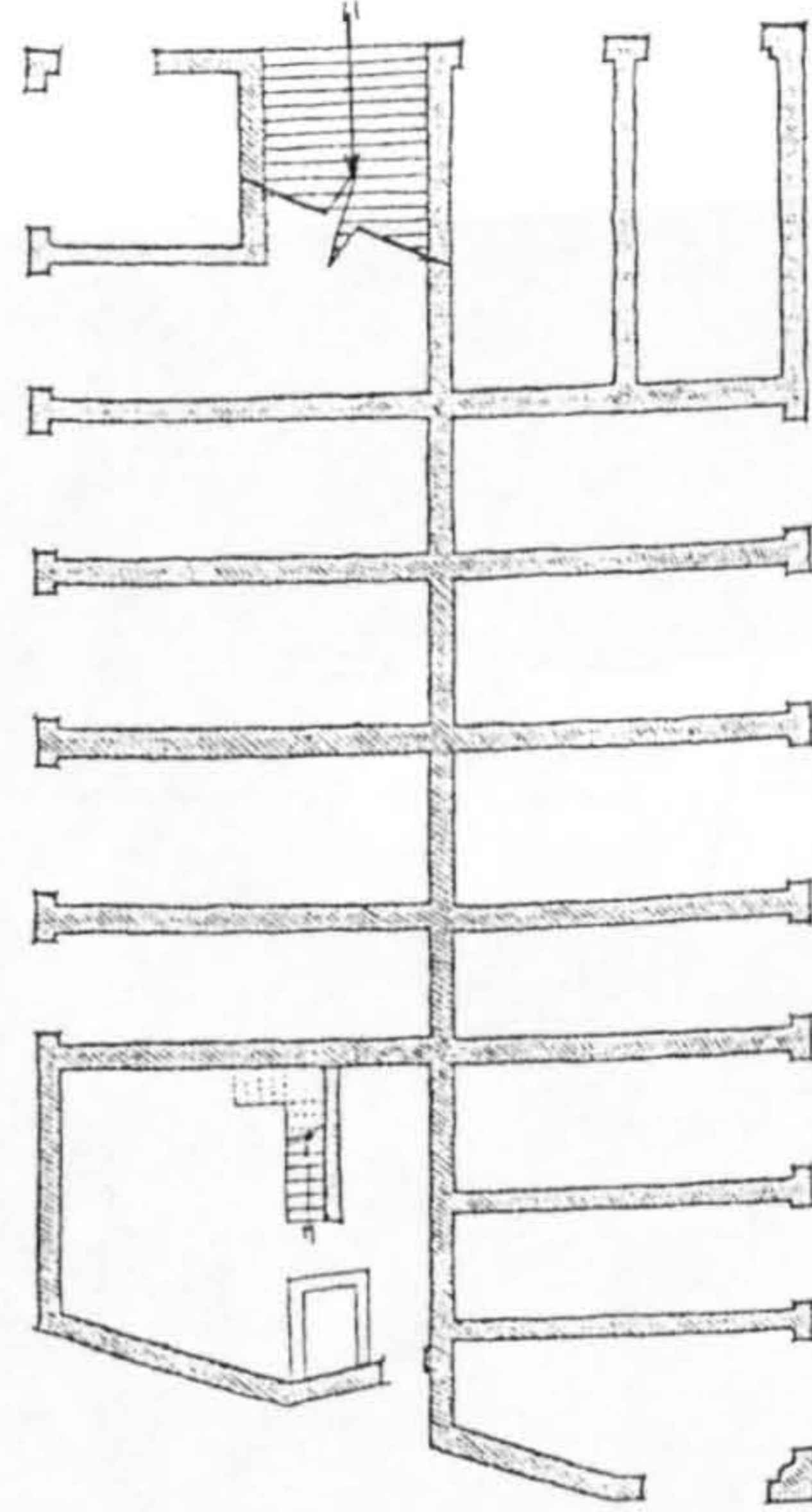
Figure (4.16): Jamec Al-Nasr.



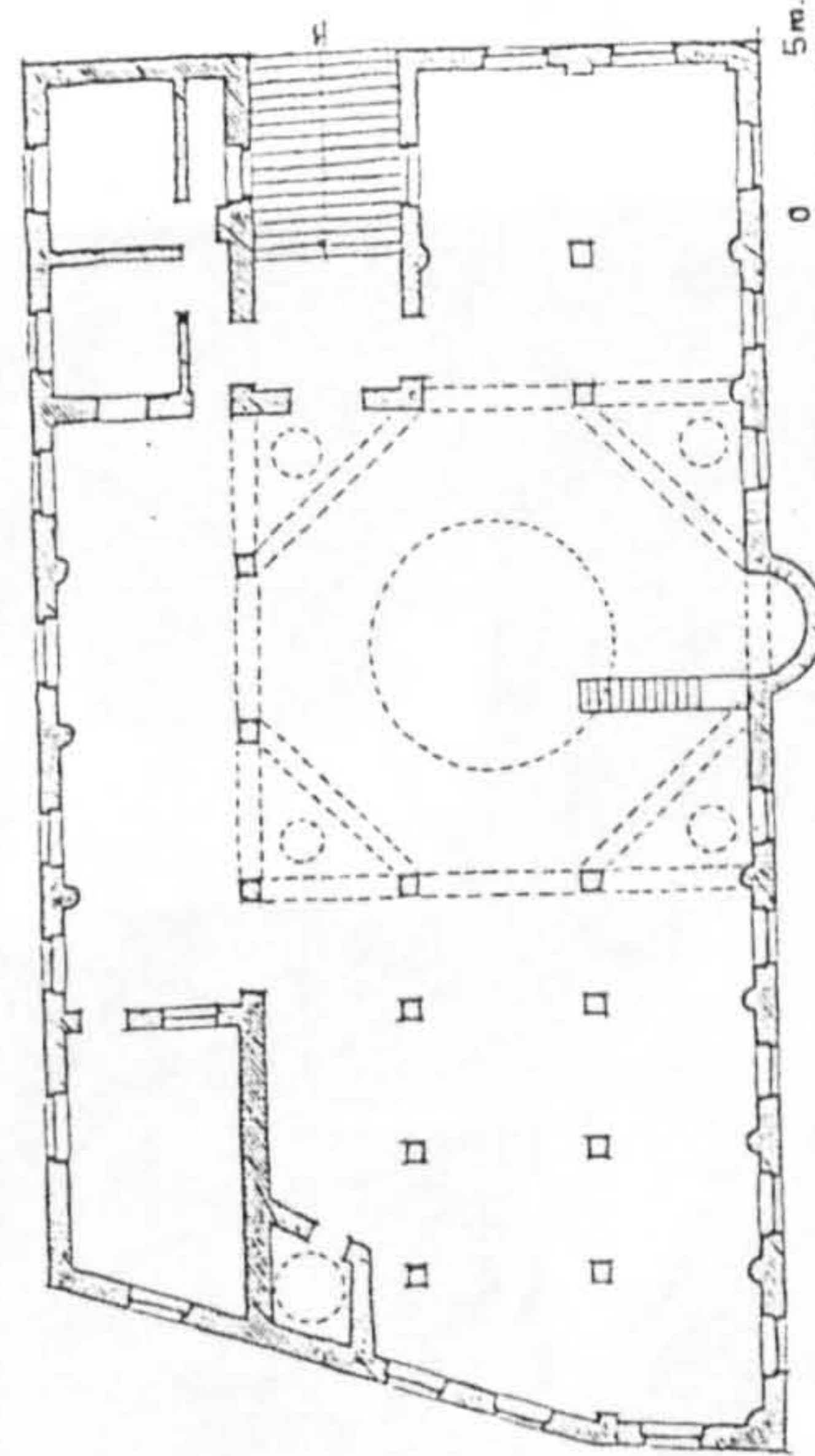
C. Original plan before the 1927 earthquake. Source: (Clermont-Ganneau, 1896).



D. Longitudinal section of the original mosque. Source: (Clermont-Ganneau, 1896).



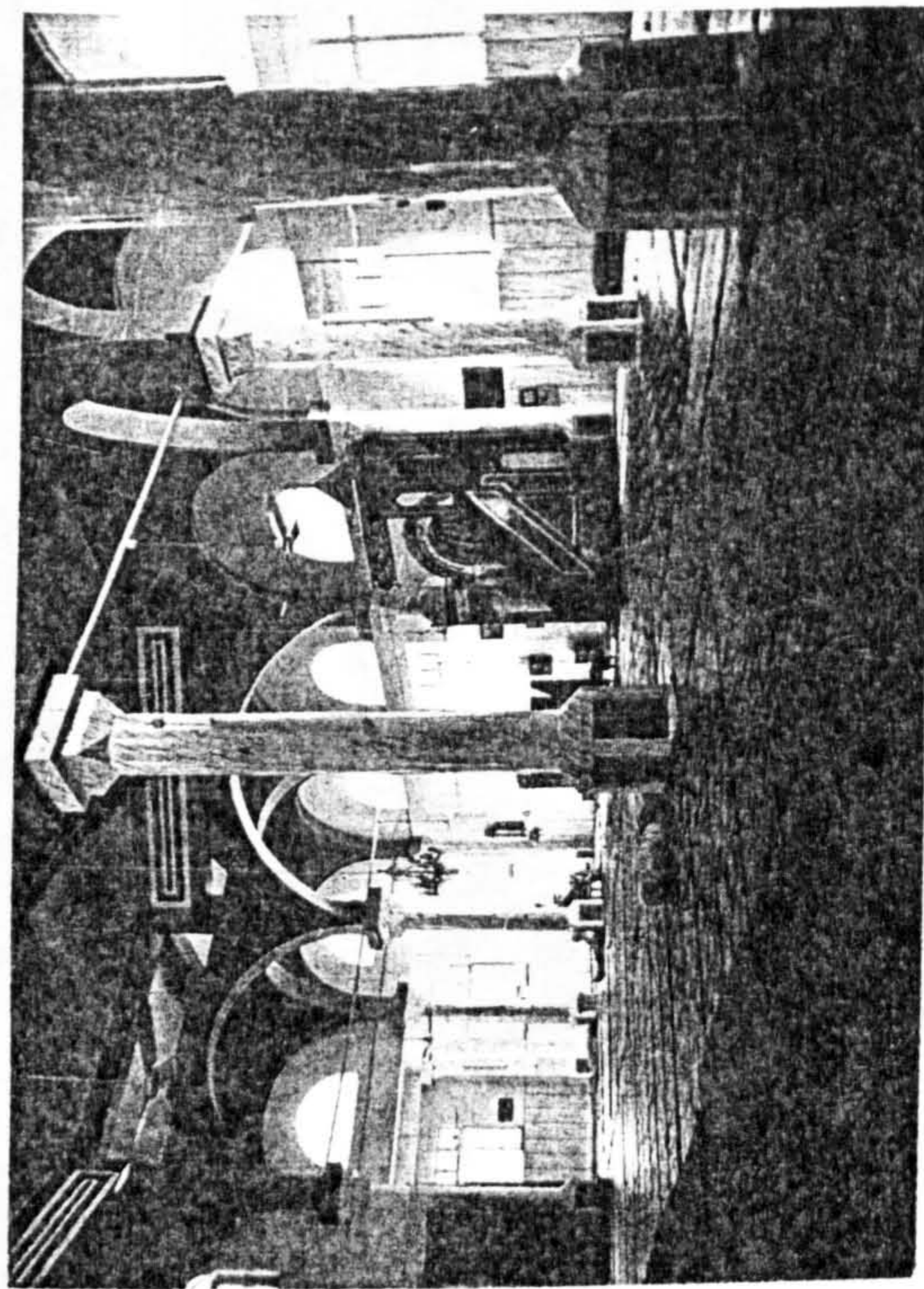
E. Ground floor of the existing mosque. Source: Courtesy of An-Najah University Arch.al students, 1989.



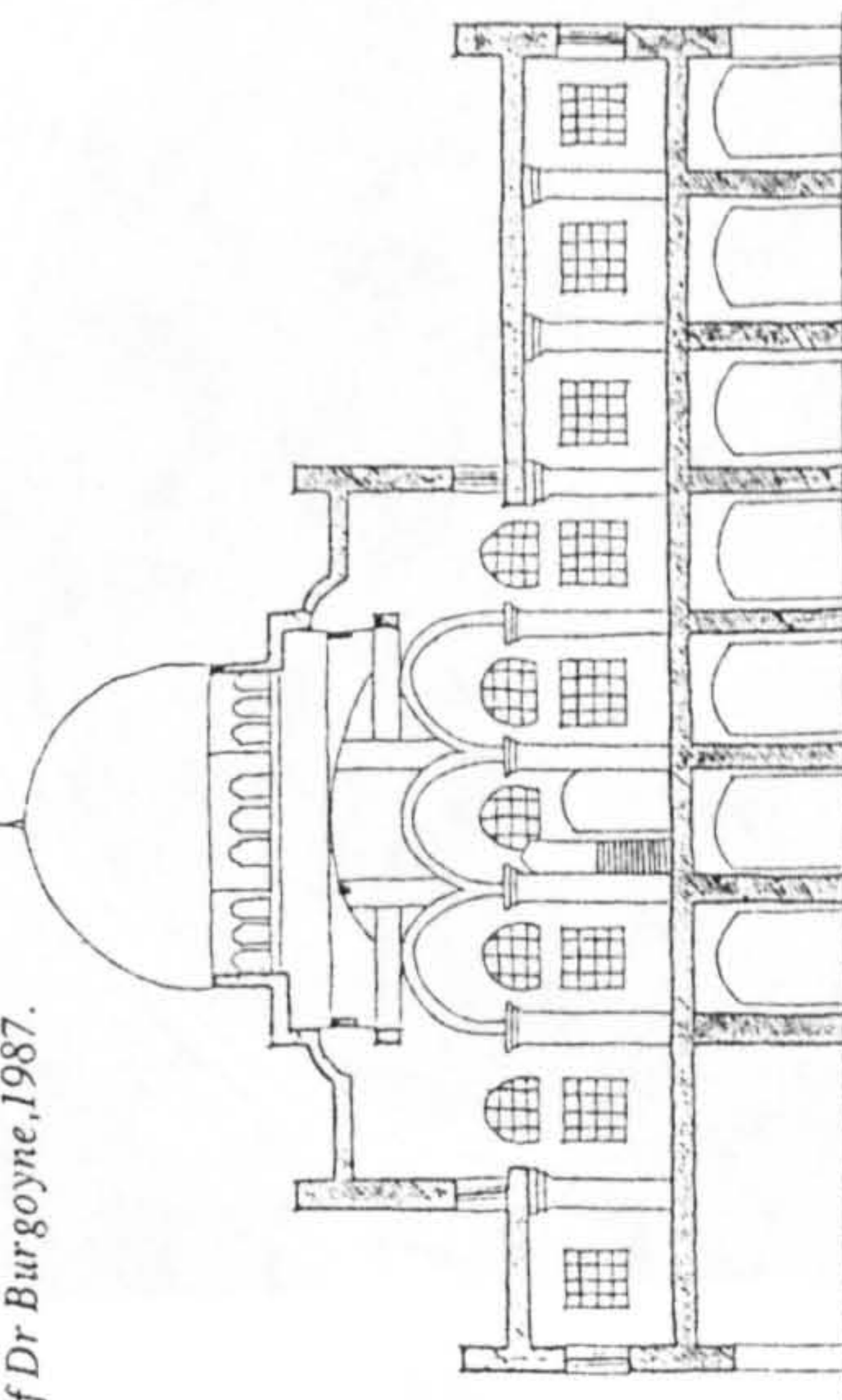
F. First floor plan of the existing mosque. Source: Courtesy of An-Najah University Arch.al students, 1989.



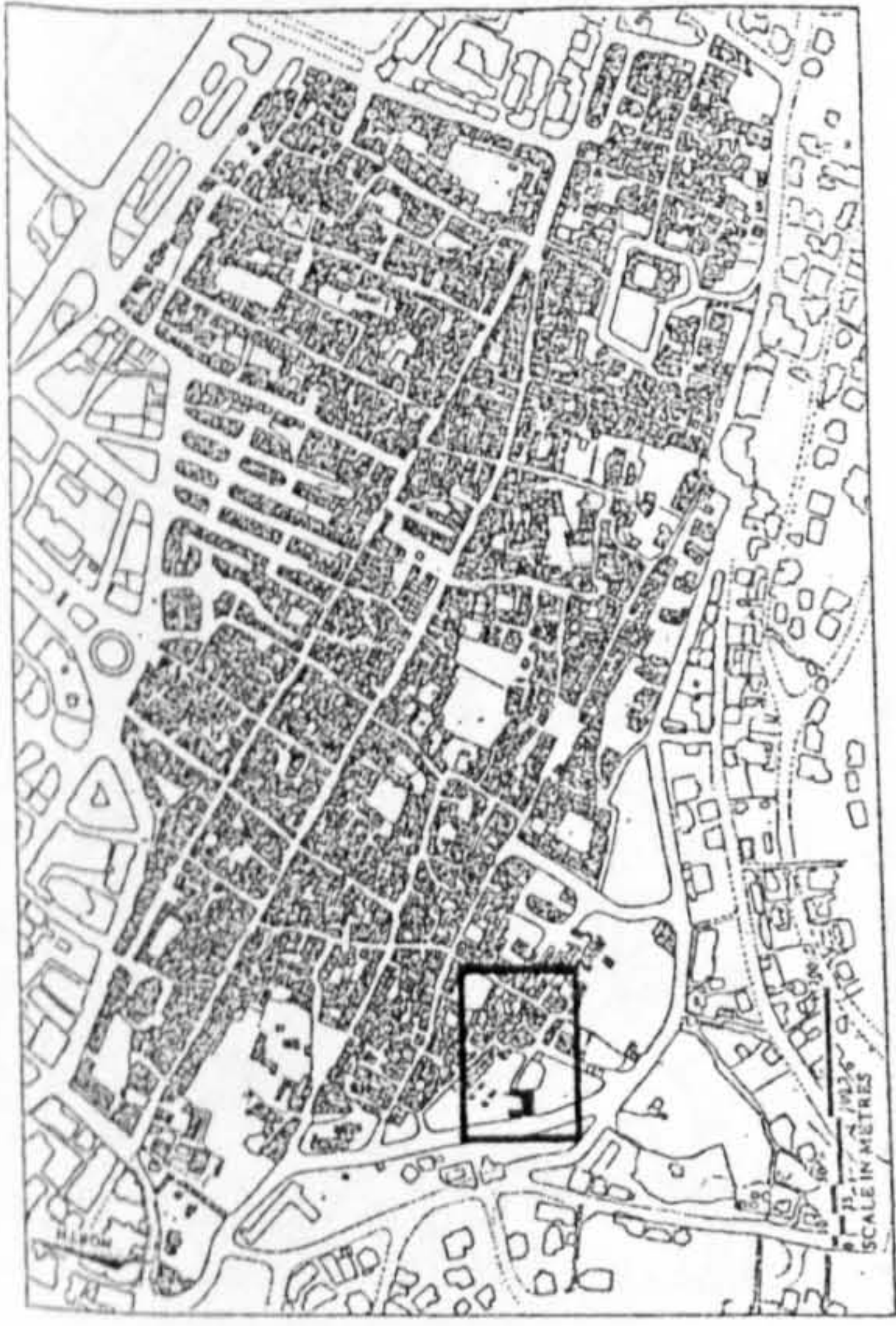
G. An exterior view from the northern slopes of Mount Gerizim. Source: Courtesy of An-Najah University Arch.al students, 1989.



H. An interior view. Source: Courtesy of Dr Burgoyne, 1987.



I. Longitudinal section of the existing mosque. Source: Courtesy of An-Najah University Arch.al students, 1989.



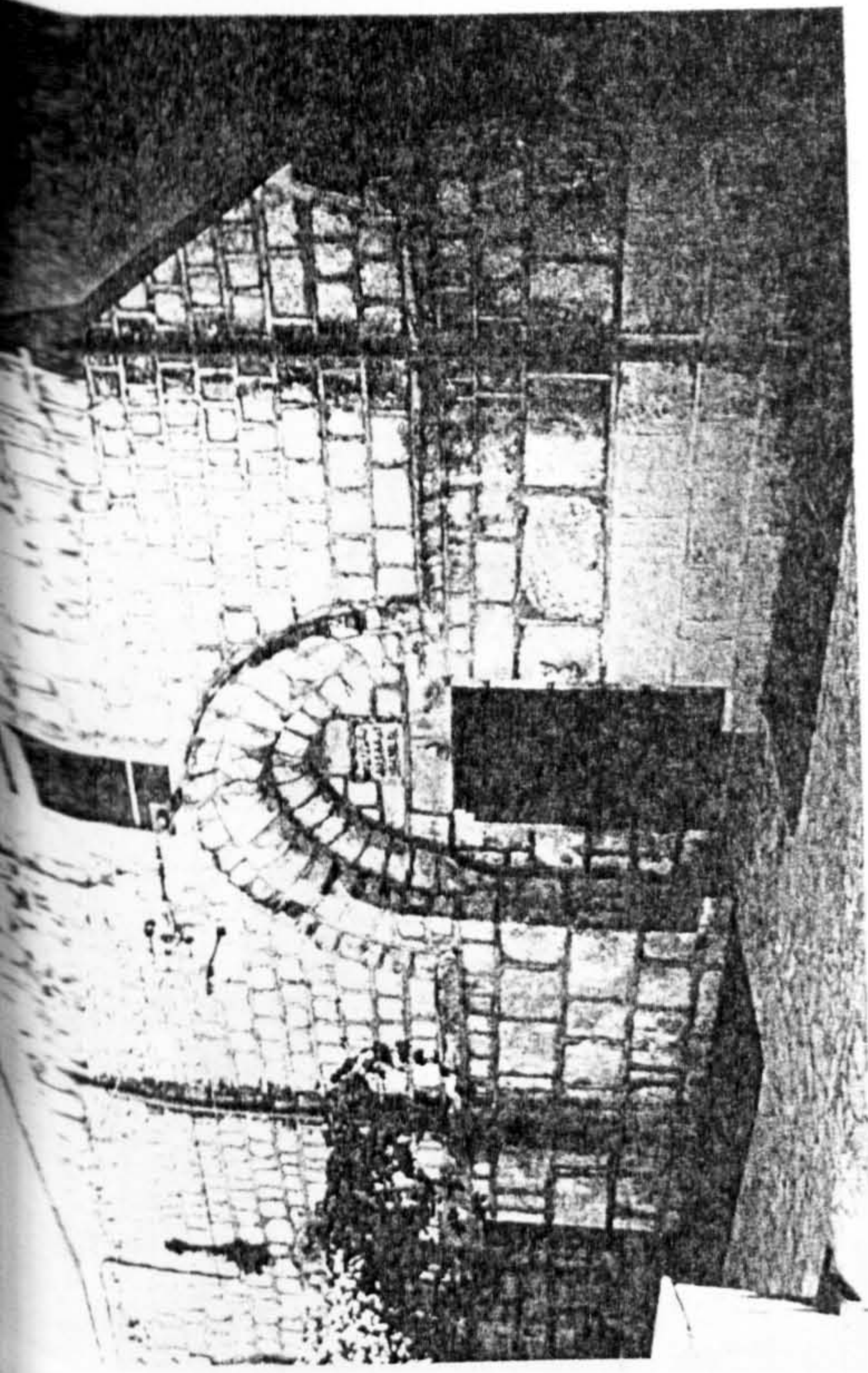
A. Location within the Old Town.



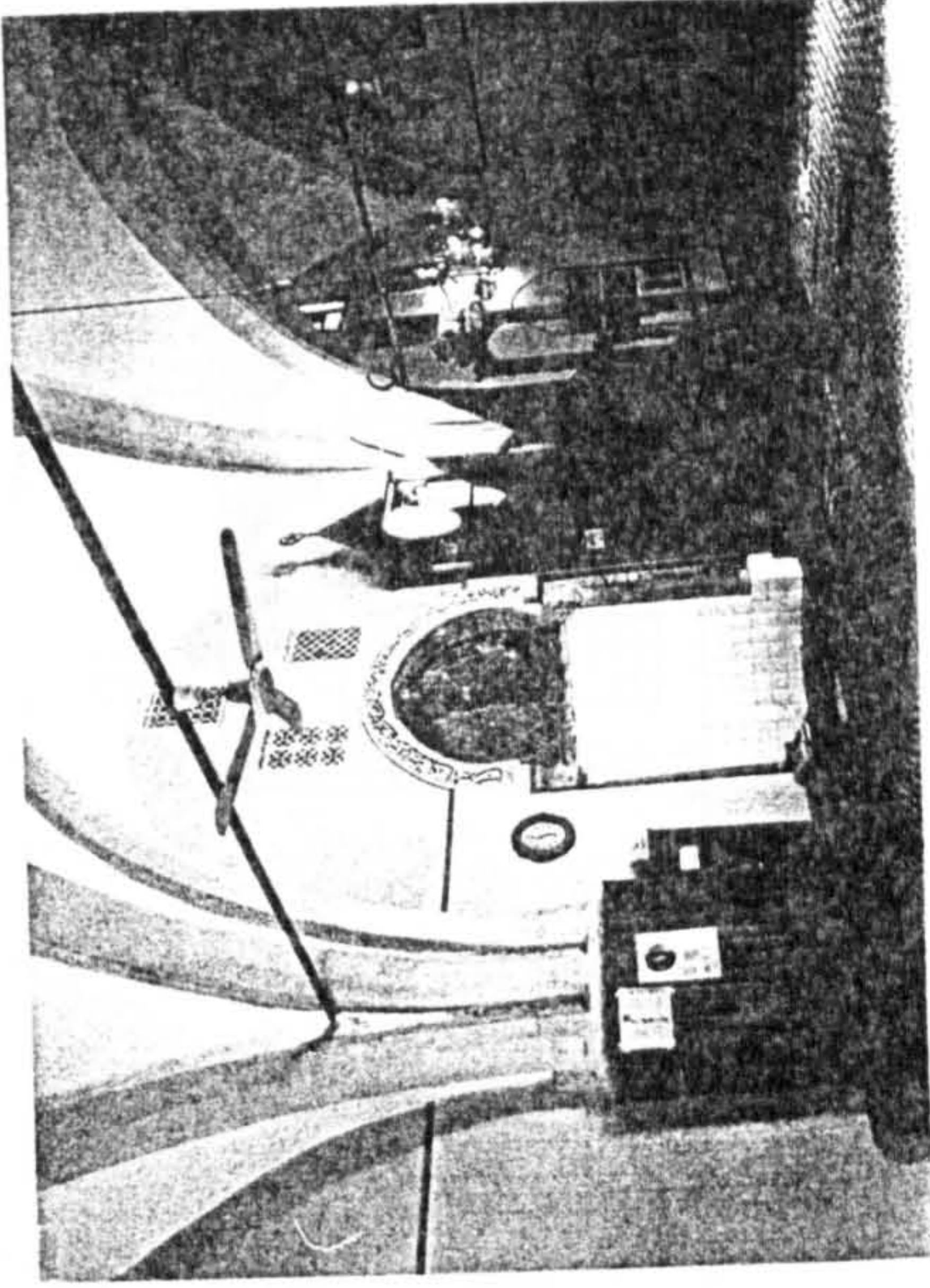
B. Site plan.

Jamec Al-Khadrah; "the green mosque" is at the south western side of the town, immediately outside the old wall, were Jacob wept for the loss of his son, Joseph, hence its name; "Huzun sidna Ya'qub"; "the weeping of Jacob" (Clermont-Ganneau, 1896, vol.2., p.314). It was founded in the fifth century AD as a Samaritan synagogue (Conder, 1882, vol.II, p.203). A long Samaritan inscription was found at the base of the square minaret away from the existing building. This minaret completely differs from other minarets in the Old Town (Jausen, 1927.b, pp.95-6). In the early Islamic period, particularly in Al-Mu'tasem time (218-27/833-42), the synagogue was destroyed, and later the Samaritans rebuild it again, it was converted into a mosque (Clermont-Ganneau, 1896, vol.2, p.314). The Crusaders replace the mosque by a chapel, then during the Mamluks period; Qalawon (678-89/1279-90) converted it into a mosque, as the inscription above its main entrance says (Jausen, 1927.b, p.95-6). Eviyya Tshelibi visited Nablus in 1640s and described the mosque as a square building measuring eighty-seven paces each side (Conder, 1882, p.203).

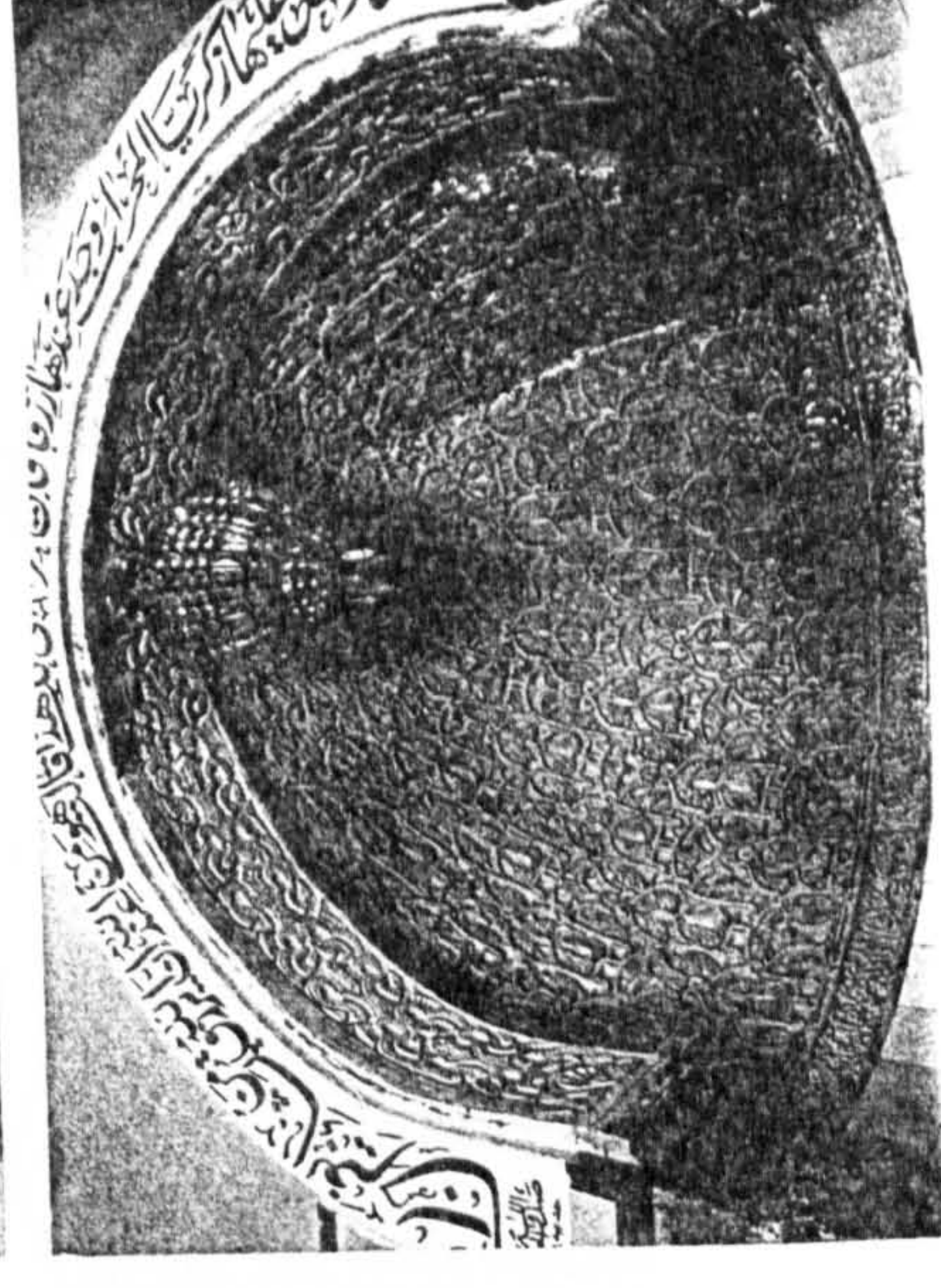
Figure (4.17): Jamec Al-Khadrah.



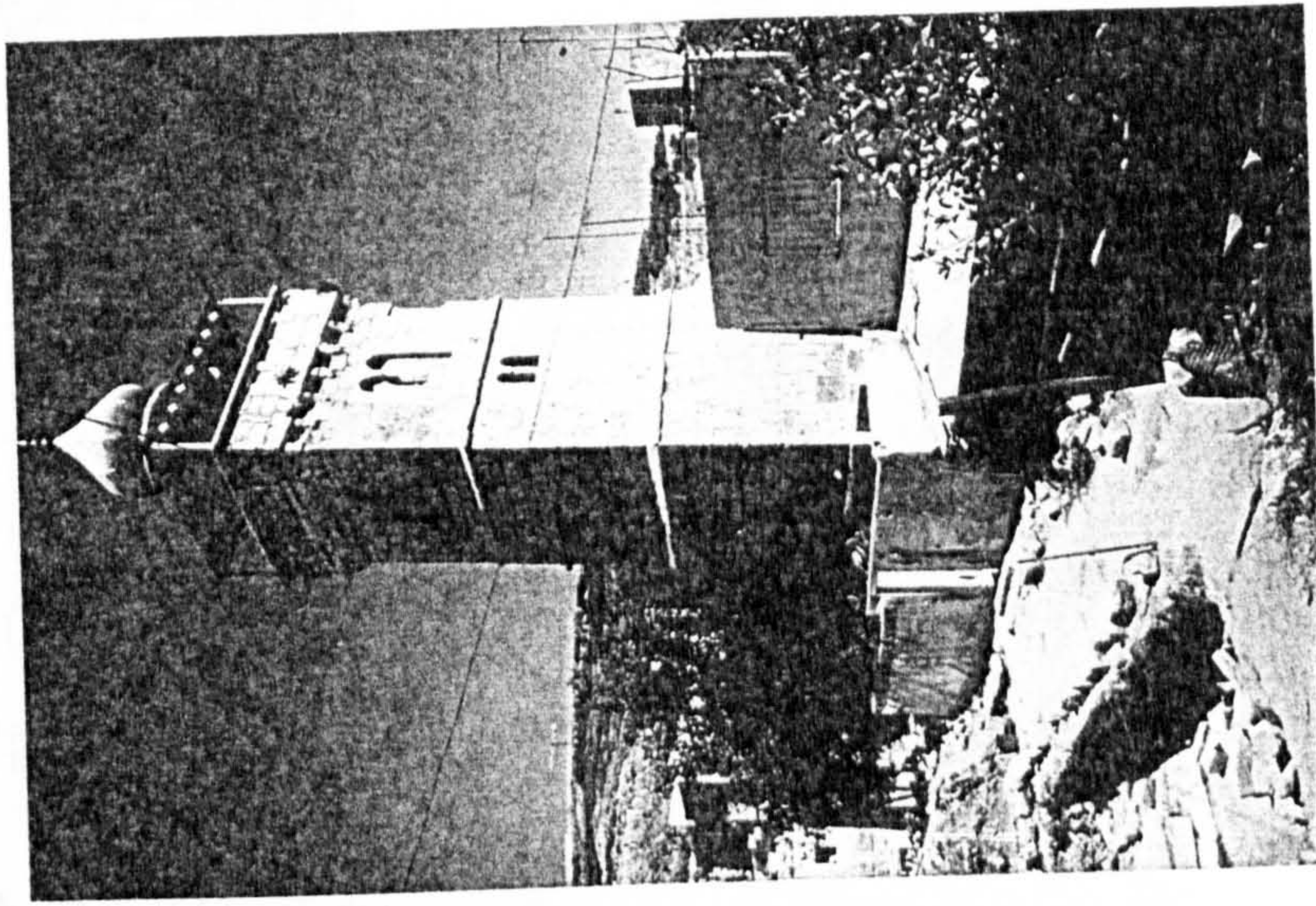
D. West elevation. Source: (Burgoyne, 1987).



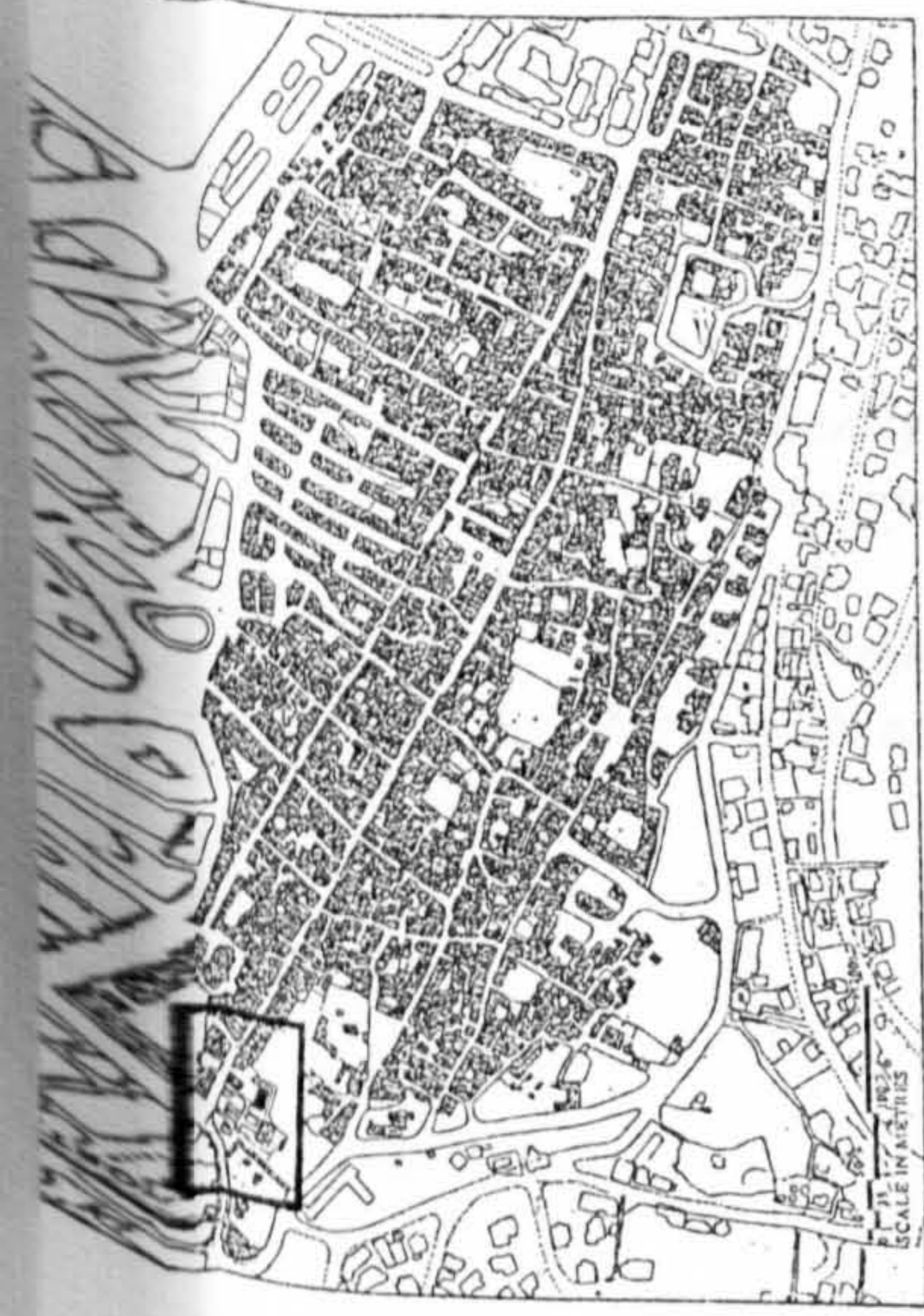
F. An interior view.
Source:
(Burgoyne, 1987).



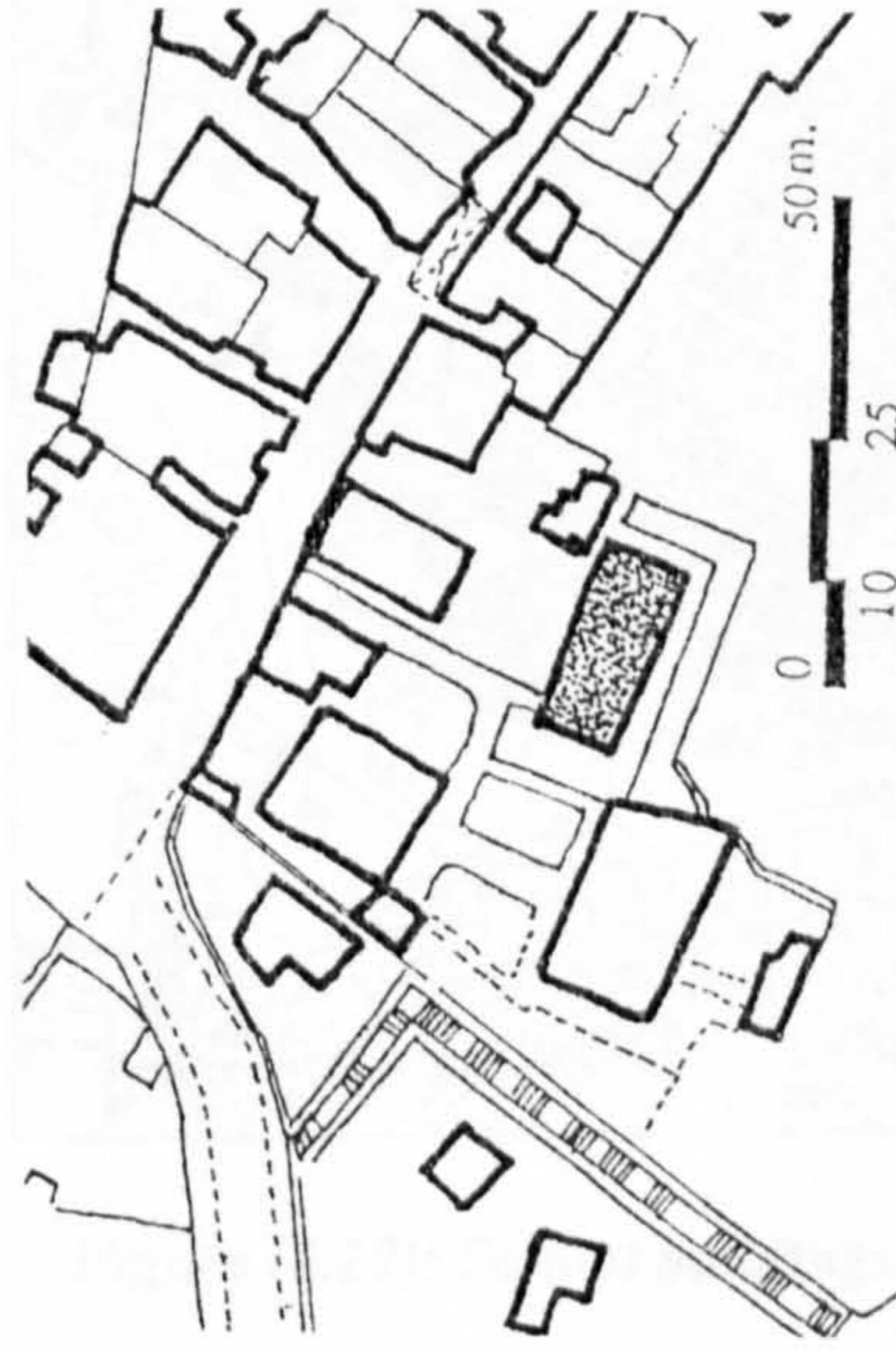
G. The Mihrab decoration.
Source: (Burgoyne, 1987).



E. The minaret. Source: (Burgoyne, 1987).

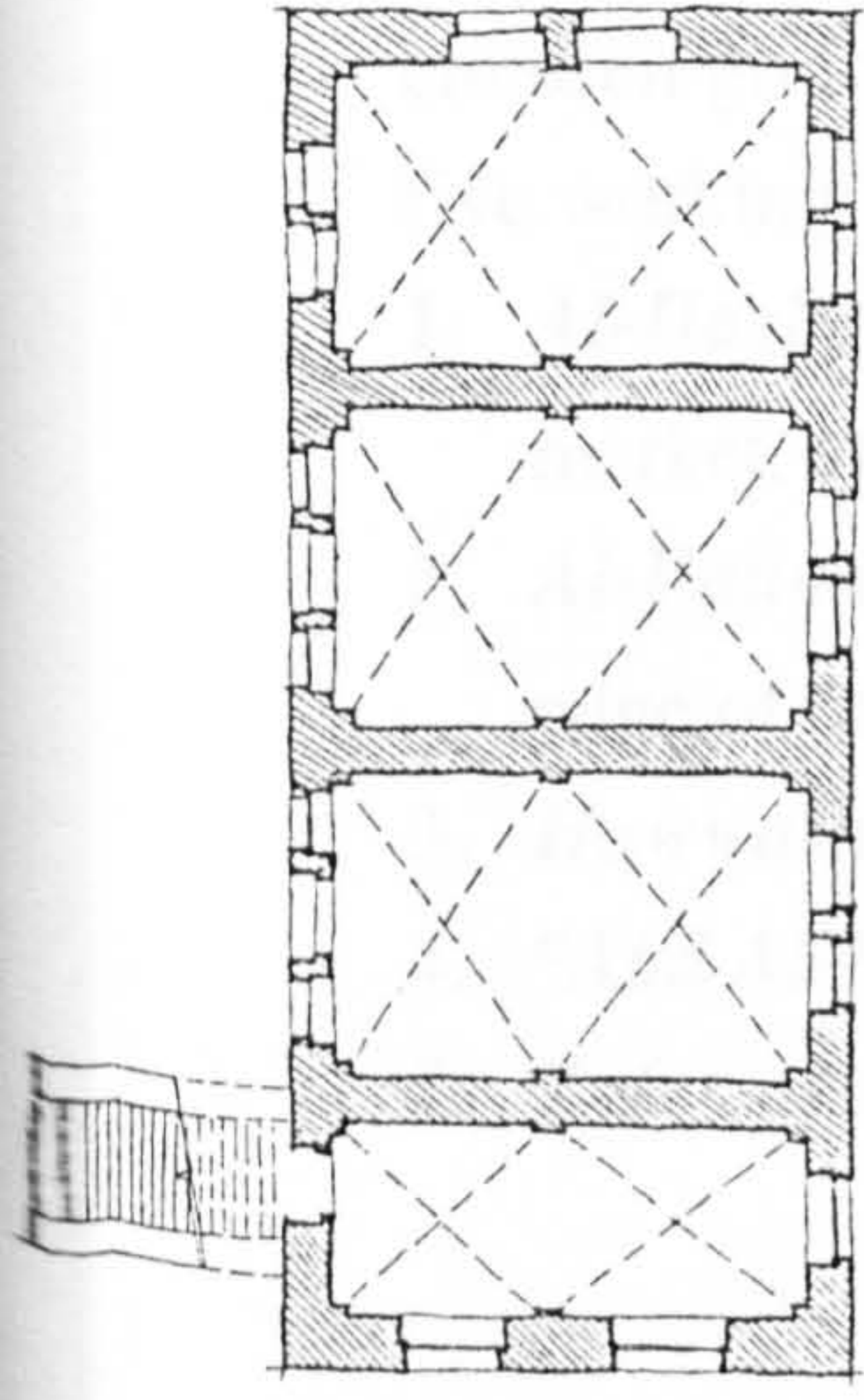


A. Location within the Old Town.

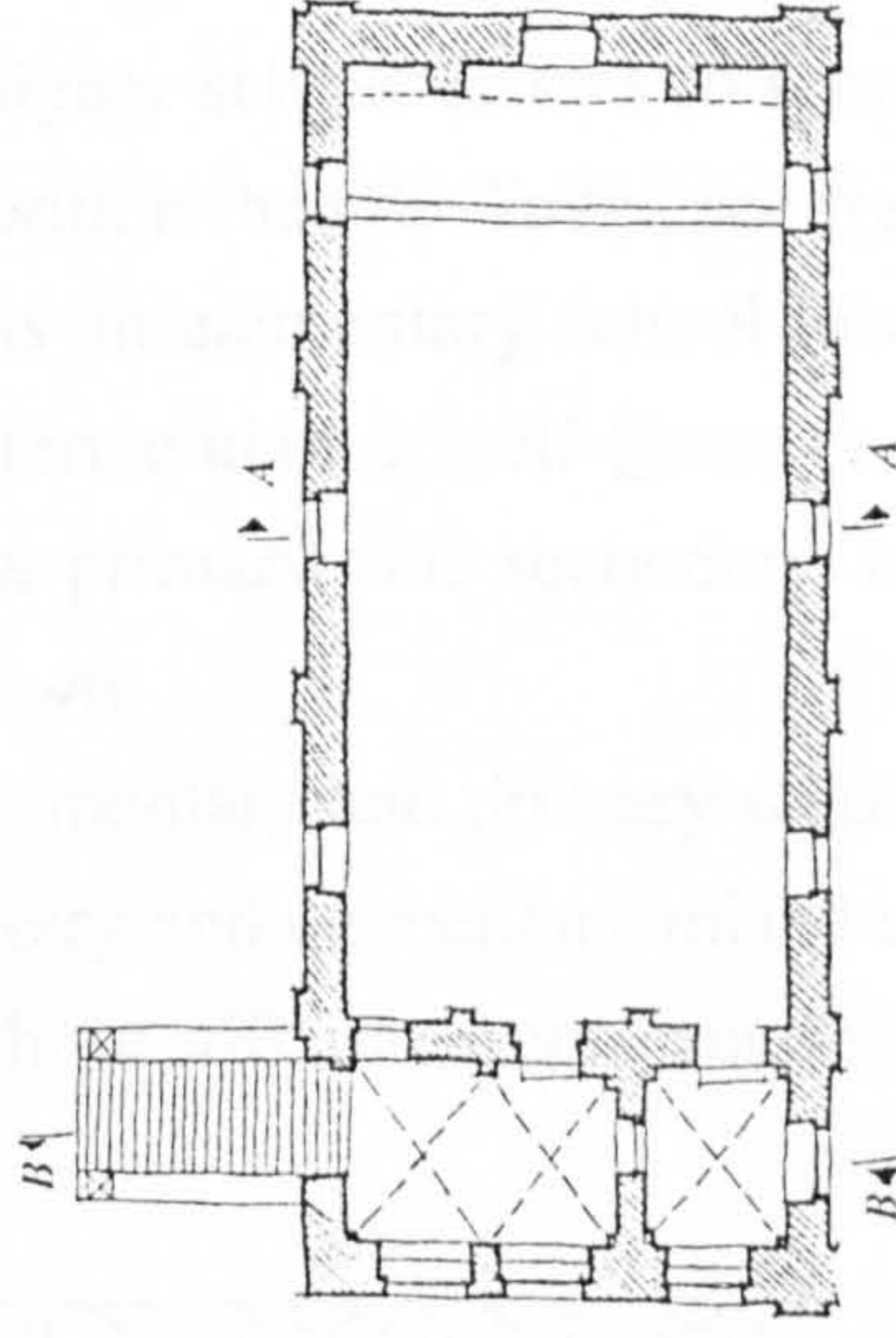


B. Site plan.

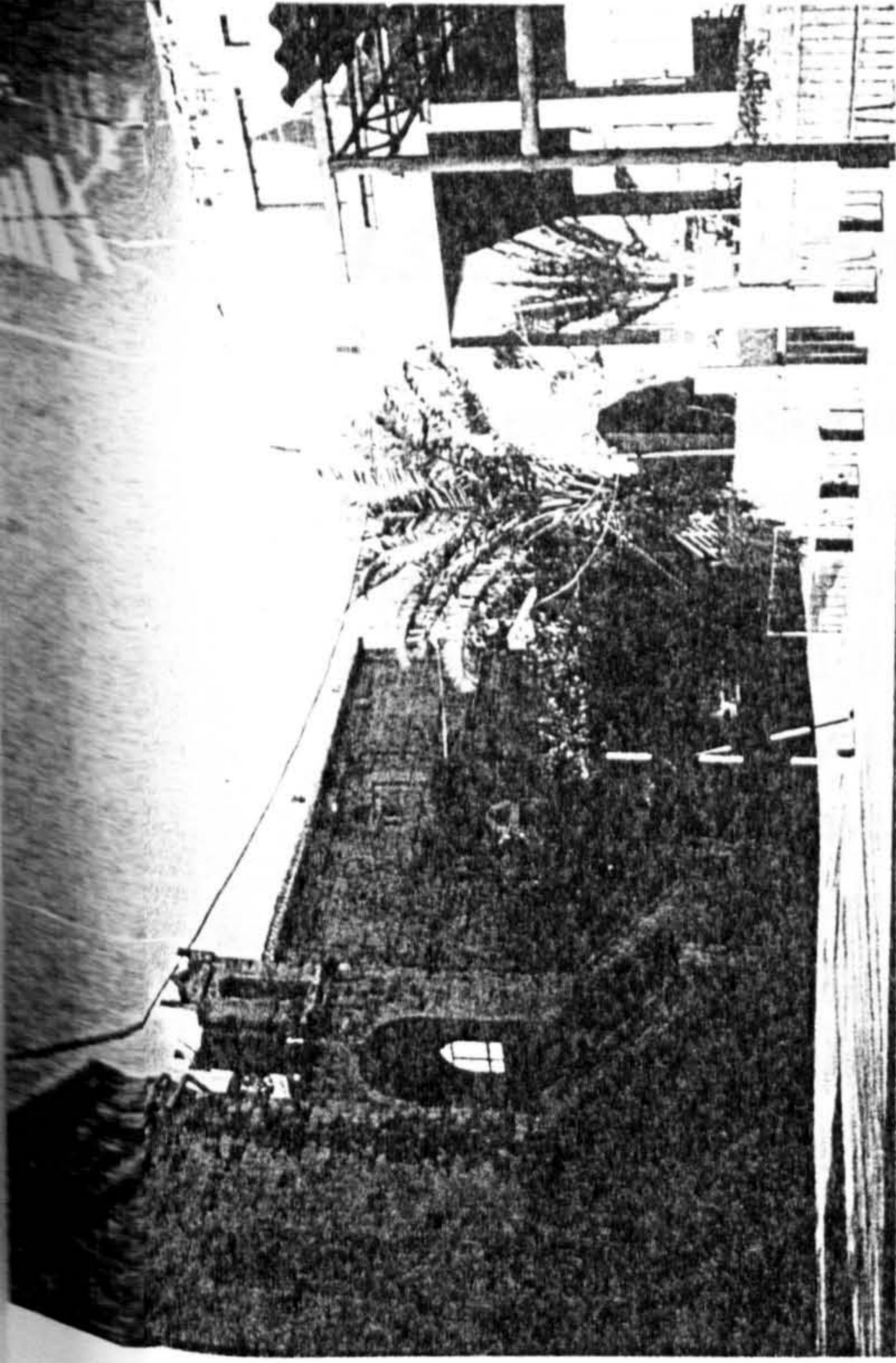
Source of all the architectural drawings: Courtesy of An-Najah University Archal students, 1989.



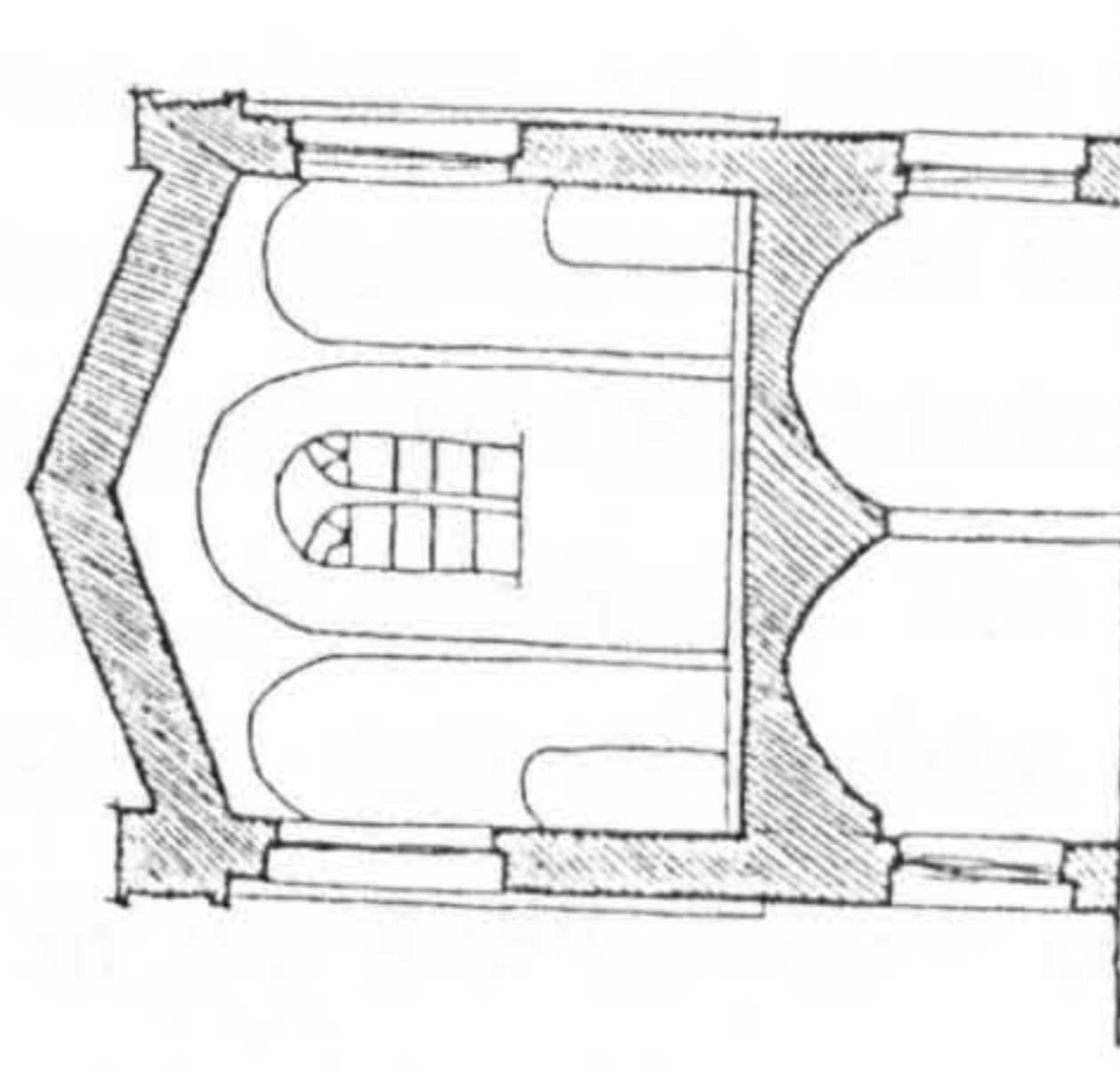
C. Ground floor plan.



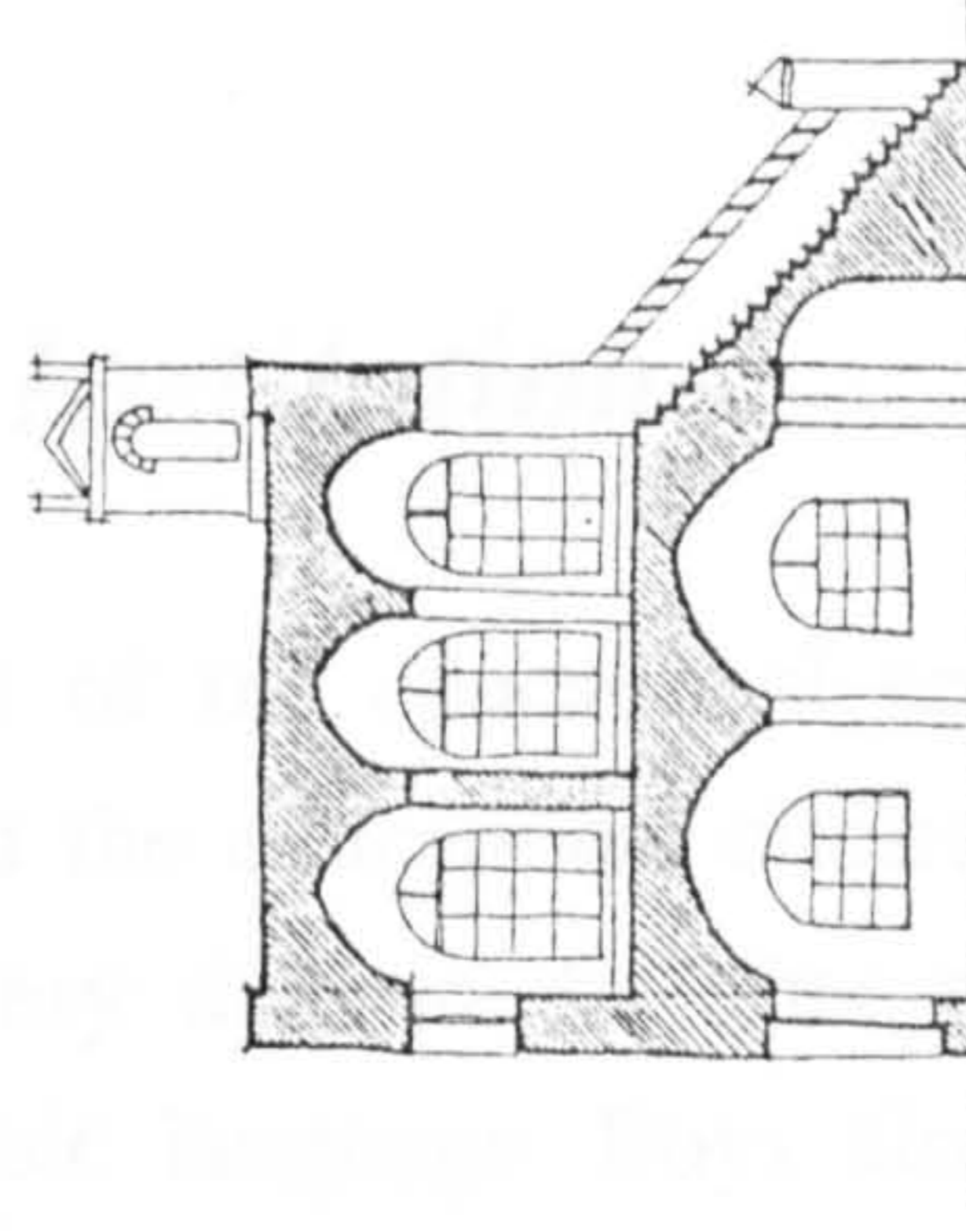
D. First floor plan.



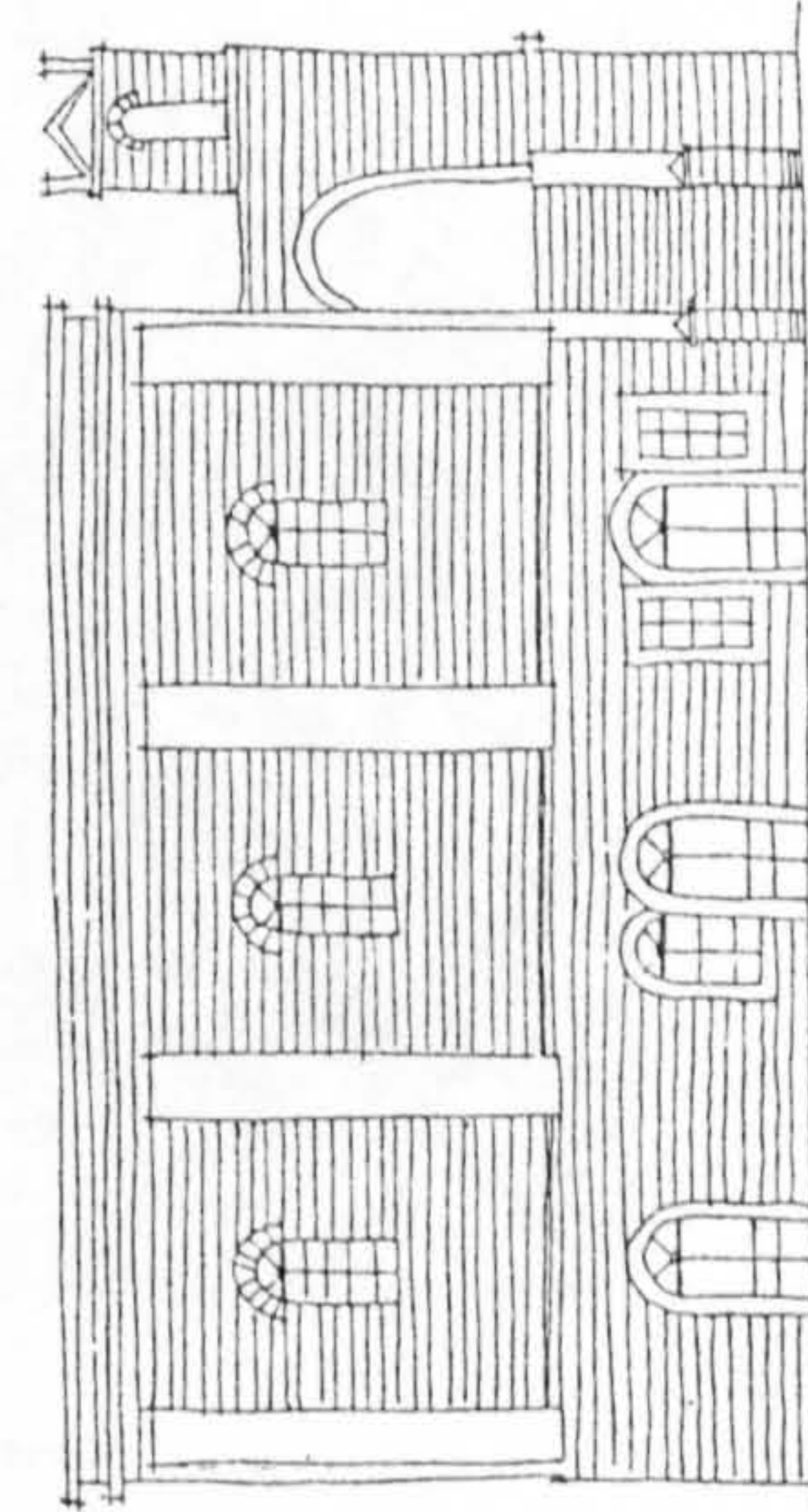
G. General view within the Church campus.



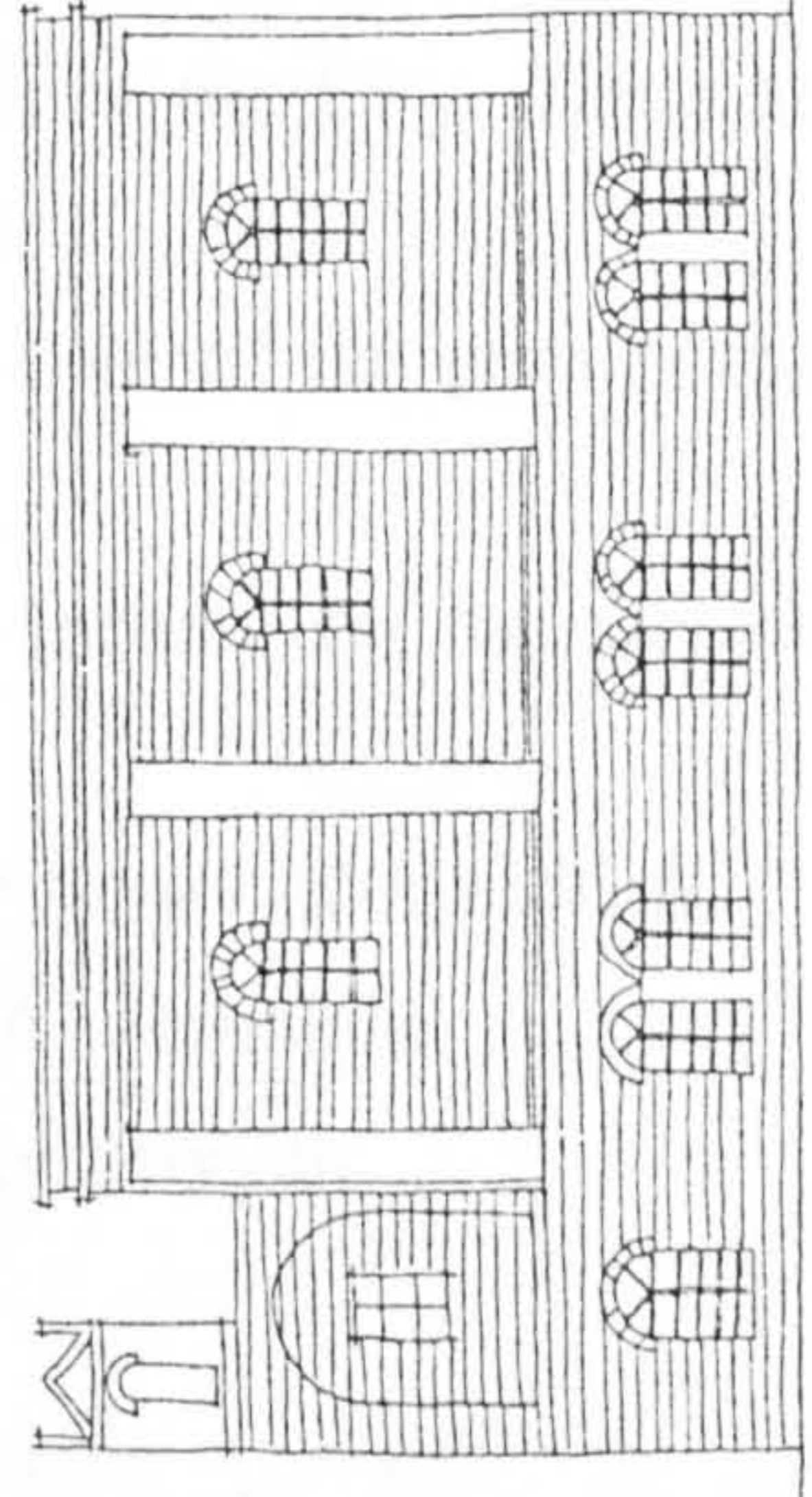
H. Section A-A.



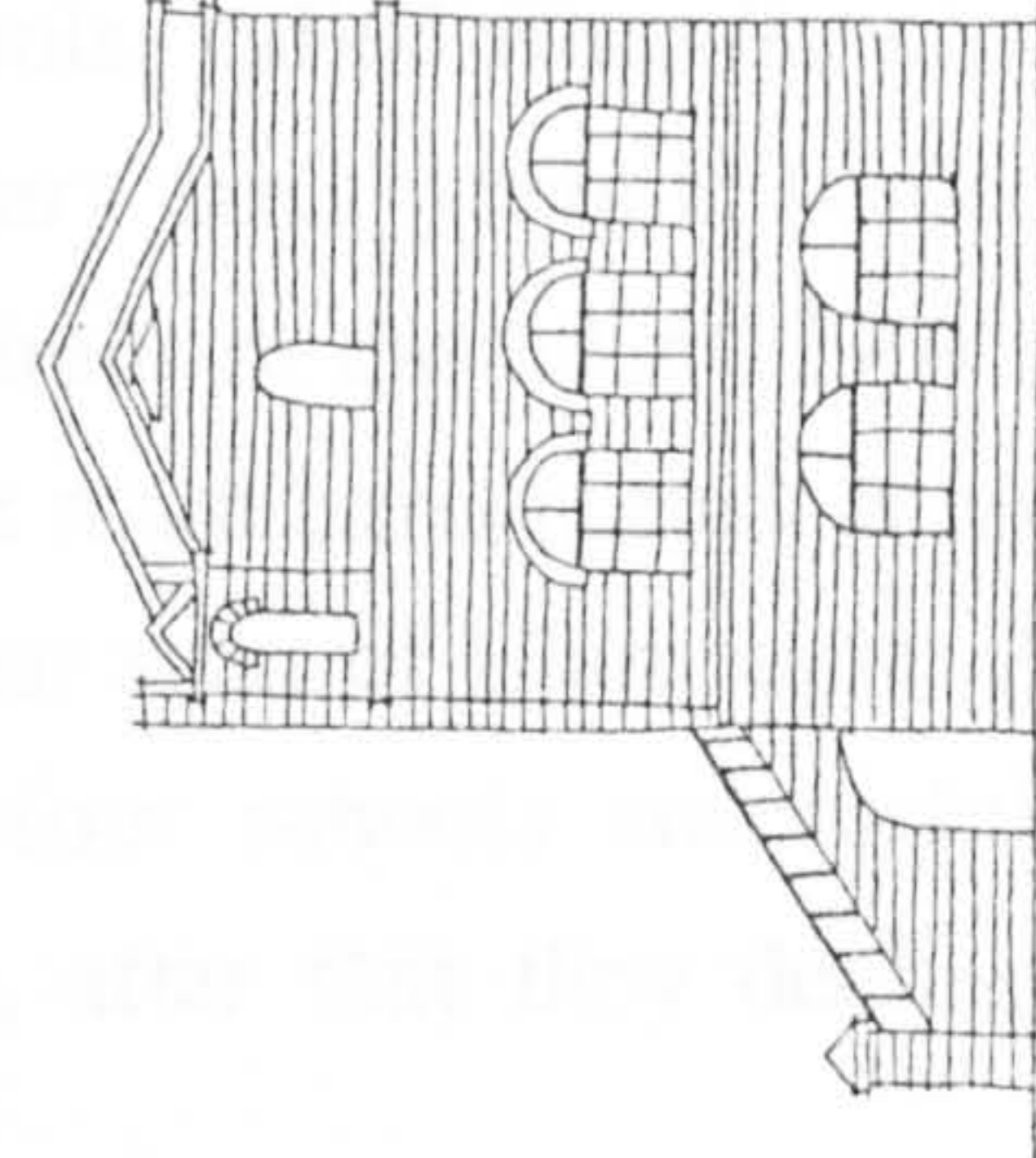
G. Section B-B.



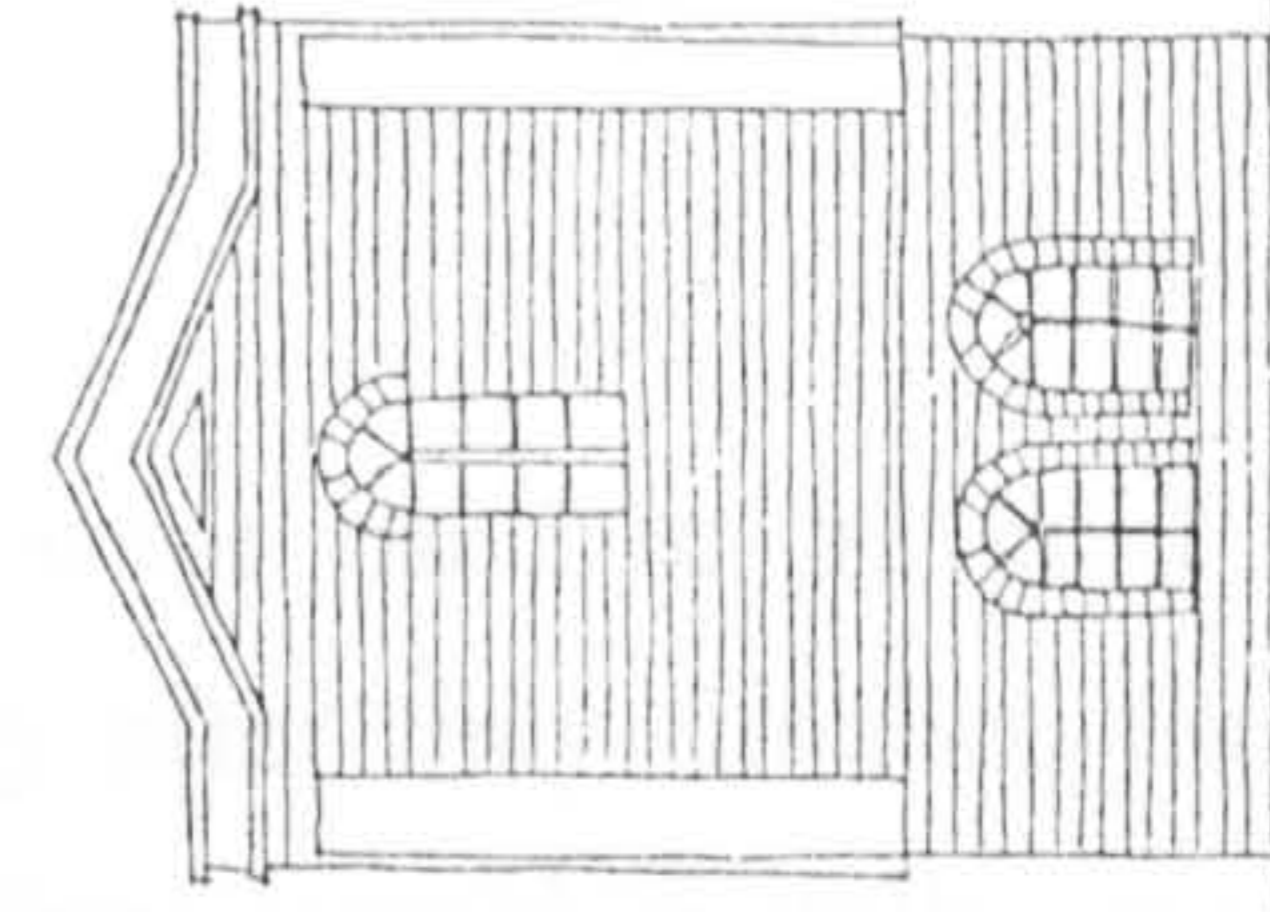
E. North elevation.



F. South elevation.



H. West elevation.



I. East elevation.



Figure (4.18): The Protestant Church.

4.3.2.2. Educational Institutions.

As earlier mentioned, most of the educational activities were used to be held in mosques. Muslim men attended the educational circles usually after they finished their work, after Al-^cAsr prayer every day, in the after noon. They would usually study religious subjects and the Arabic language. Boys also had the same teaching, but in different circles. They also had regular study in special schools, called *Katatib*, pl. of *Kuttab*. There were seven Qur'an schools, and seven elementary boys' schools (Celebi, 1938, p.139). There was also four religious schools for men, built in the 690s/1290s by Sultan Qalawon over *Soq Al-Qumash*; the Cloth Market, in the main bazaar, each school taught an Islamic Sector, *Mathhab*, pl. *Mathaheb*. The main four sects of Islam were: *Al-Shafe^cey*, *Al-Hanbaley*, *Al-Hanafey*, and *Al-Maleky*. These four schools successfully continued graduating students in the 8-9th/14-15th centuries, after that they declined, now they are deserted (Nimir, 1975).

Nowadays, new schools have been built on the edge of the Old Town, and most of the children go for their higher school classes to schools on the edges of the City. There are five working schools within the Old Town, see figure (4.19):

1. *Al-Hashemiyyah* is an elementary school located within the core of the commercial market, at the western end of *Soq Al-Qumash*.
2. *Al-Fatimiyyah*, is a primary and secondary school for girls, located on the western edge of the Old Town.
3. *Hawwash*, is an elementary and primary school for girls, near *Jame^c Al-Khadrah*.
4. *Abd Al-Hadi* nursery and elementary mixed school in Haret Al-Habalalah.
5. *Zafer Al-Masri* school still under construction in Haret Al-Qaysariyyah.

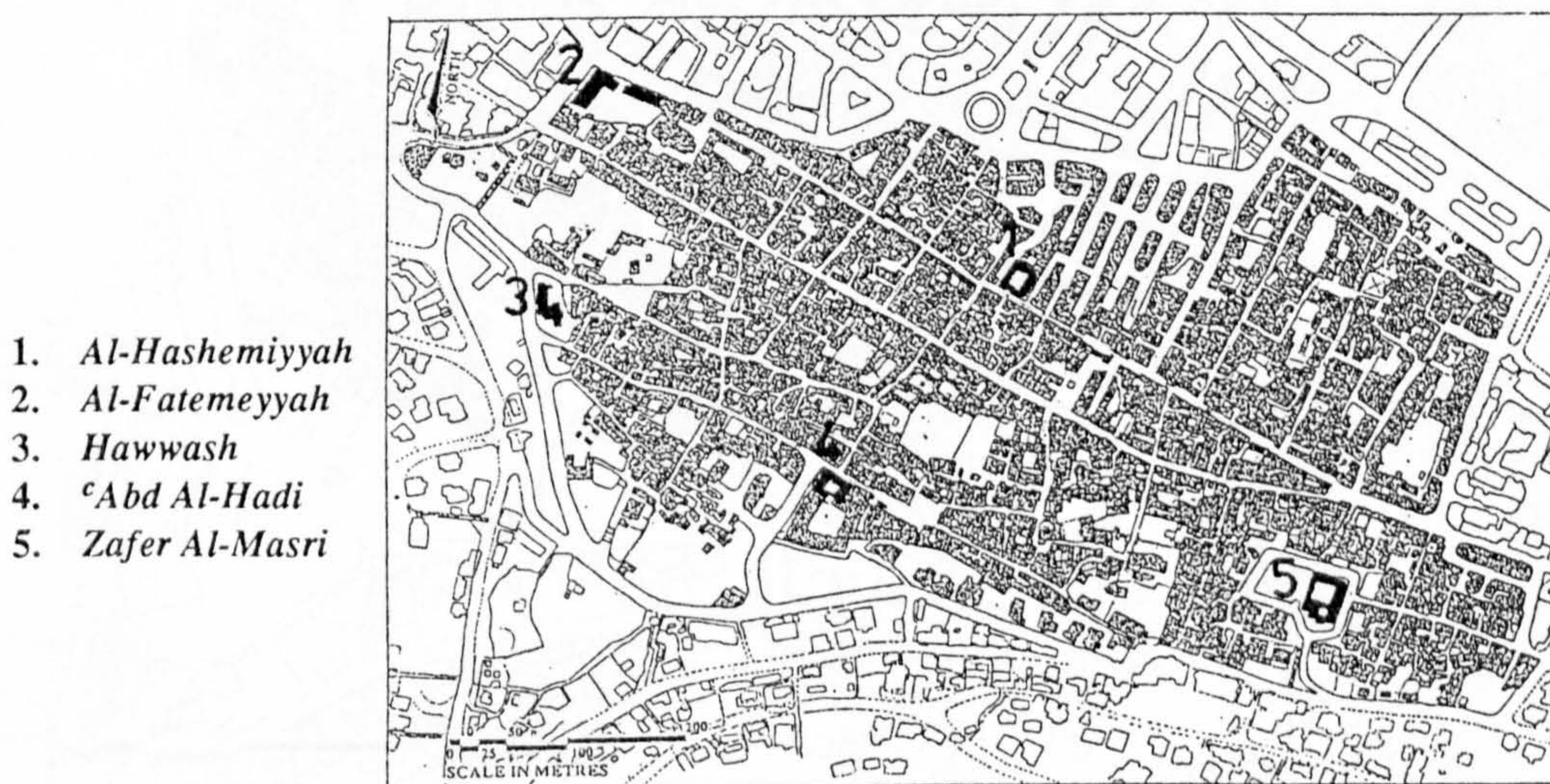


Figure (4.19): School buildings within the Old Town.

4.3.2.3. Commercial and Industrial Institutions.

A. The Bazaars:

The commercial activities were concentrated in the commercial markets and Bazaars in the town centre. Commercial streets were consisted of covered and uncovered bazaars, see figure (4.20). Figures (4.21) and (4.22) show the Cloth and the New Bazaars. John Mills, in 1864, described the town's market-place, he wrote:

"These are the Eastern shops or market-places, and they are comparatively numerous in Nablus. They are grouped according to the merchandise they contain, and are situated principally in the main street. One is for vegetables of all kinds; another for dried fruits- raisins, olives, figs, &c.; and last, but not least, comes the group of well-stores of tobacco. The principal bazaar is arched, and is very large and fine for Nablus. It is the finest, by far, in Palestine, and equals any, so far as I observed, in the largest towns of the Turkish Empire. This is the clothing emporium, and is well furnished with the bright silk productions of Damascus and Aleppo - the Abas of Bagdad - calicos and prints from Manchester, in varieties too numerous to be named - as well as the productions of the town itself" (Mills, 1864, pp. 88-9).

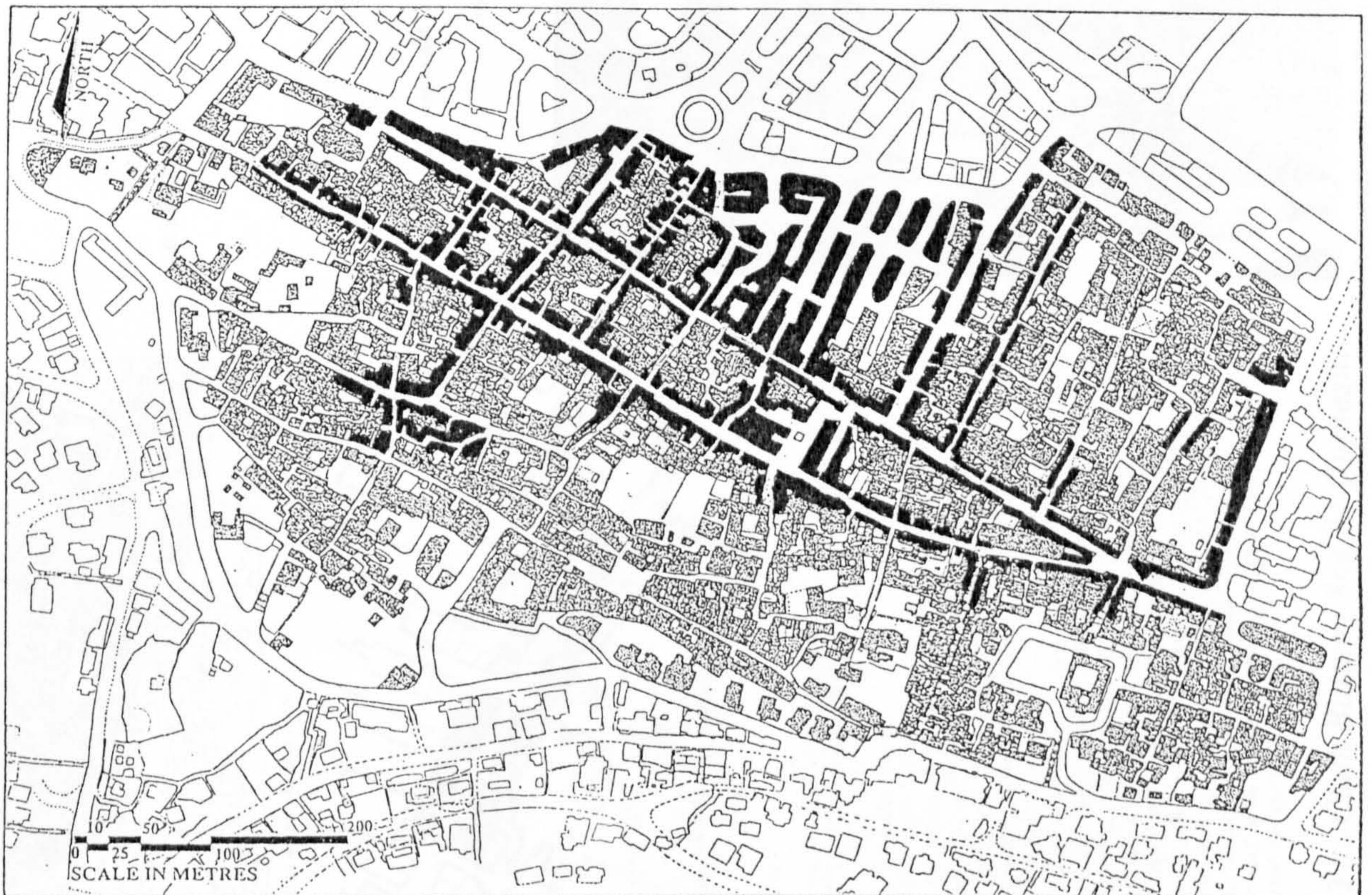
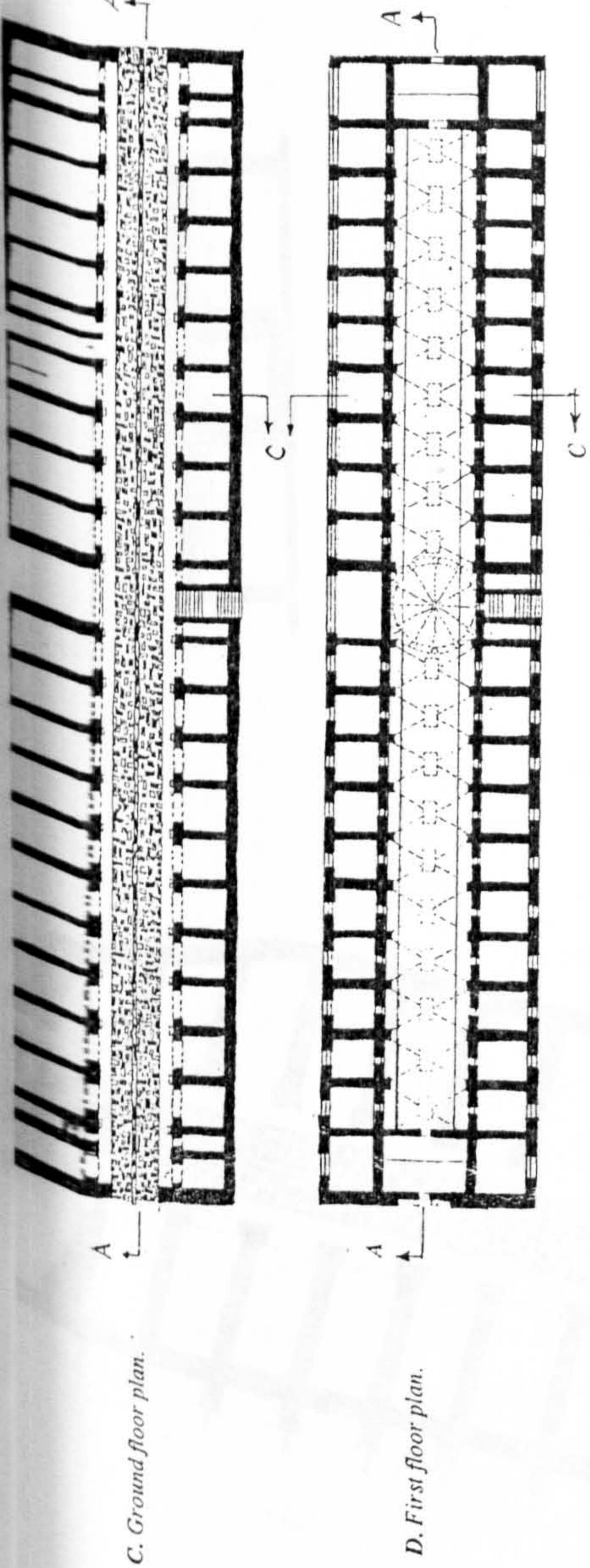


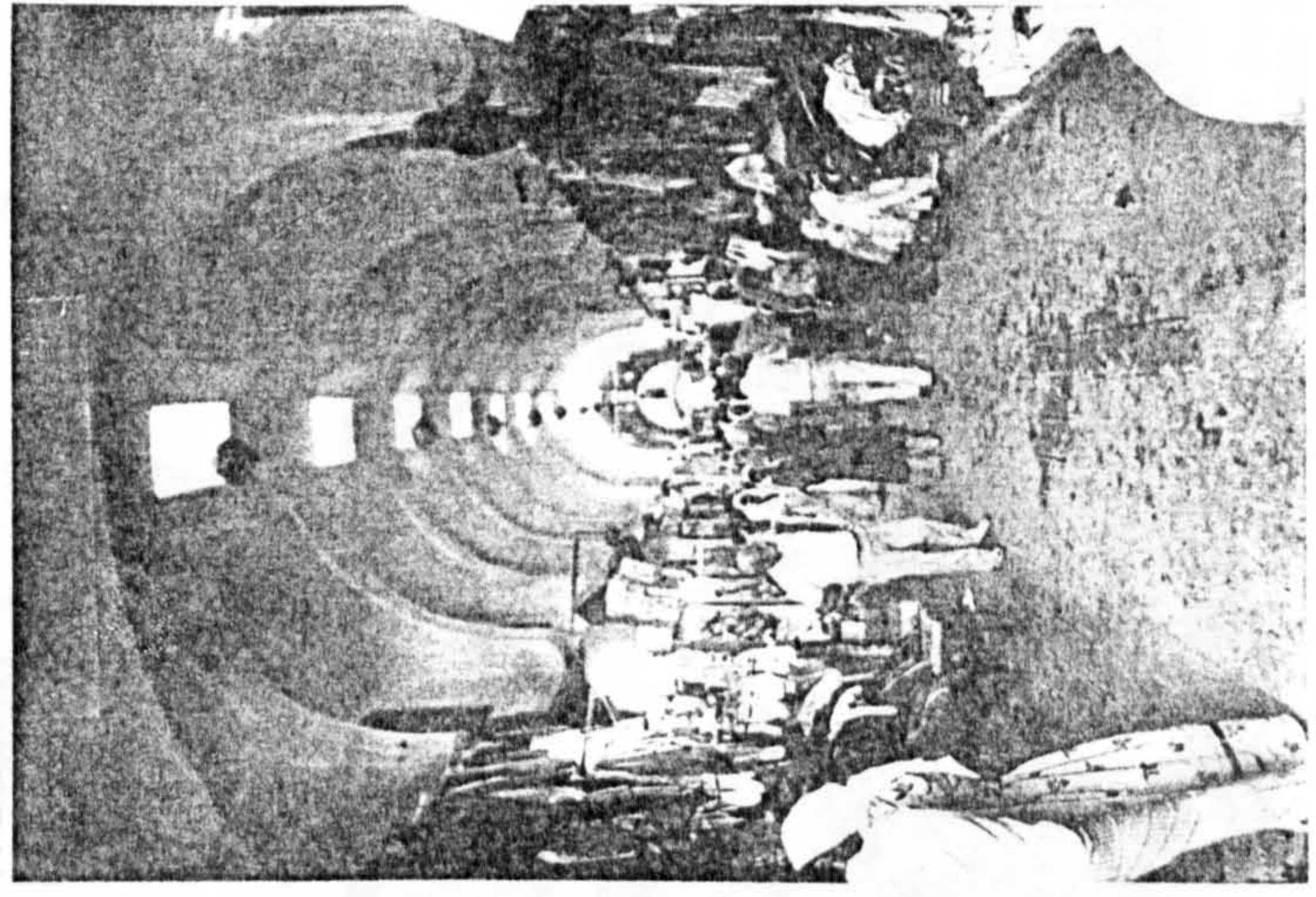
Figure (4.20): Commercial markets within the Old Town.



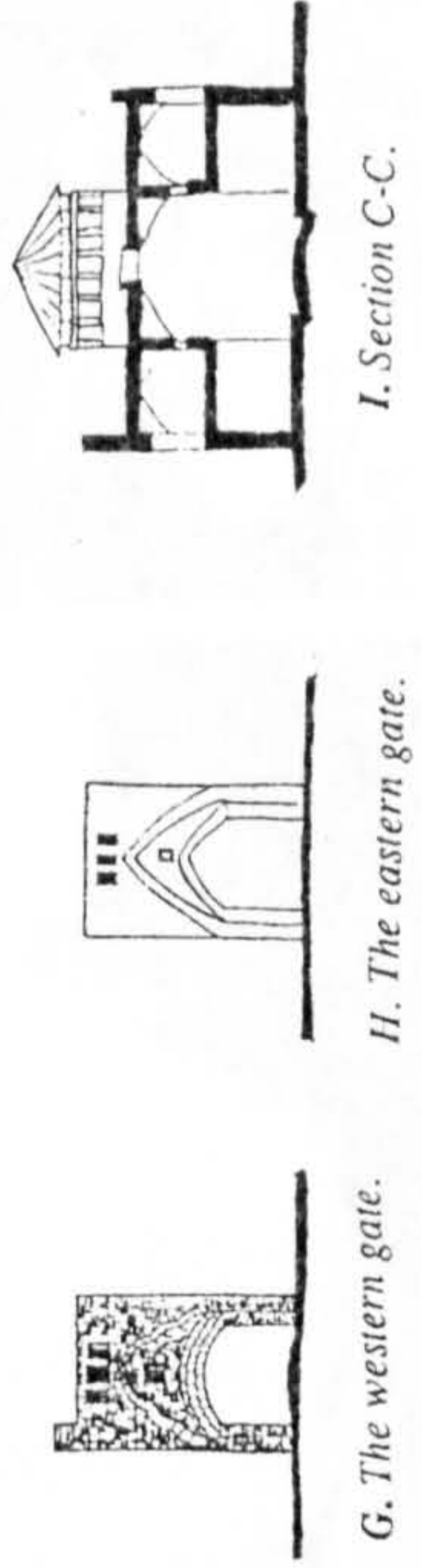
C. Ground floor plan.

D. First floor plan.

E. Longitudinal section A-A.



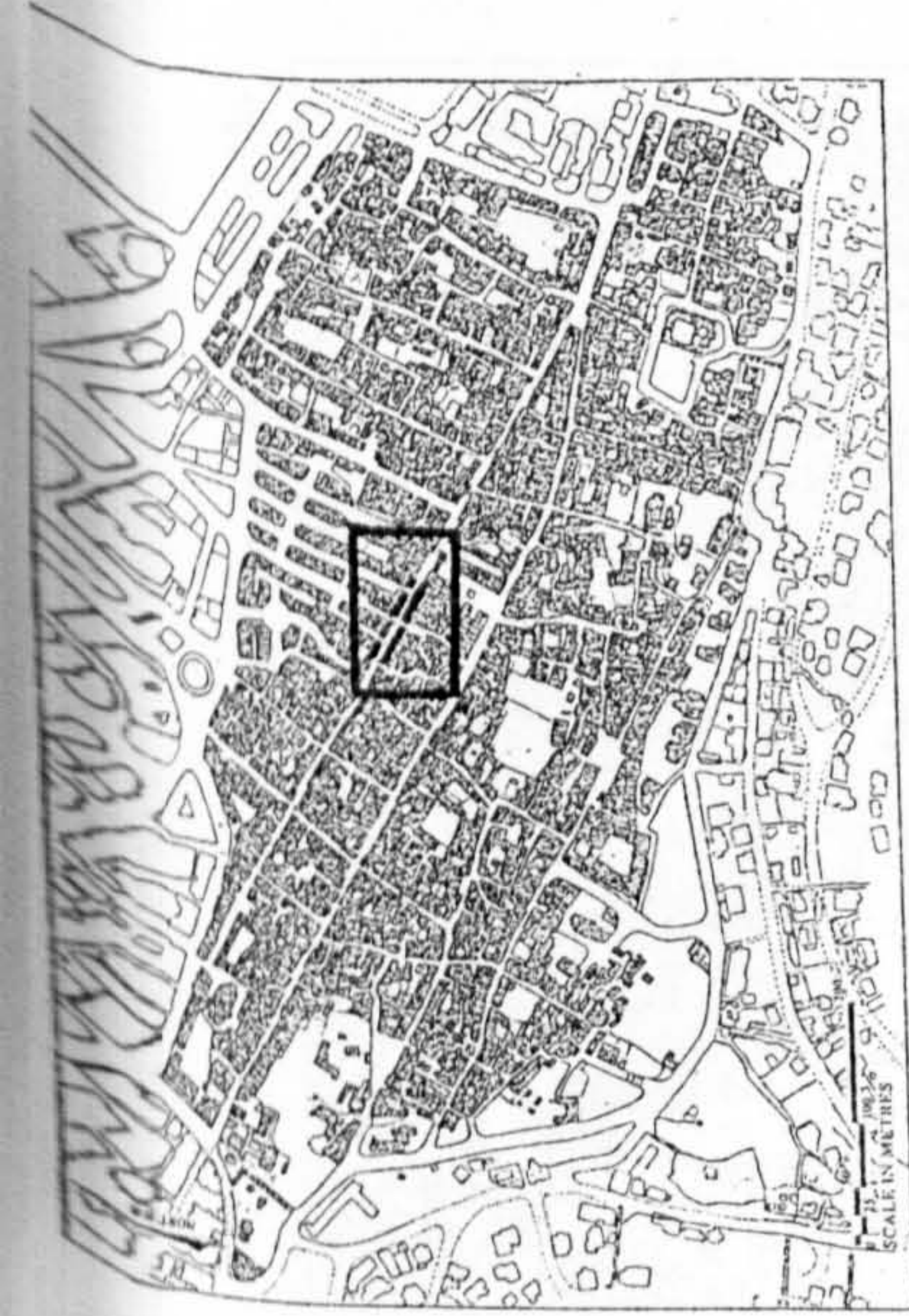
F. General interior view. Source: (Burgoyne, 1987).



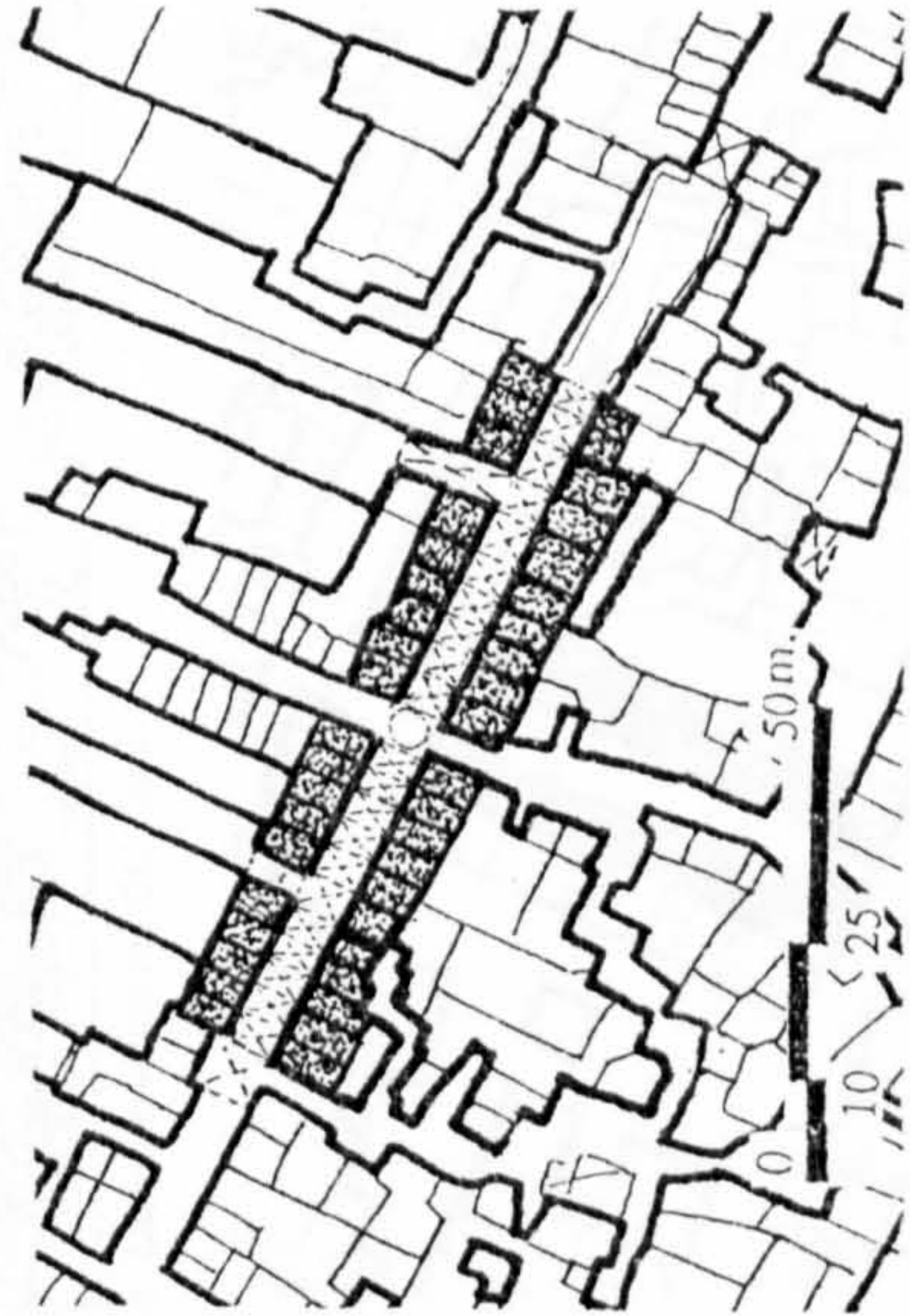
G. The western gate.

H. The eastern gate.

I. Section C-C.



A. Location within the Old Town.



B. Site plan.

This bazaar is called the Cloth Bazaar, Soq Al-Qumash. It was built by Sultan Qalawon about 690/1291, with four religious schools above it (Nimir, 1975, vol.1, p.55). Eviya Tshelibi, in 1640s, described this bazaar, he wrote:

"The Sultan Bazaar with stone built gates at each end (closed daily at nightfall) measures twelve hundred paces between them and consists of three hundred and seventy shops on each side, all well arranged (Celebi, 1938, p.139).

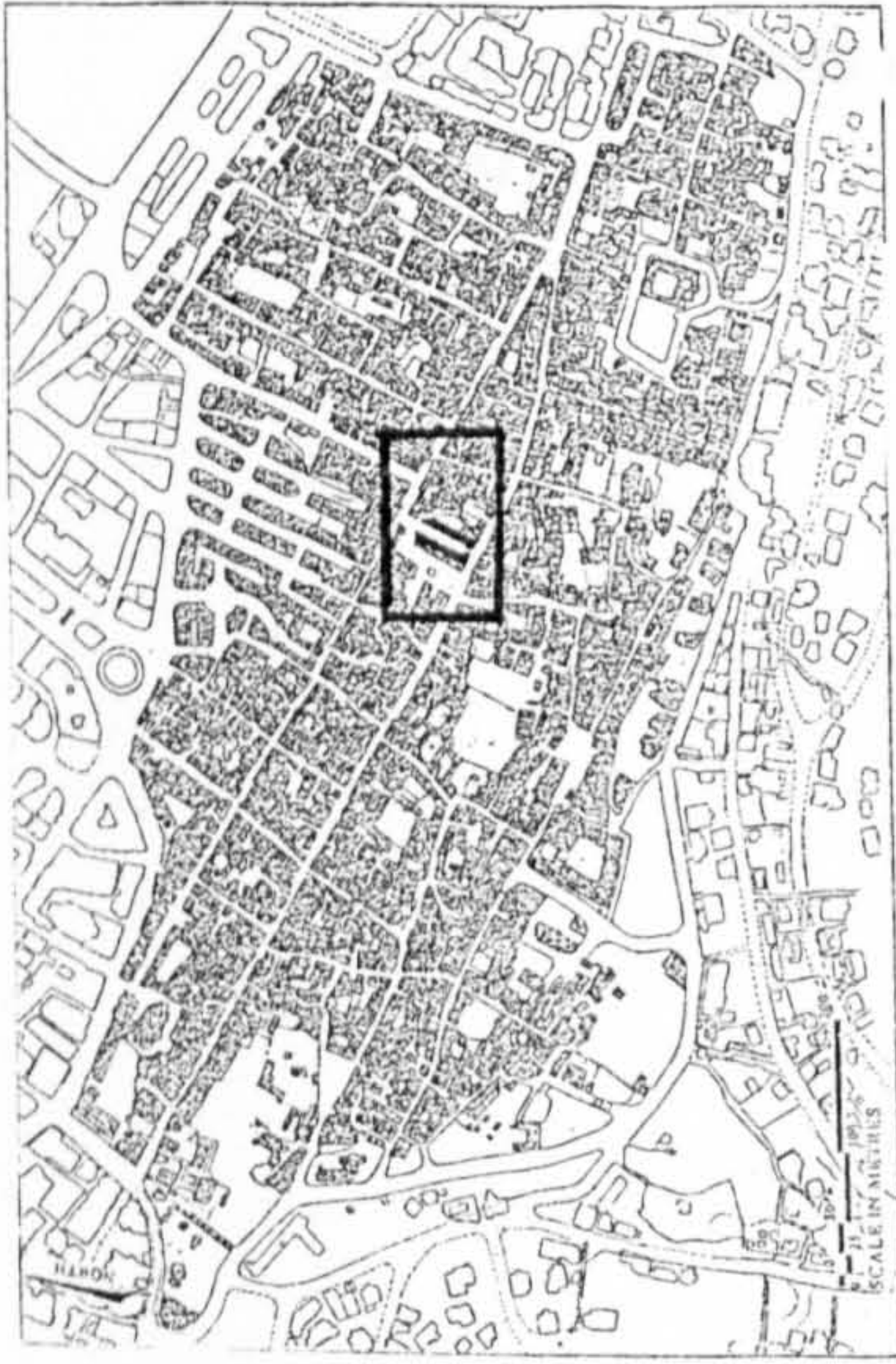
John Mills, in 1864, also wrote:

"The principal bazaar is arched, and is very large and fine for Nablus. It is the finest, by far, in Palestine, and equals any, so far as I observed, in the largest towns of the Turkish Empire. This is the clothing emporium, and is well furnished with the bright silk productions of Damascus and Aleppo - the Abas of Bagdad - calicos and prints from Manchester, in varieties too numerous to be named - as well as the productions of the town itself" (Mills, 1864, pp. 88-9).

Figure (4.21): The Cloth Bazaar; Soq Al-Qumash:

Source of all the architectural drawings: Courtesy of An-Najah University Arch. al students, 1989.

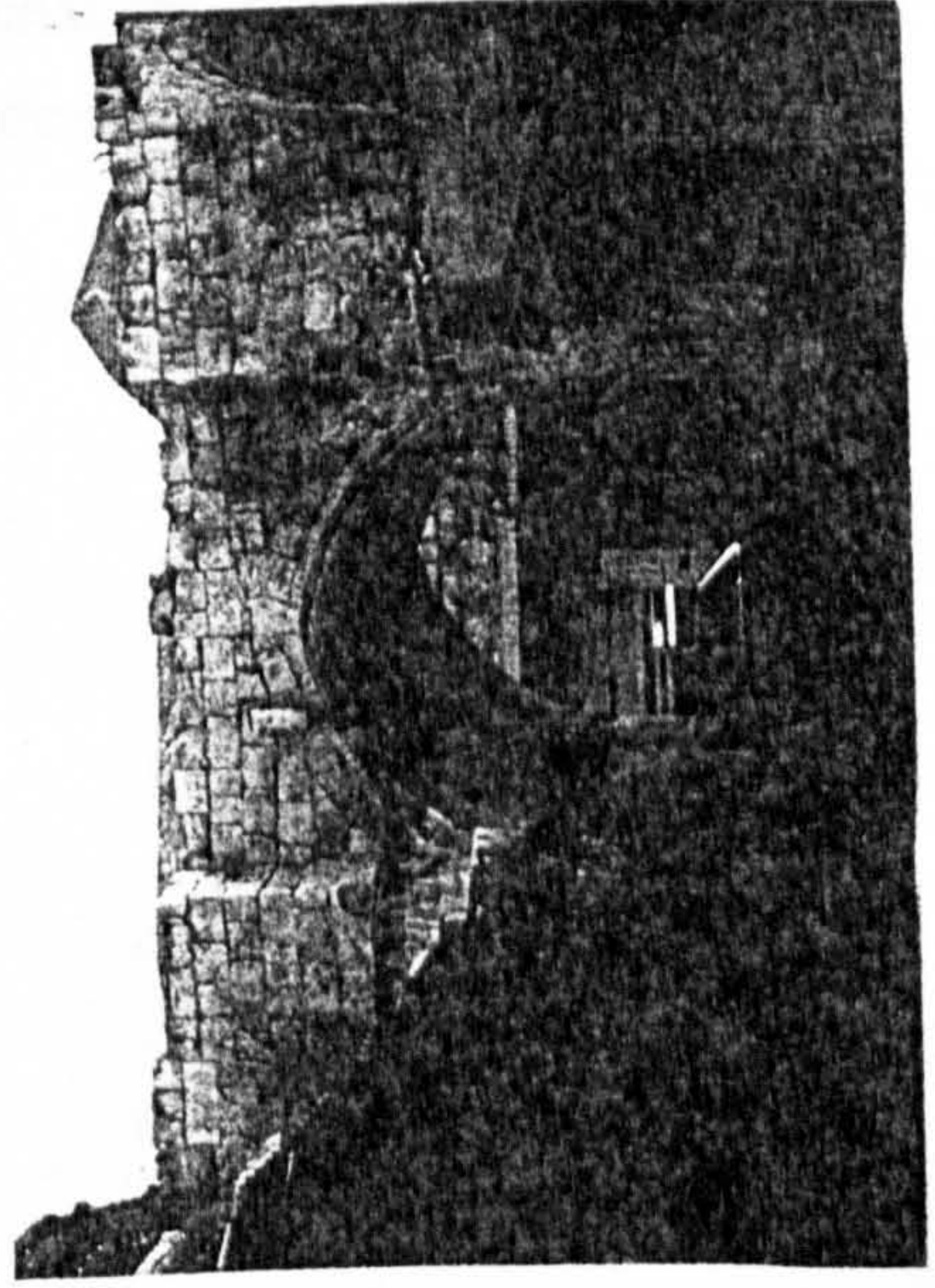
It was built in 1250-111835 (Wilson, no date, vol.2, p.13).



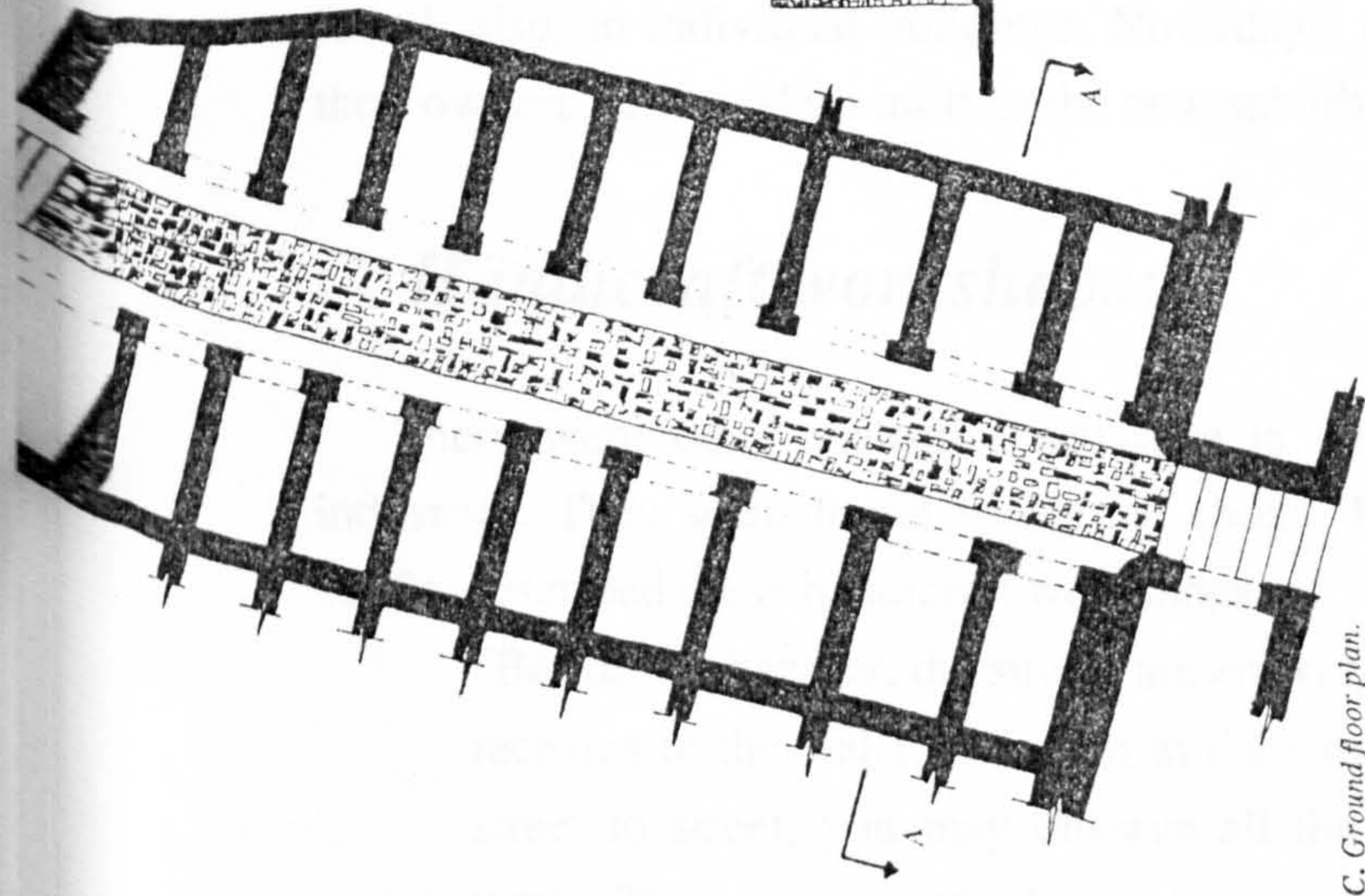
A. Location within the Old Town.



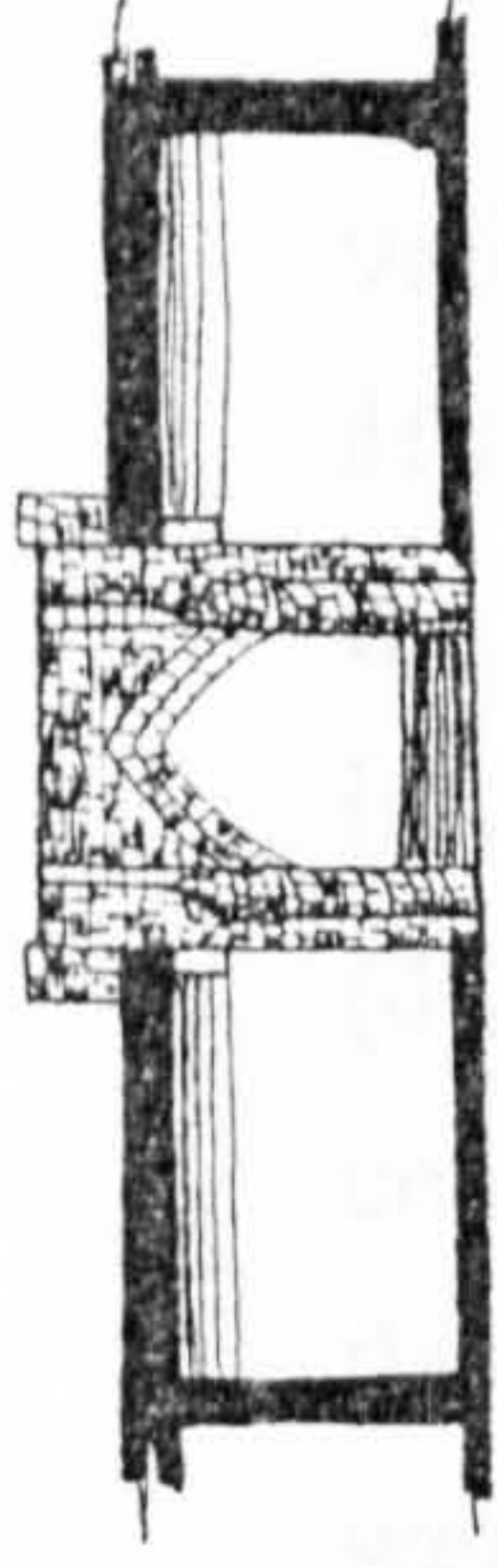
B. Site plan.



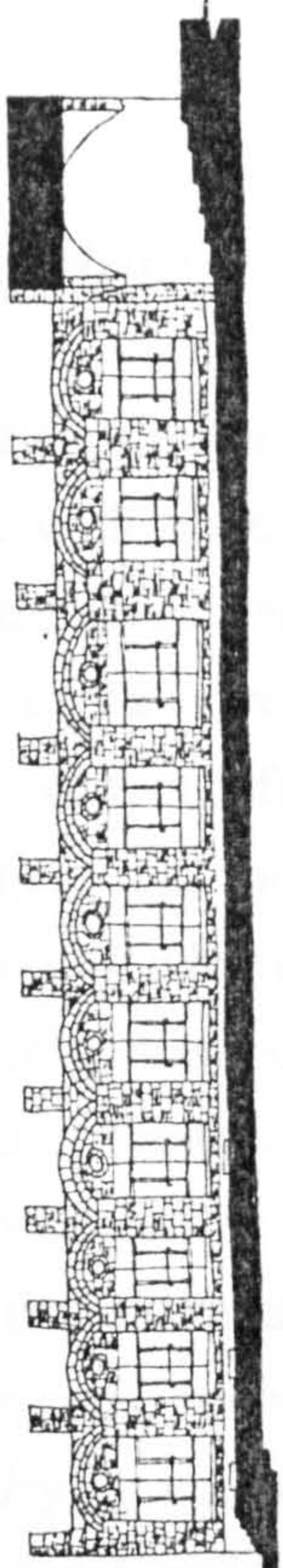
F. The northern gate.



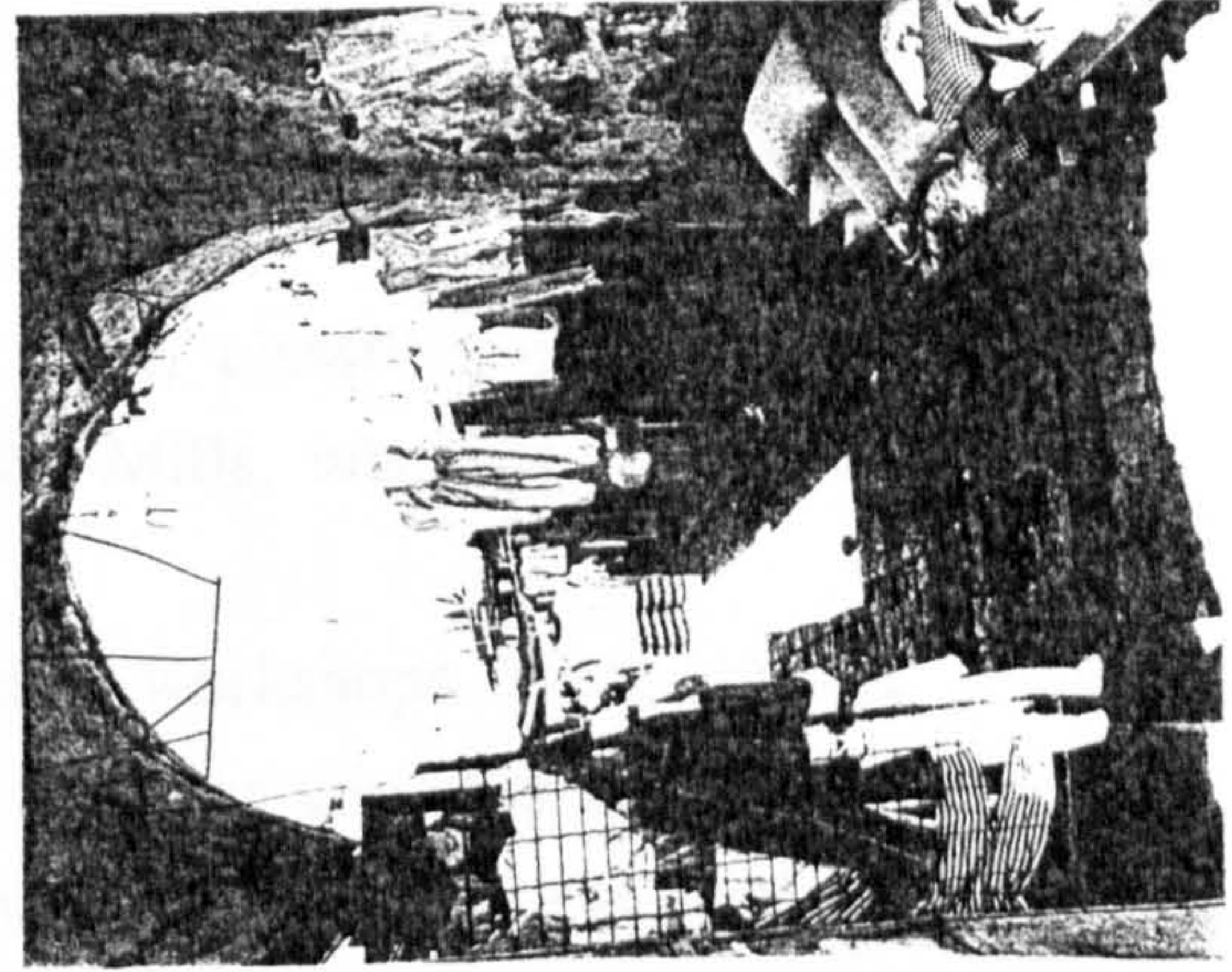
C. Ground floor plan.



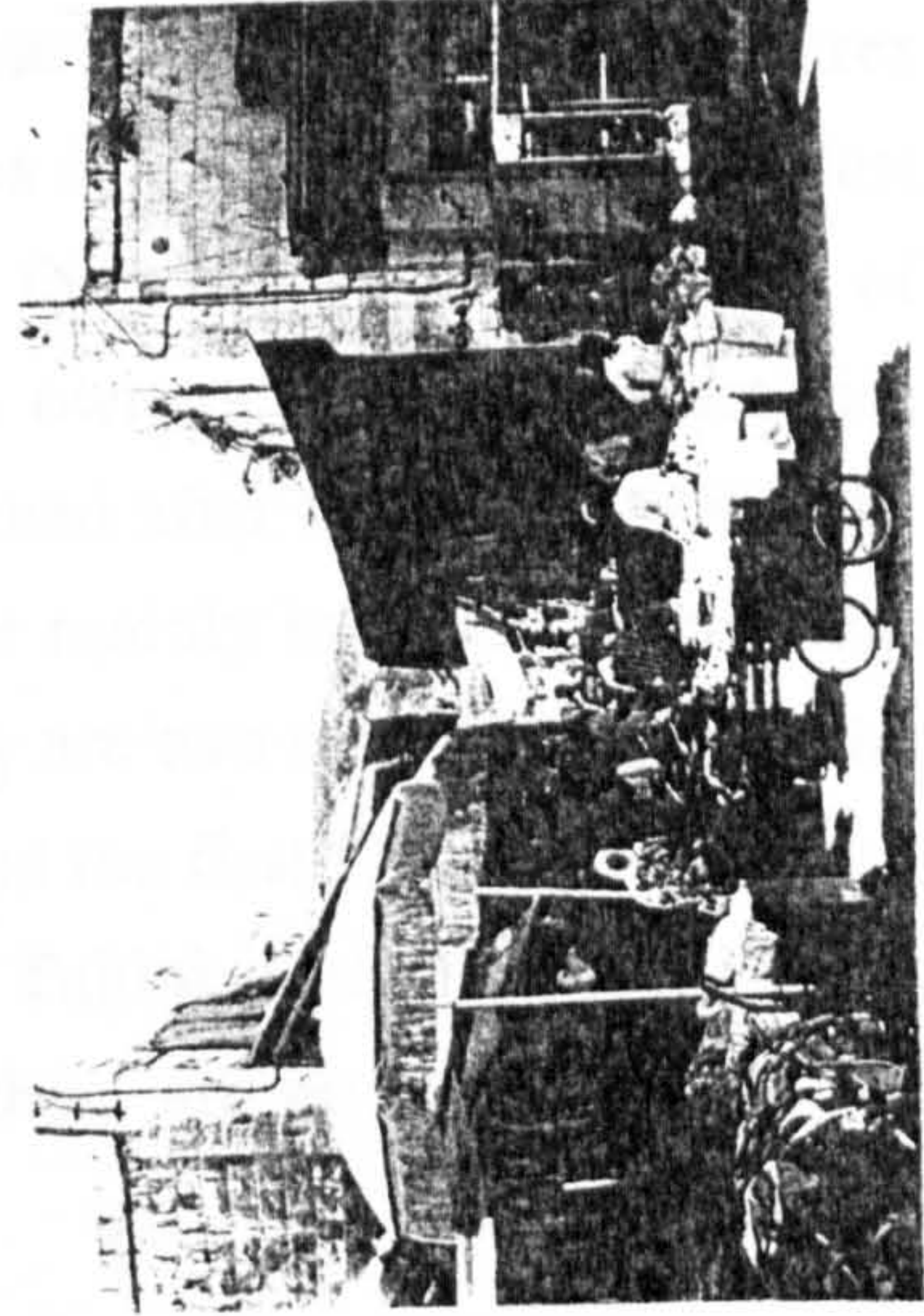
D. Section A-A.



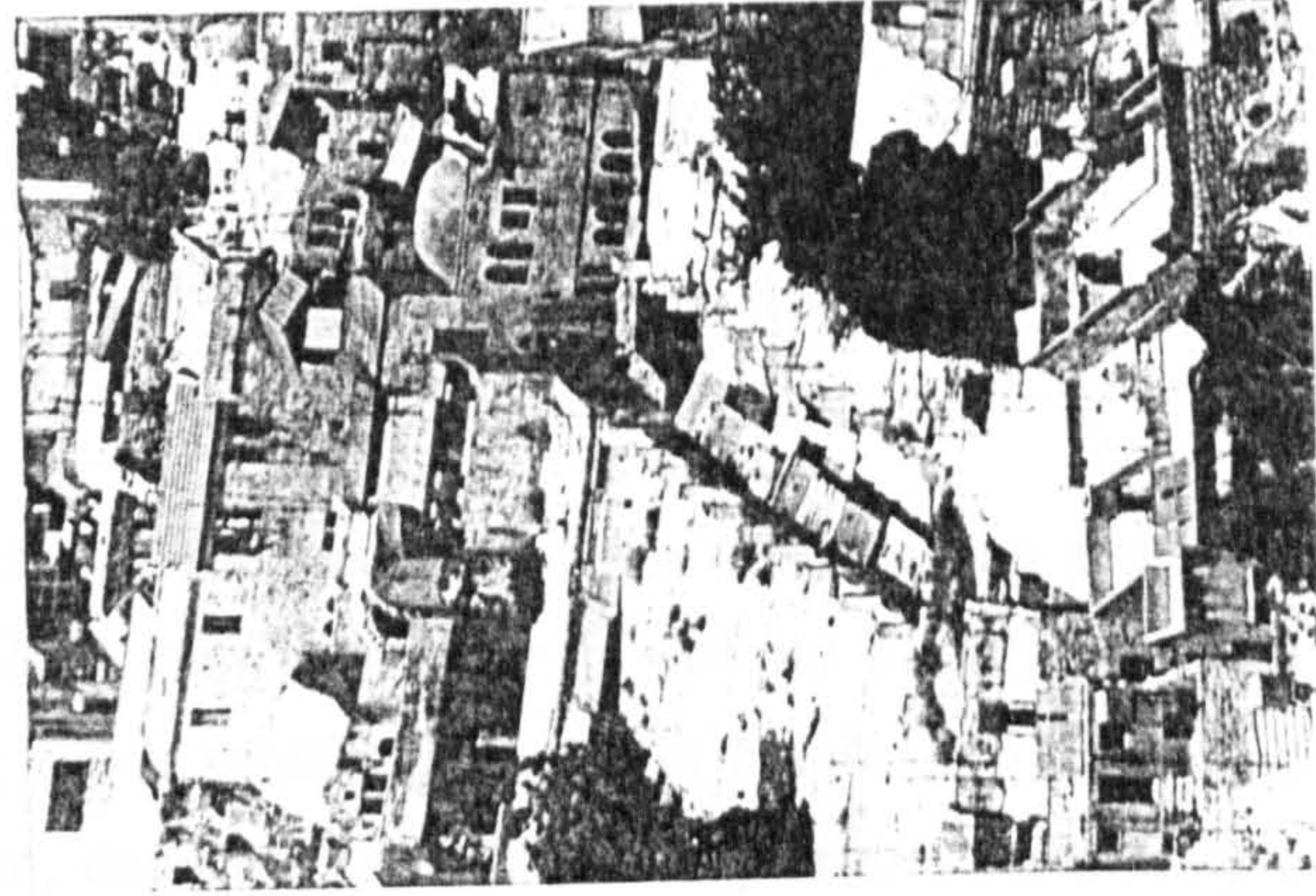
E. Longitudinal section.



G. The southern gate from inside.



H. General interior view from the southern gate. Source: Courtesy of Dr Burgoyne, 1987.



I. An exterior view from the high slopes in the south side. Source: Courtesy of An-Najah University Arch.al students, 1989.

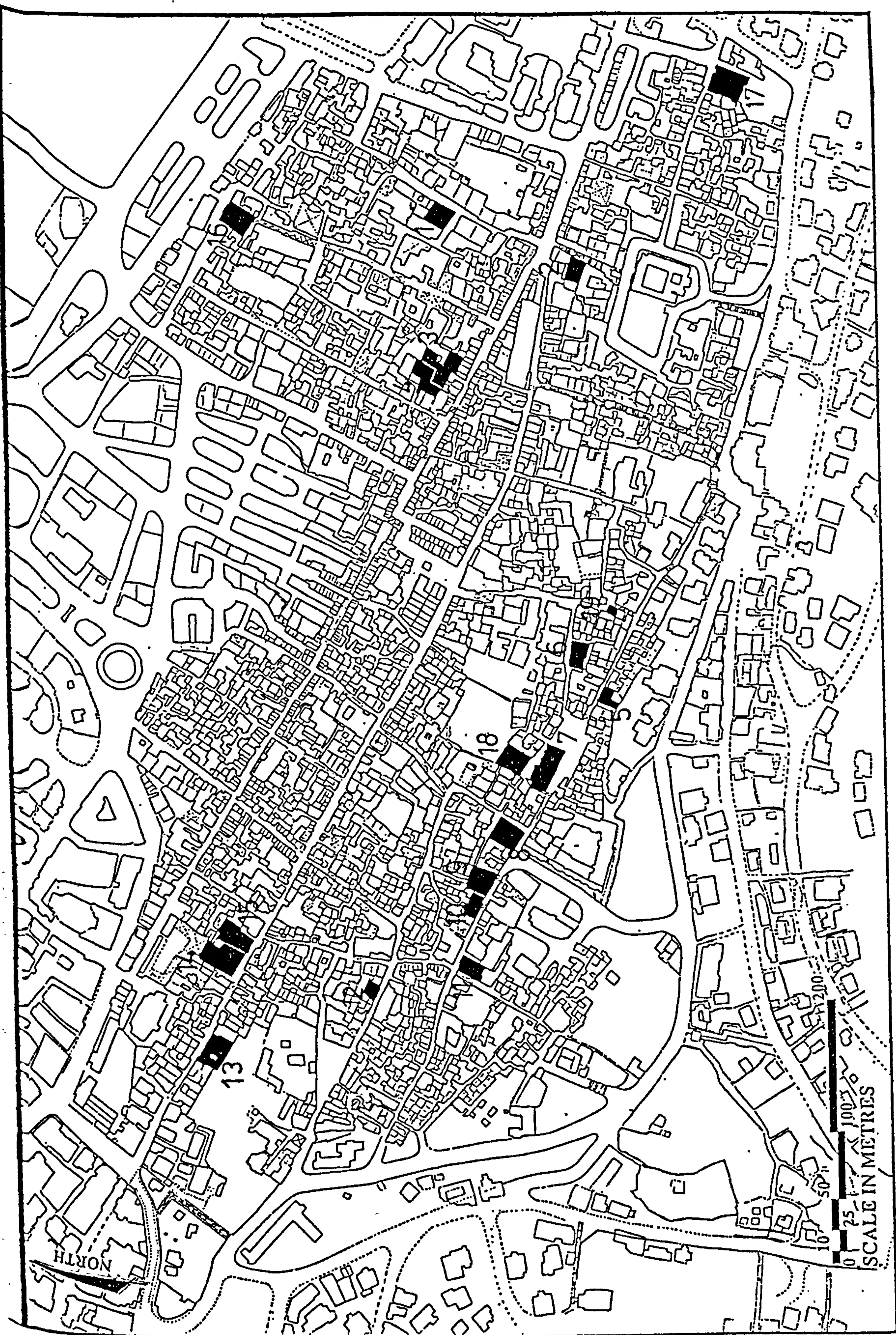
B. Soap Factories:

The main industrial activity in Nablus was soap making from olive oil, as the town valley was abundant with olive groves. The soap was made in special buildings called *Masaben*, pl. of *Masbanah*. Soap making was a special tradition in Nablus, you can find the soap factories spread all over the town, even in the residential quarters, for example in *Haret Al-Qaryon* one can find many of them, very near to each other, see figures (4.23) and (4.24). There was more than thirty soap factories in the Old Town in the last century, only nineteen of which are still working as when the town expanded, some of them were deserted or converted into other uses. The main owners of the soap factories were the big families of the town, and each factory was named after that family (Khatib, 1984). In order to safeguard health, the soap factories were mainly built as independent buildings, without any residential unit over, and usually they are two storey buildings, the ground floor used for cooking the soap and a sales office, and the first floor was used for spreading, cutting, drying and warping the finished soap. Tahini producing mills were found, also, in individual buildings. Nowadays, many of them are no longer in use, as their owners built modern mills in the new suburbs.

C. Handicraft workshops:

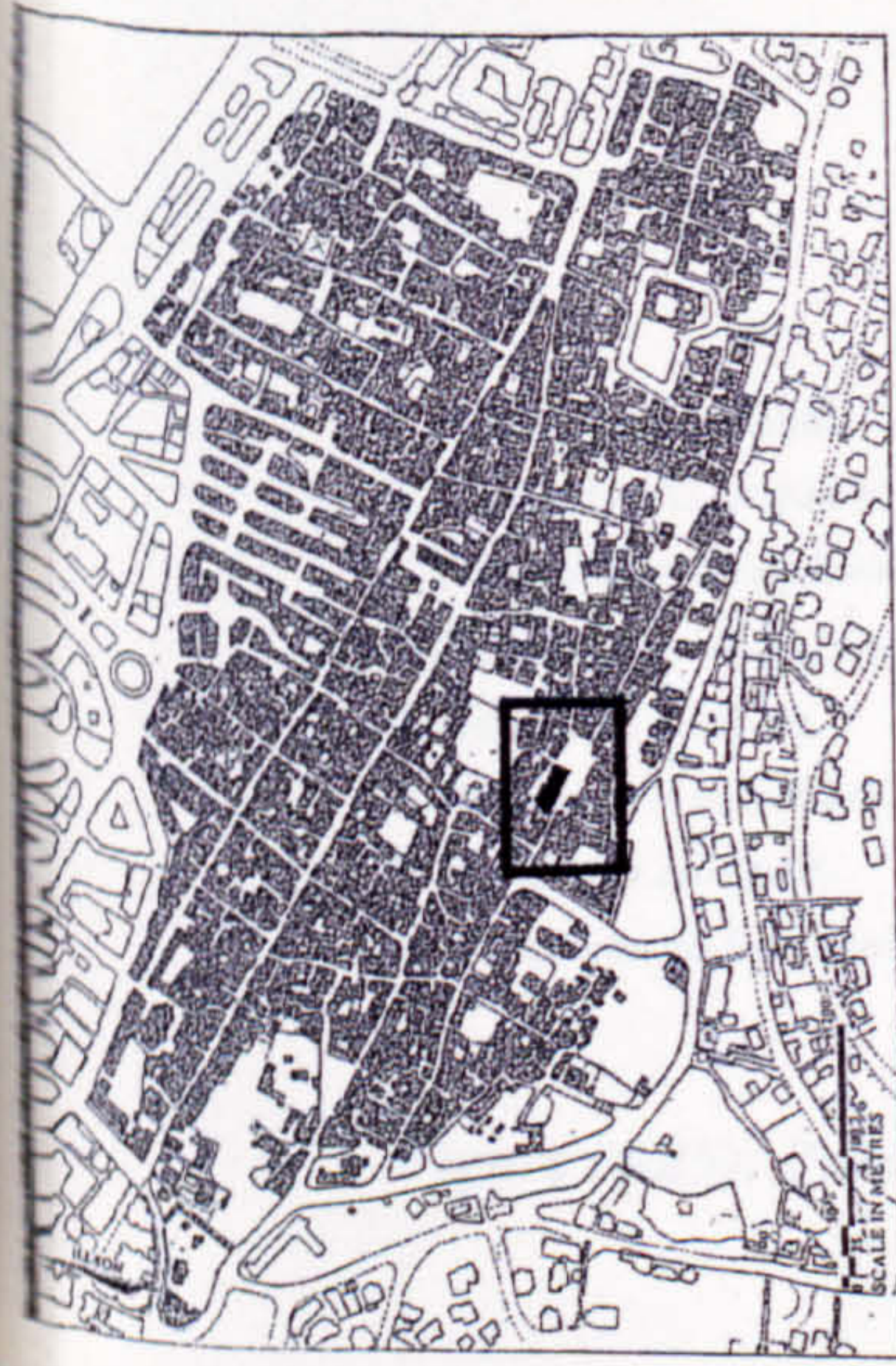
There were other industrial activities in the town, classified as small handicraft industries. They were found in normal shops. John Mills, when he visited Nablus in 1860s, described these handicraft workshops as:

"Beside the bazaars, the streets are enlivened by workshops. These are like recesses in the walls, and open to the streets; and as you pass along from street to street, you may observe all the handicraftsmen of the town at work, These consist of silversmiths, weavers, shoemakers, and all other kind of artisans necessary to the well being of a community (Mills, 1864, p.89).



1. Masbanet M. Fatayer.
2. Masbanet Salhab.
3. Masbanet Al-Debas.
4. Masbanet 'A. 'Abd Al-Majid.
5. Masbanet Abo Al-Ros.
6. Masbanet Al-Nablusi.
7. Masbanet Toqan.
8. Masbanet 'Abd Al-Hadi.
9. Masbanet H. Kan'an.
10. Masbanet A. Kan'an.
11. Masbanet 'Abd Al-Haq.
12. Masbanet Al-Sarafandi.
13. Masbanet Al-Rantisi.
14. Masbanet F. Kan'an.
15. Masbanet S. Al-Nablusi.
16. Masbanet Al-Zin.
17. Masbanet Al-Masri.
18. Masbanet Al-Saqa.
19. Masbanet Al-Kukhun.

Figure (4.23): Soap factories within the Old Town.



A. Location within the Old Town.

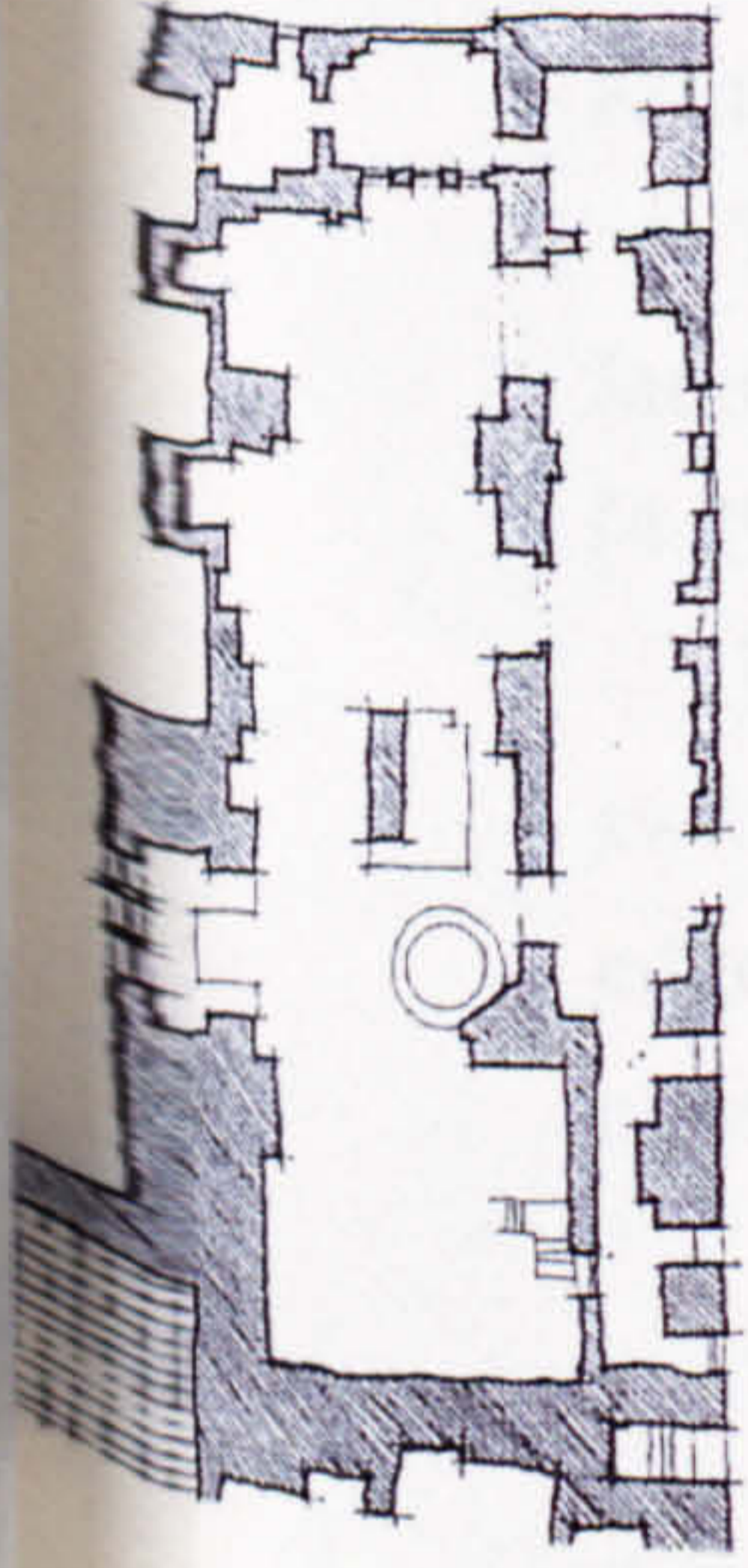


B. Site plan.

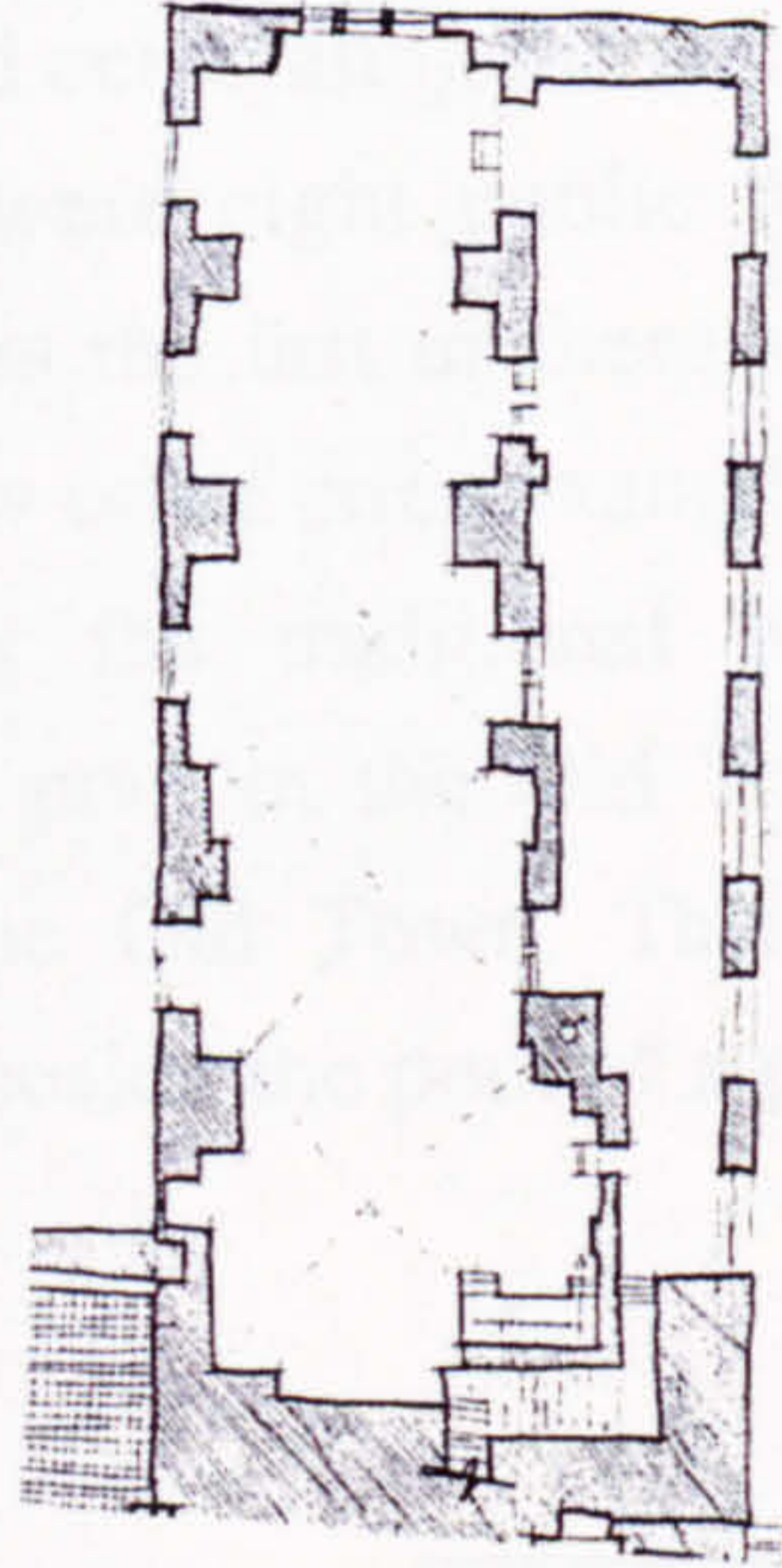


C. The soap factory and the surrounding buildings.

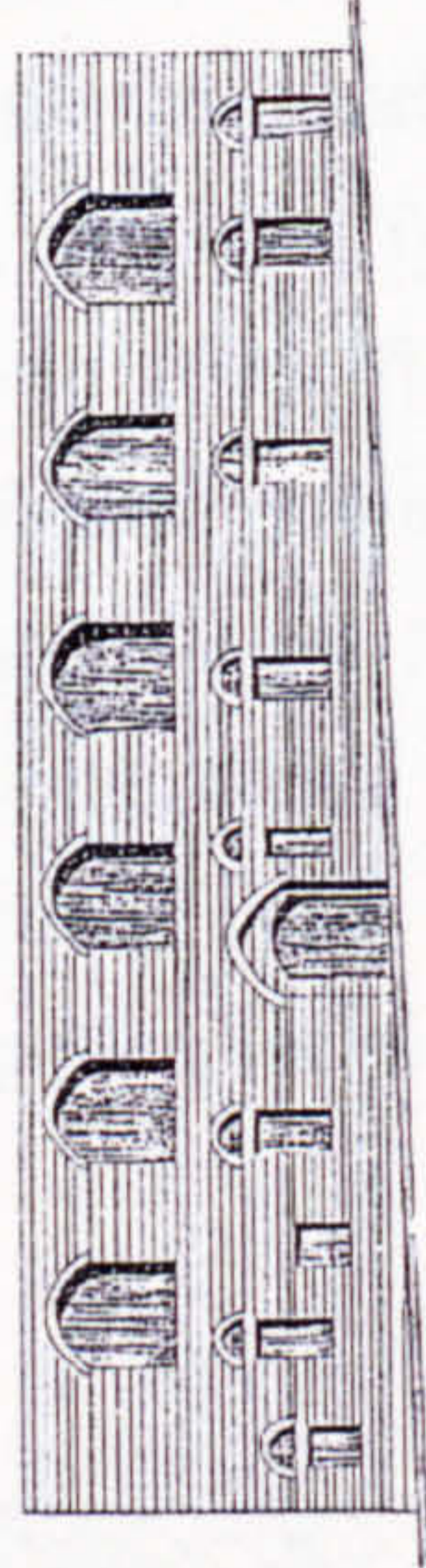
Figure (4.24): Masbanet Toqan.



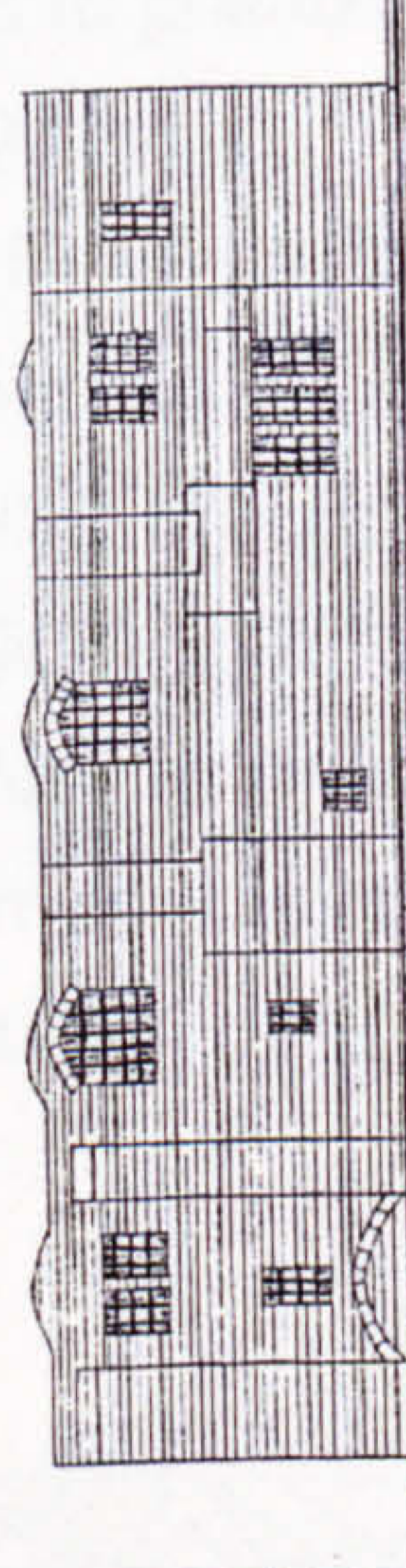
D. Ground floor plan.



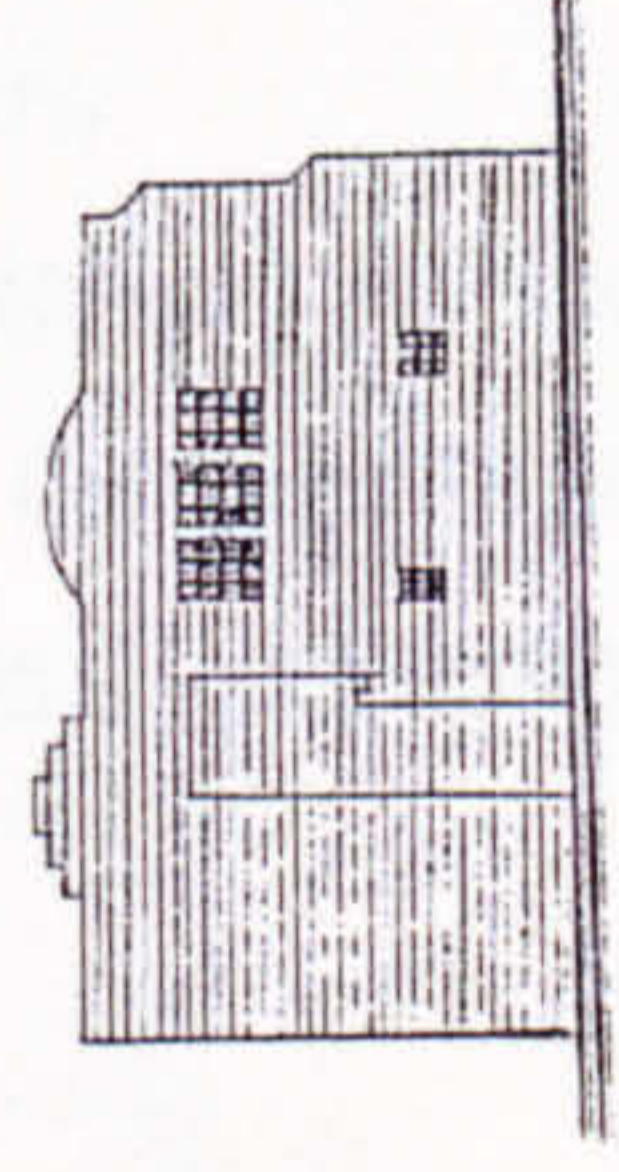
E. First floor plan.



F. South elevation.



G. North elevation.



H. East elevation.



Source of all the architectural drawings and plates: Courtesy of An-Najah University Arch.al students, 1989.



I. An exterior view.



J. An interior view.



K. General interior view.

4.3.2.4. Leisure and Recreational Institutions:

A. Bath-houses; Al-Hammamat:

The public steam baths are of Roman and Byzantine origin. Usually, *Al-Hammamat*; pl. of *Hammam*, were used during the morning by men and in the afternoon by women. They had to serve different purposes: hygienic, social recreational, and indirectly religious. The bath-house being a hygienic institution, provides thorough cleansing not only the exterior of the body but the whole organism as well. It is also a centre for recreation and relaxation and where massage is available after taking the bath (Ismail, 1969). As a social institution was served by strengthening the social interactions, bonds and the relations among the quarter people, moreover they were used for special social occasions, such as weddings and educational celebrations, as in graduation from schools, Kuttab, and celebrating the compilation of memorising the Qur'an.

There were eight public baths in the Old Town, see figure (4.25). Hammam Al-Jadidah was the last of them to close in 1990, figure (4.26). Figures (4.27), (4.28) and (4.29) show other three examples of disused public baths within the Old Town.

Besides the traditional bath-houses there were at least one traditional public swimming pool in the Old Town. It was called "*Al-Ajaj Pool*", located at the southern edge of the Old Town. This swimming pool was a part of a recreational complex consisted beside the pool of a public garden for picnic facilities.

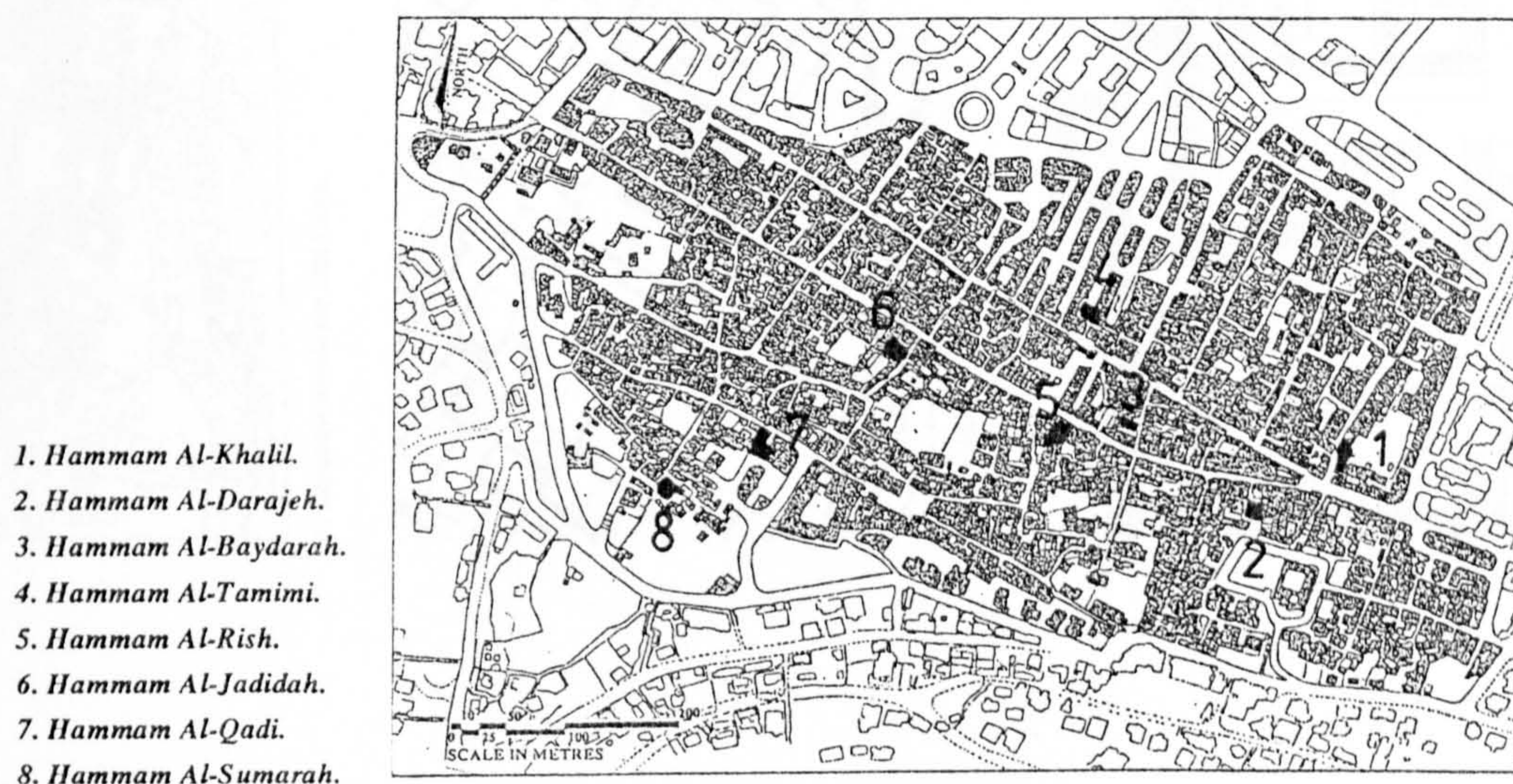
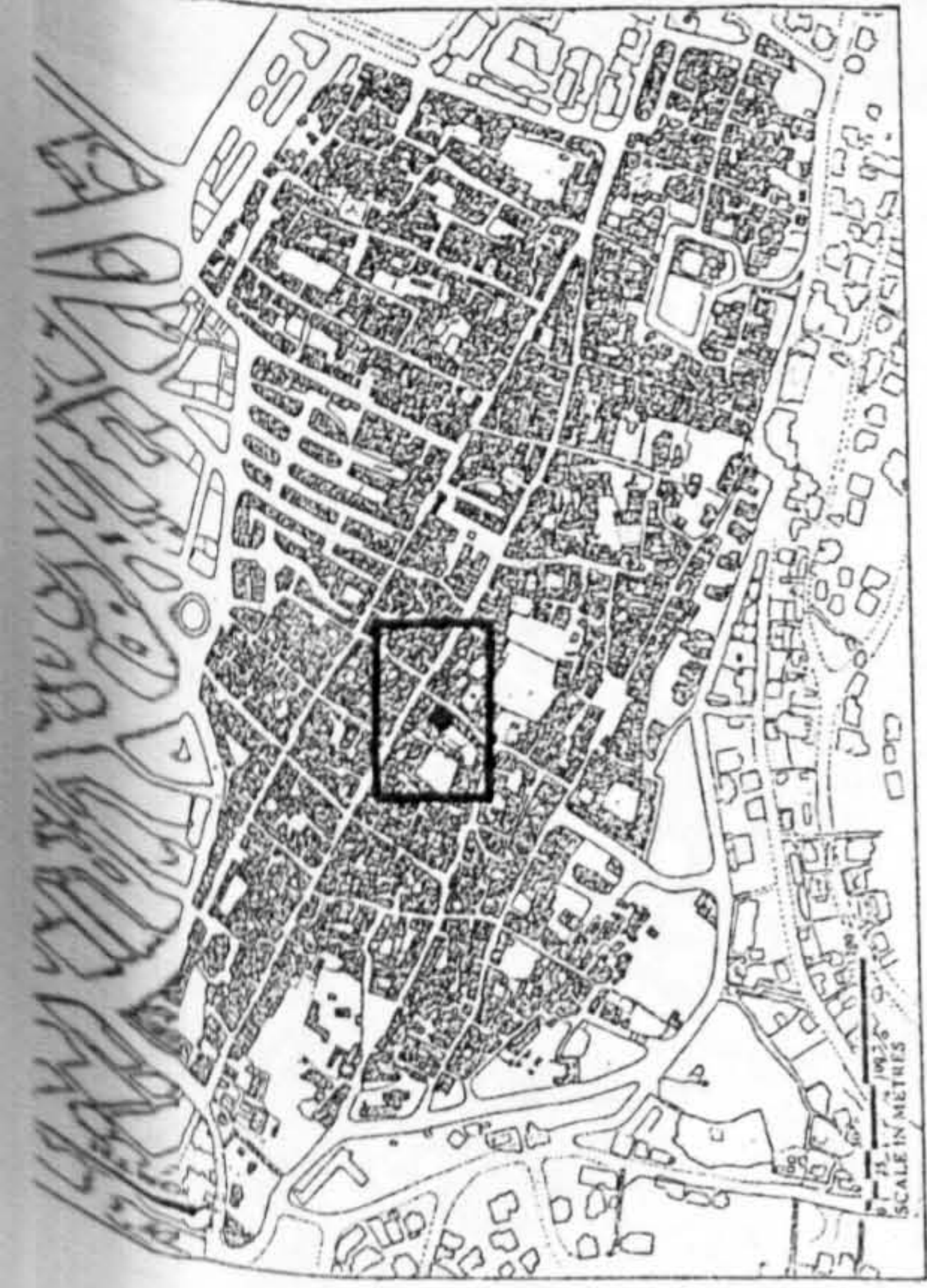


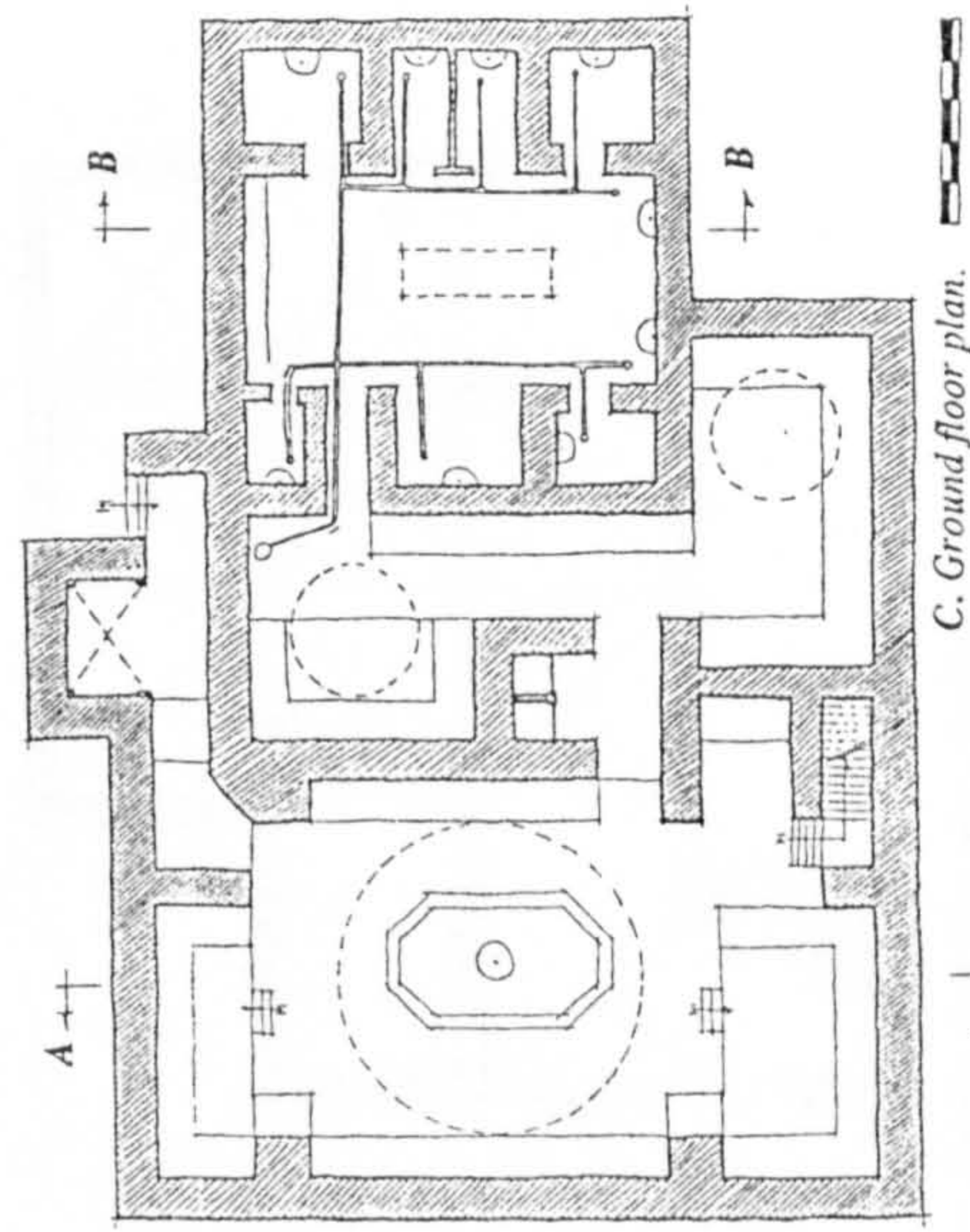
Figure (4.25): Public Bath-houses; Hammamat, within the Old Town.



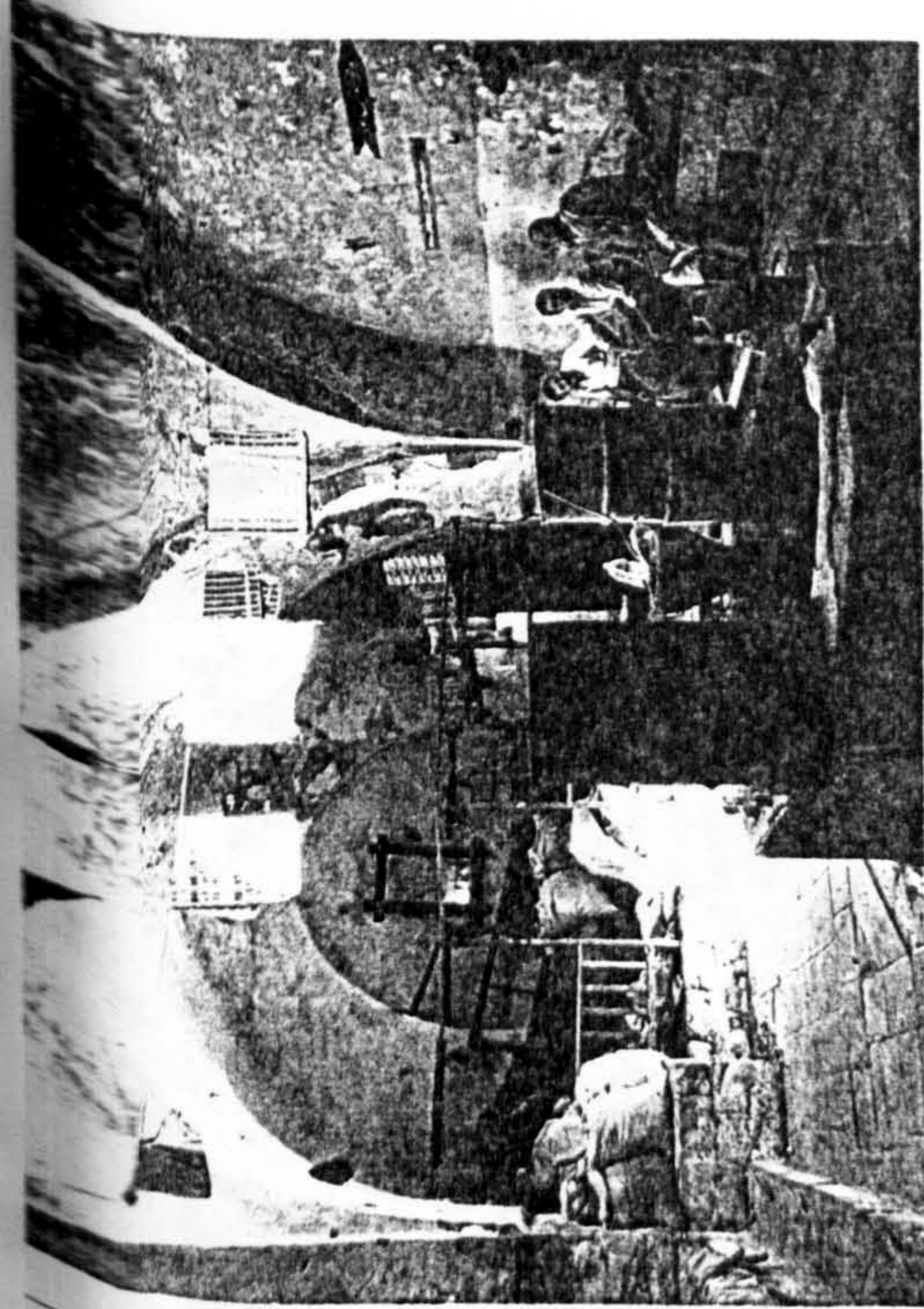
A. Location within the Old Town.



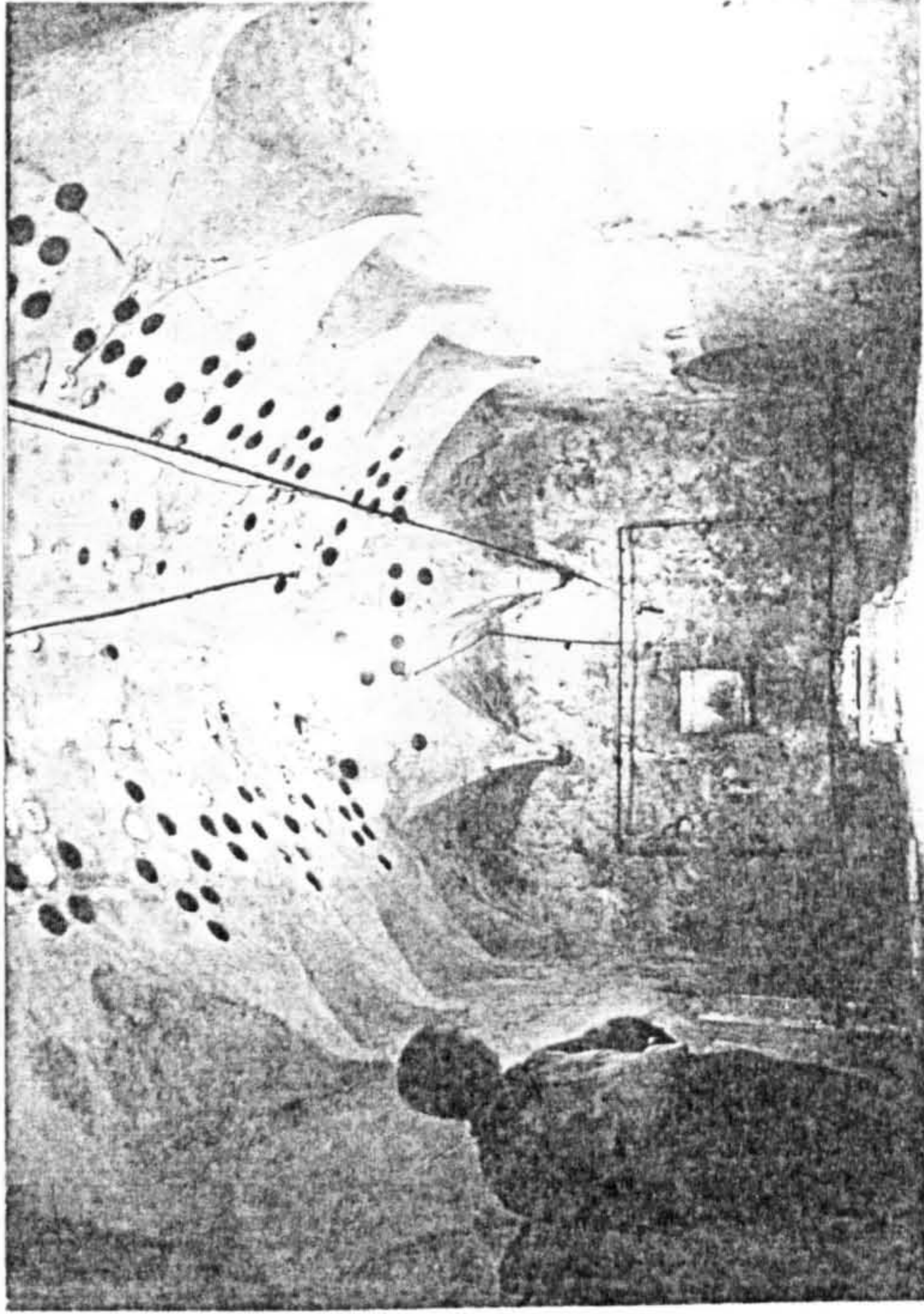
B. Site plan.



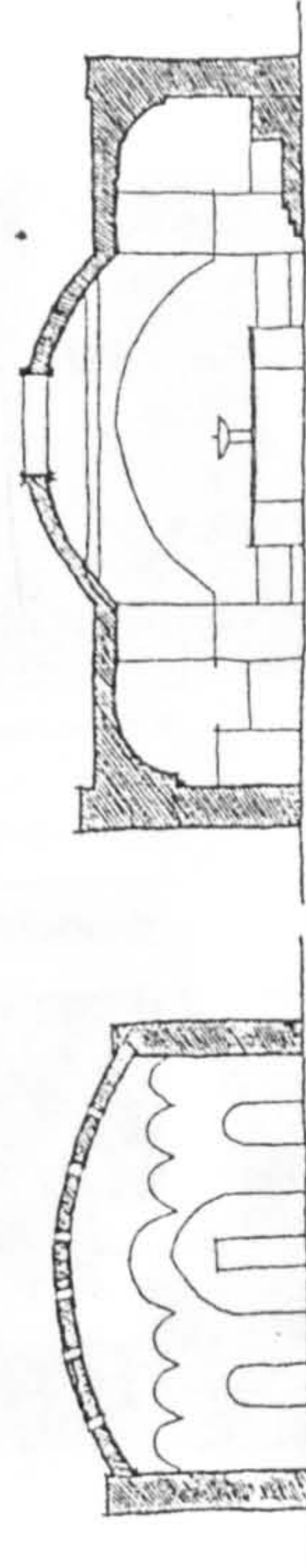
C. Ground floor plan.



D. An interior view of the summer part. Source: Courtesy of Dr Burgoyne, 1987.



E. An interior view of the winter part. Source: Courtesy of Dr Burgoyne, 1987.



F. Section B-B.

G. Section A-A.

Source of all the architectural drawings and plates: Courtesy of An-Najah University Arch. al students, 1989.

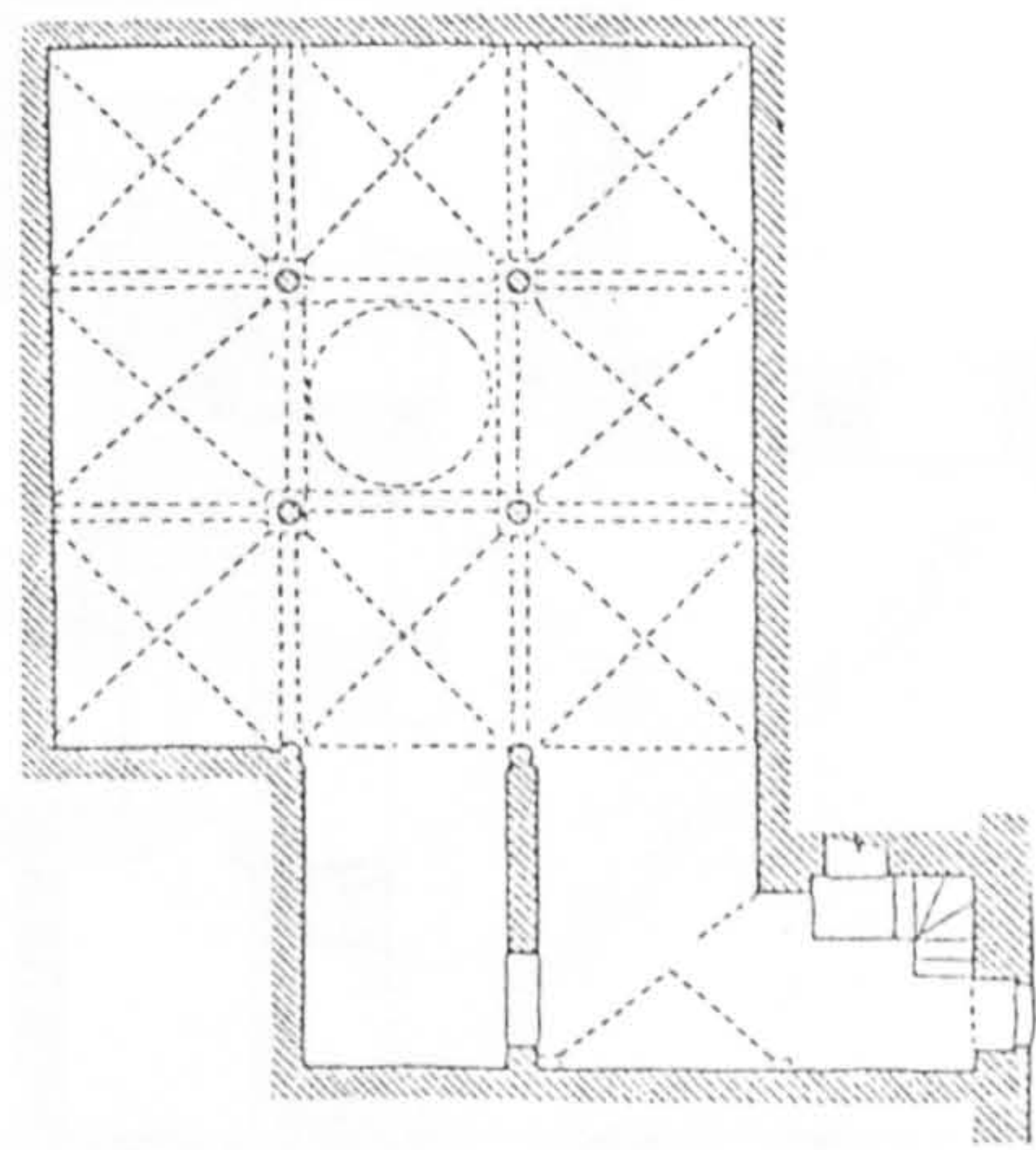
Figure (4.26): Hammam Al-Jadidah.



A. Location within the Old Town.



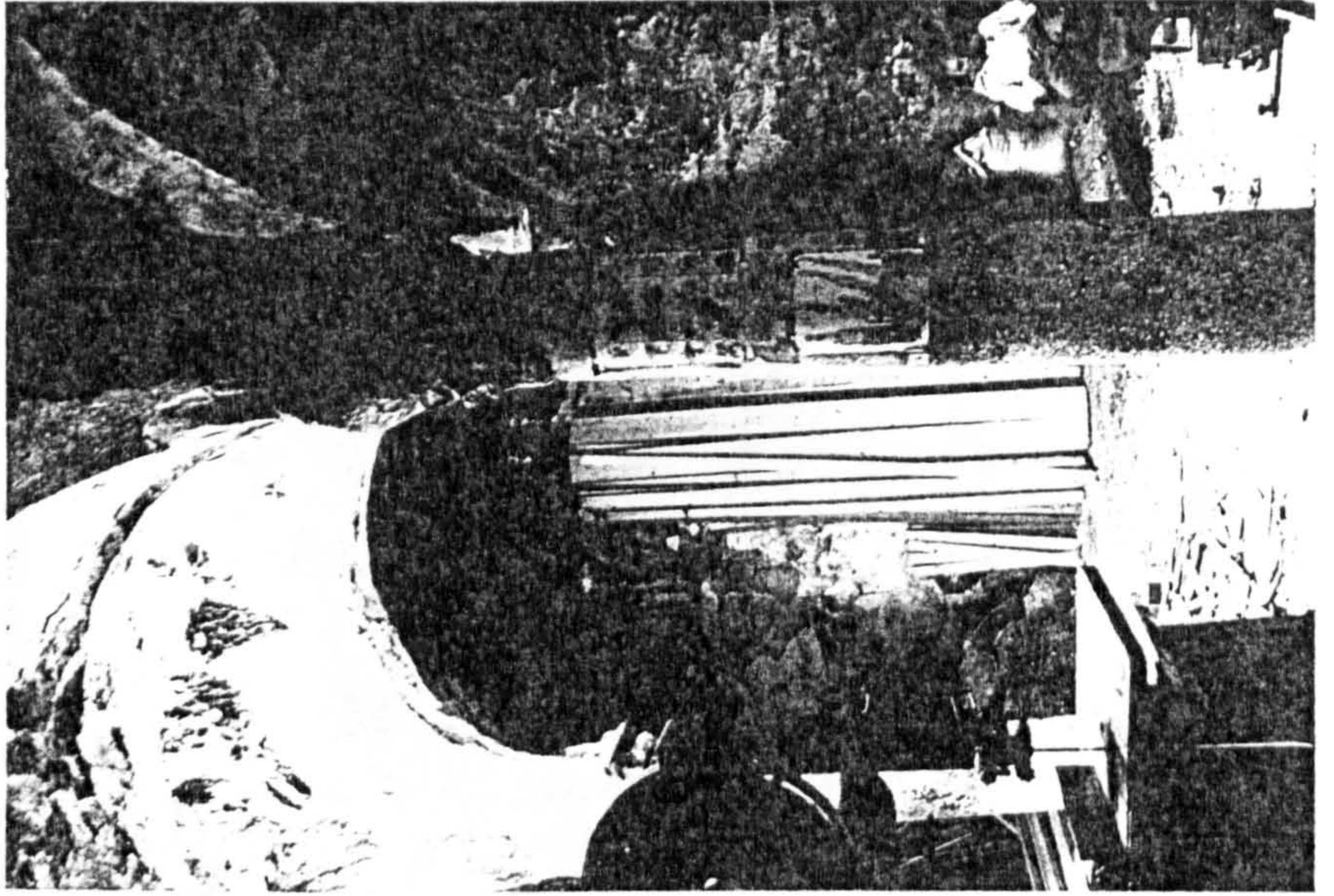
B. Site plan.



C. Ground floor plan, now a carpenter's workshop.
Source: (Burgoyne, 1987).



D

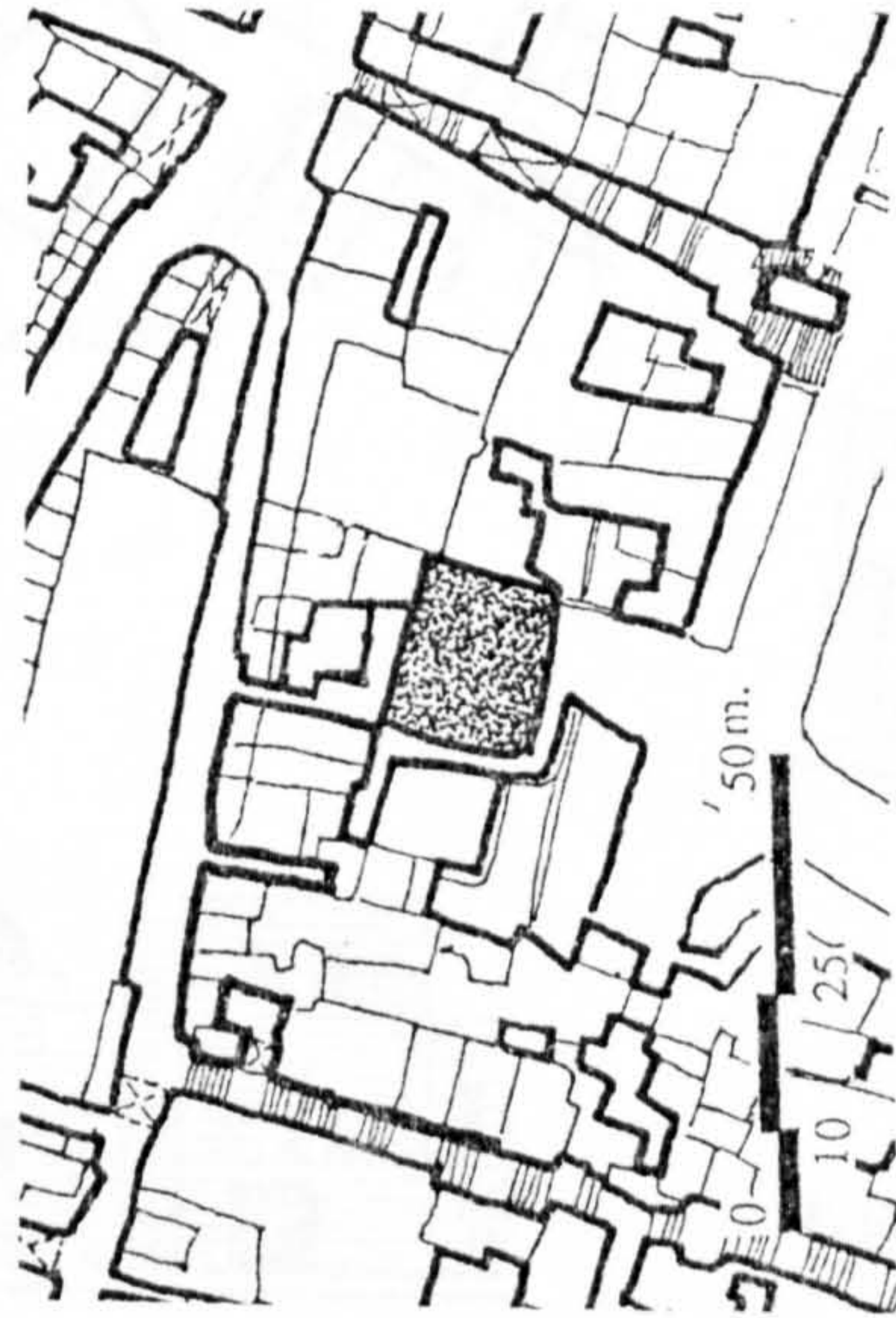


E

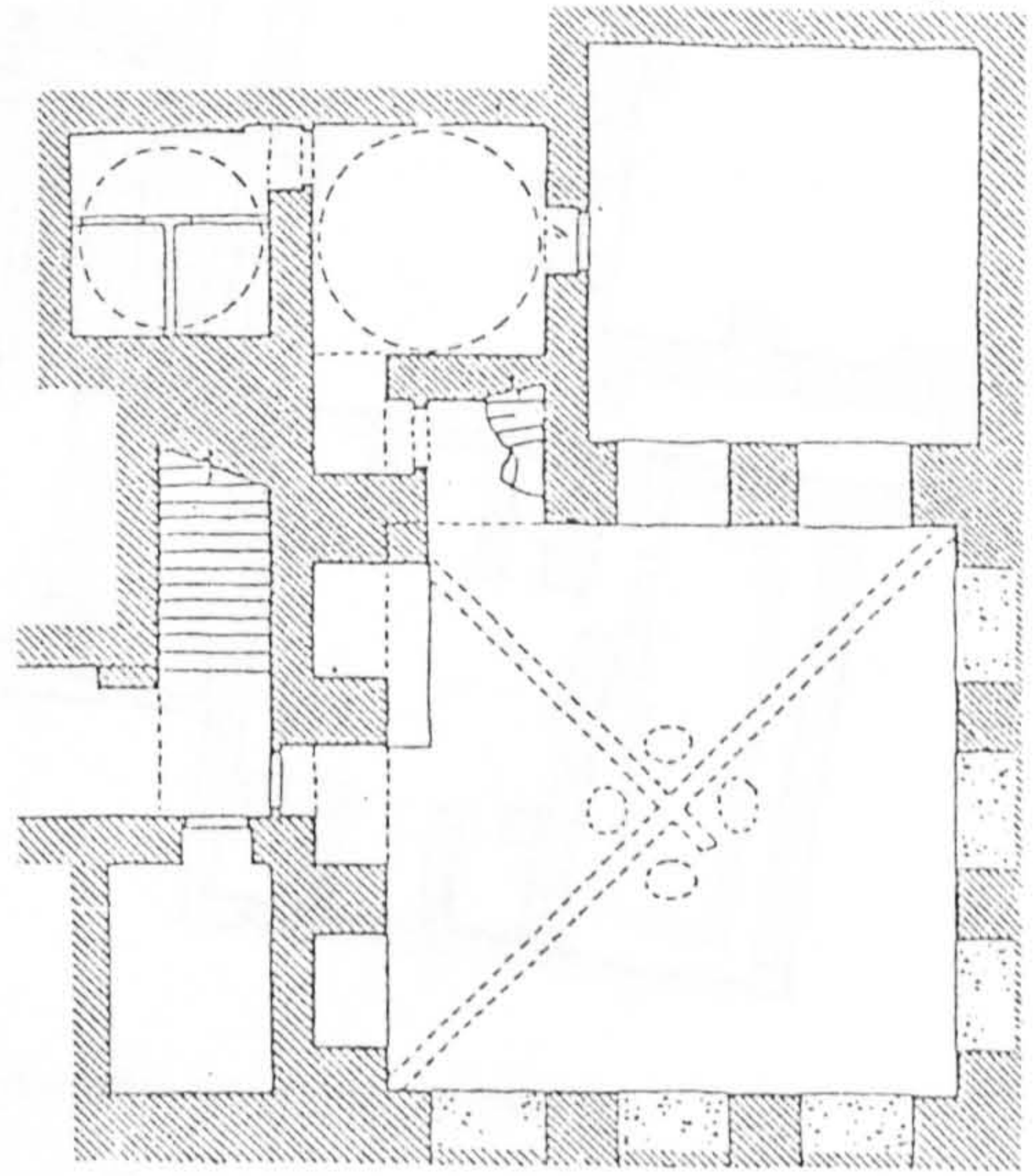
D & E Interior views. Source: Courtesy of Dr Burgoyne, 1987.



A. Location within the Old Town.



B. Site plan.
Scale: 1/1250.



C. Ground floor plan. Source: (Burgoyne, 1987).

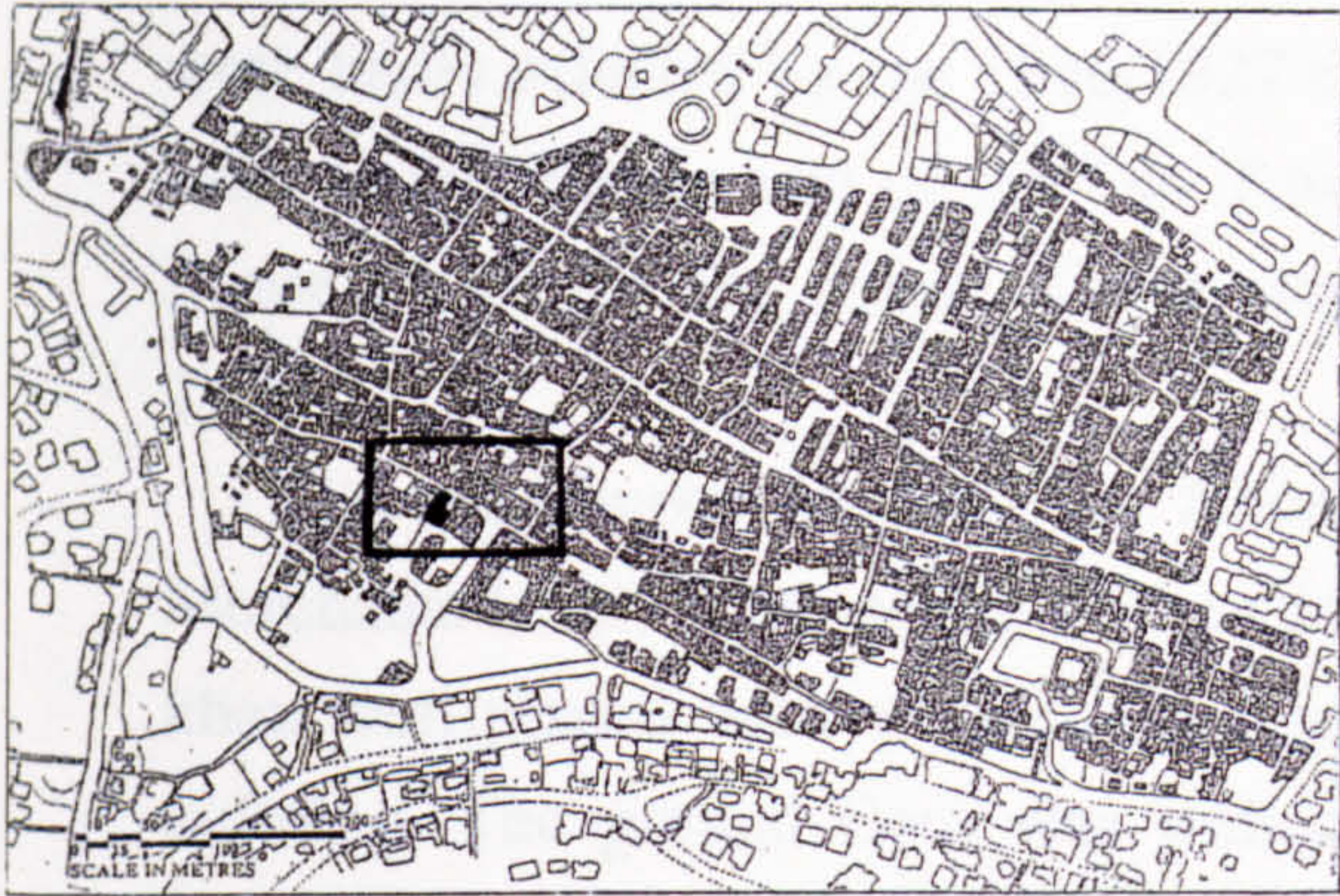


D. An interior view of the summer part showing the condition of its vault. Source: Courtesy of Dr Burgoyne, 1987.

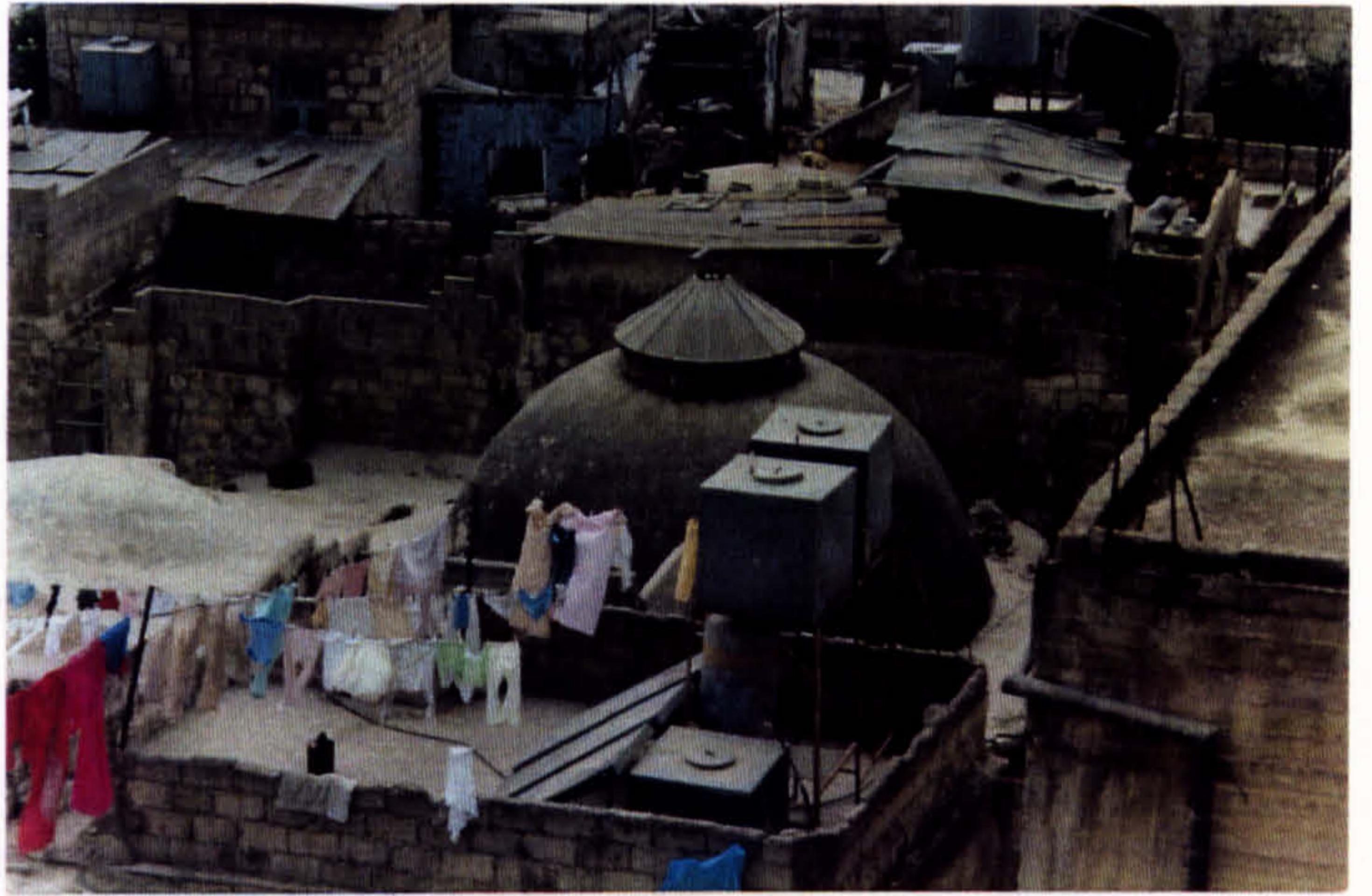


E. The exterior foyer. Notice the vaulted approach shown on the right side. Source: Courtesy of Dr Burgoyne, 1987.

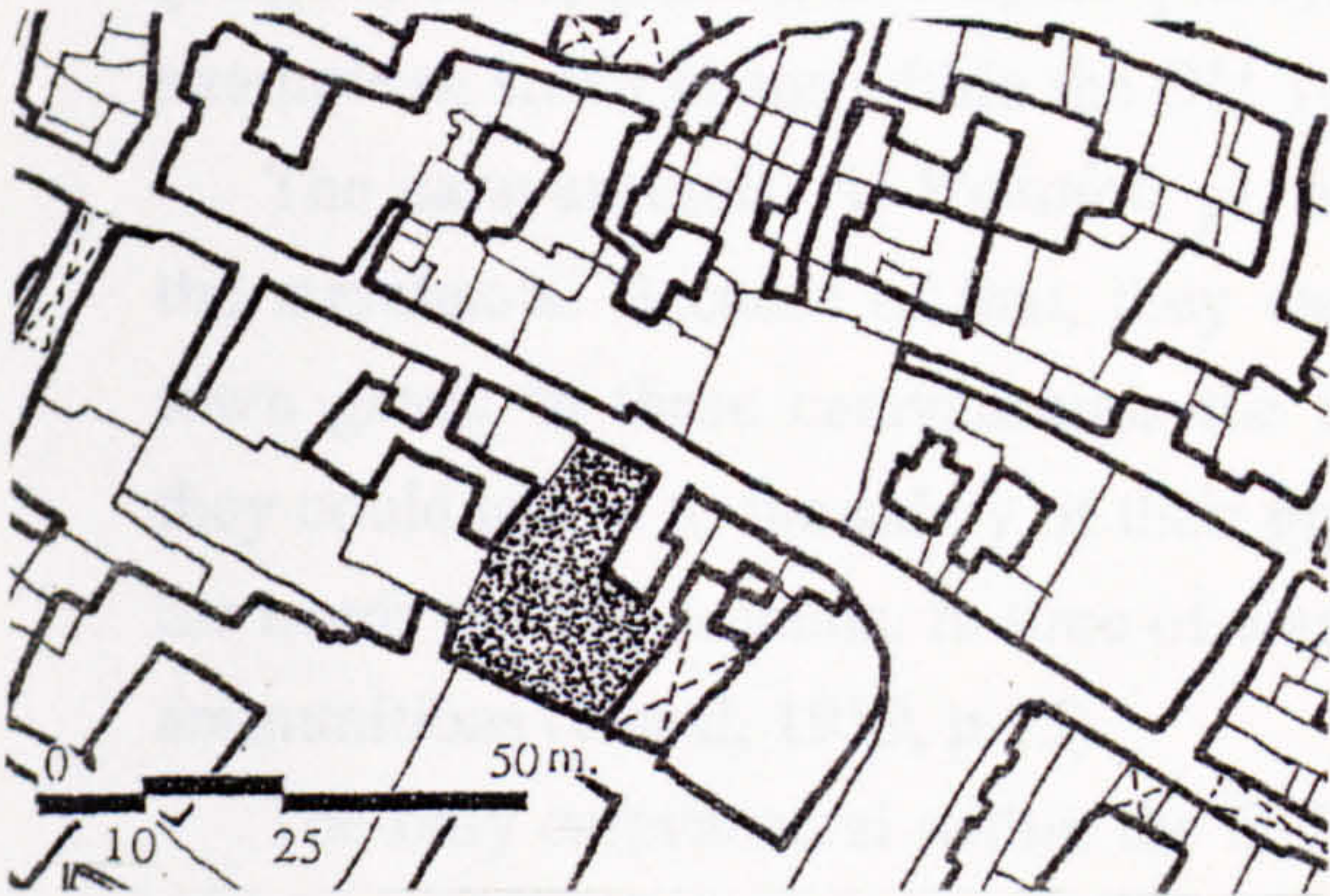
Figure (4.28): Hammam Al-Darajeh.



A. Location within the Old Town.

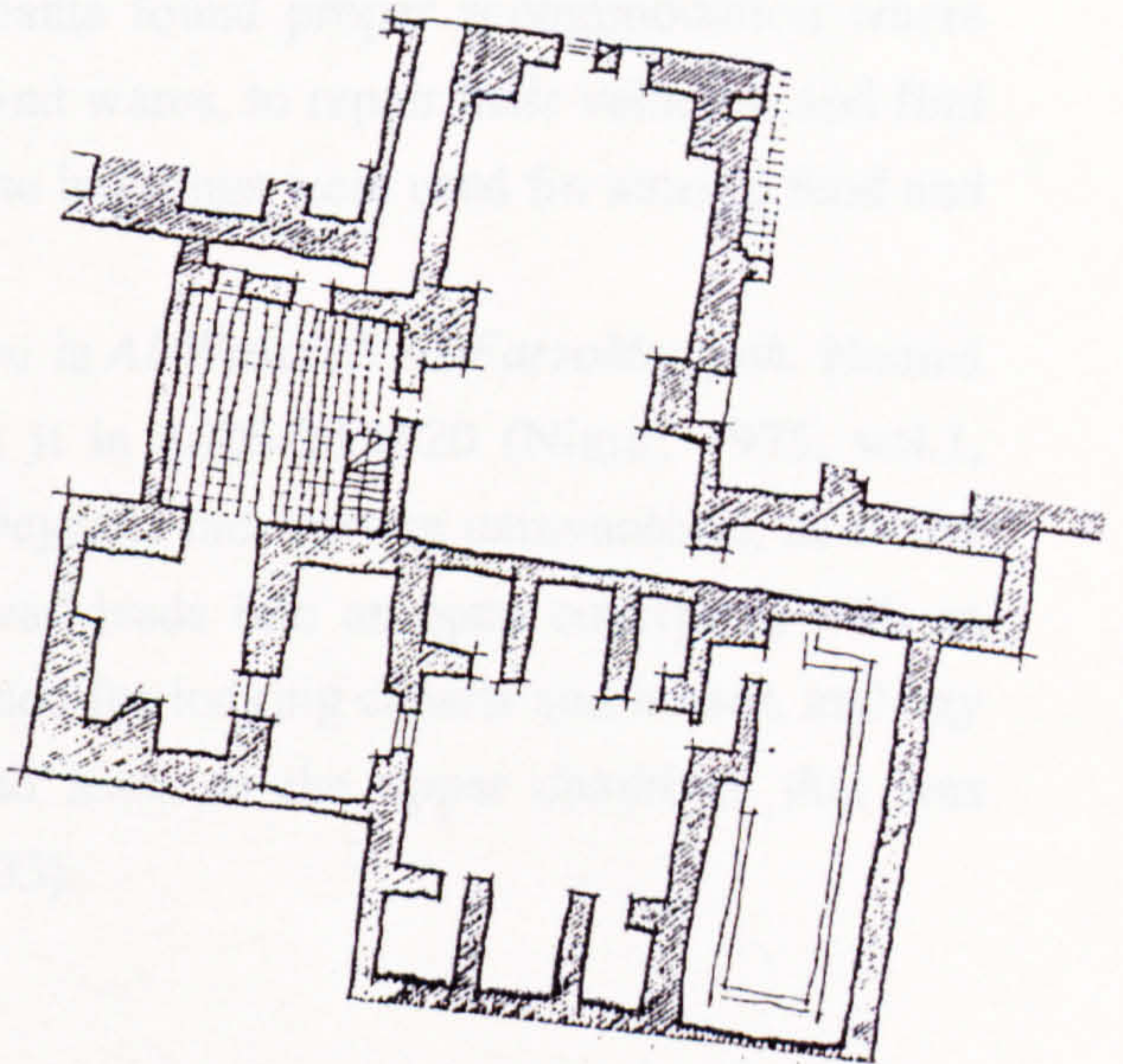


D. An exterior view showing the main dome.

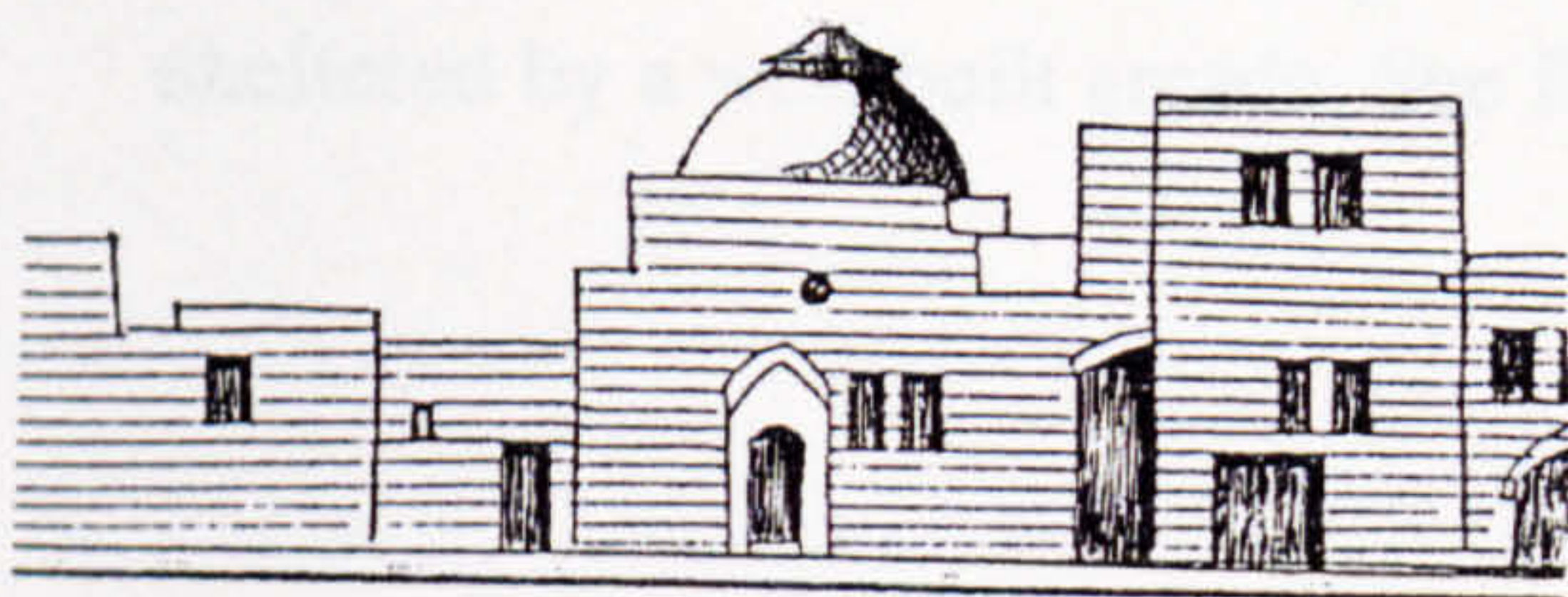


B. Site plan.

Scale: 1/1250.



E. Ground floor plan, now a sweet making shop.



C. Street elevation.

Figure (4.29): Hammam Al-Qadi.

Source of all the architectural drawings and plates: Courtesy of An-Najah University Arch.al students, 1989.

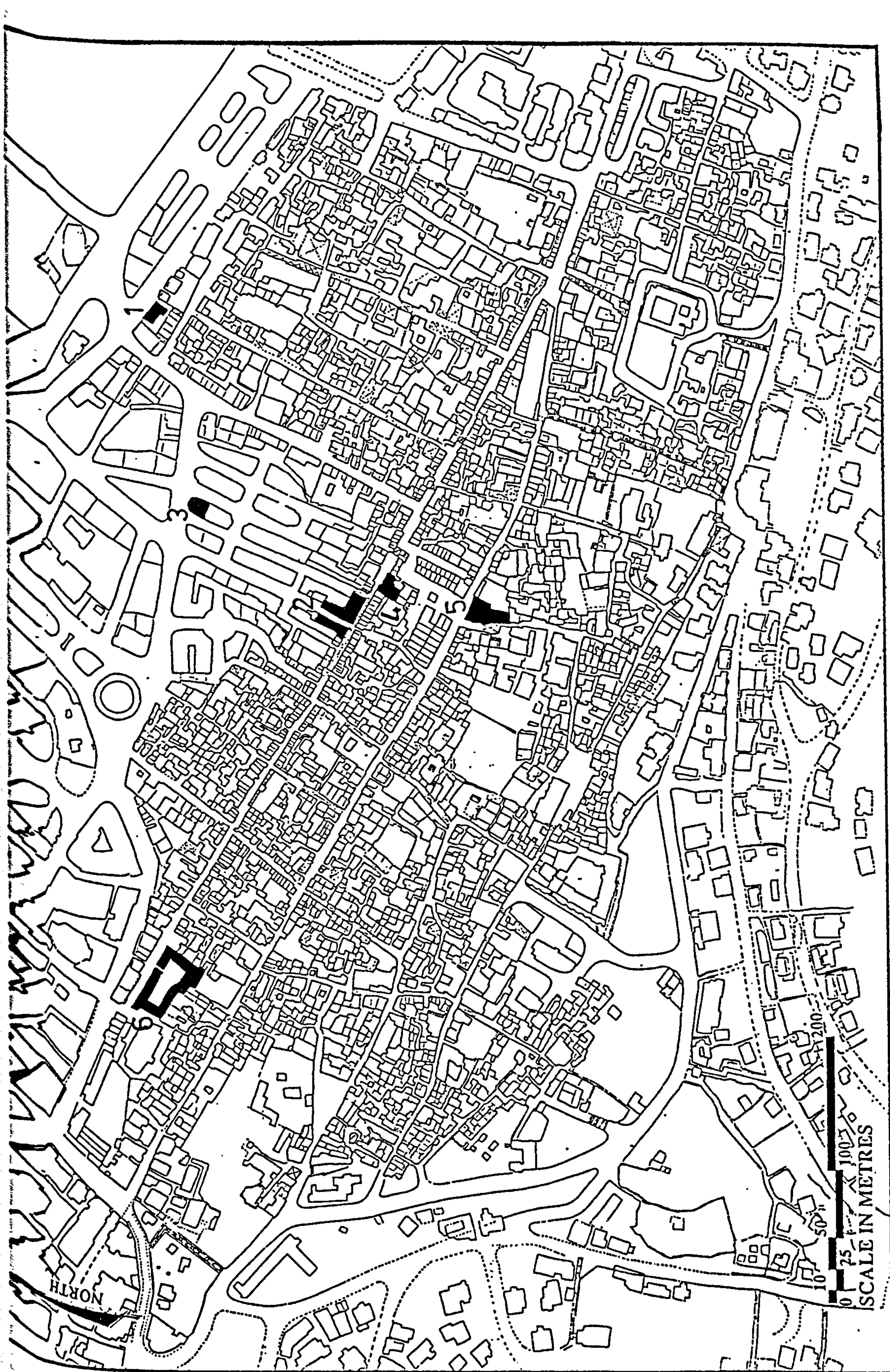
B. Hotels; Khans, and the Caravanserai; Al-Wakalah:

There were only a small number of hotels in the Old Town because strangers were not allowed to stay during nights, unless they were tradesmen or guests. These hotels were badly affected by the 1346/1927 earthquake. *Khan Al-Zabib*, for example, used to exist at the eastern end of the Old Town, there is no trace for it there, nowadays. See figure (4.30) for the hotels; *Khans*, and the Caravanserai; *Al-Wakalah* within the Old Town.

The most important hotel was *Khan Al-Tujjar* in *Soq Al-Sultan*. Its name means the Merchants hotel, at the centre of the Cloth Bazaar, *Soq Al-Qumash*. It was "an extensive khan well planed with an uncovered square space, enclosed by a two storied range of building. The ground floor was well adapted for lodging camels and other beasts of burden, but the upper chambers were so dilapidated that they offered but little shelter" (Rogers, 1865, p.260). See figure (4.31). Figure (4.32) shows *Khan Hindiyyah (3)* as an example of small khans within the Old Town.

The caravanserais; *Al-Wakalat*; pl. of *Al-Wakalah*, were to offer the best service to the merchants. Because of that, they were usually built near the main bazaars and the town gates. In these caravanserais the merchants found proper accommodation where they could attend to the safety of their goods and wares, to repair their vehicles, and find the needs of their animals. In time of wars these buildings were used for storing food and ammunitions (Unsal, 1959, p.15).

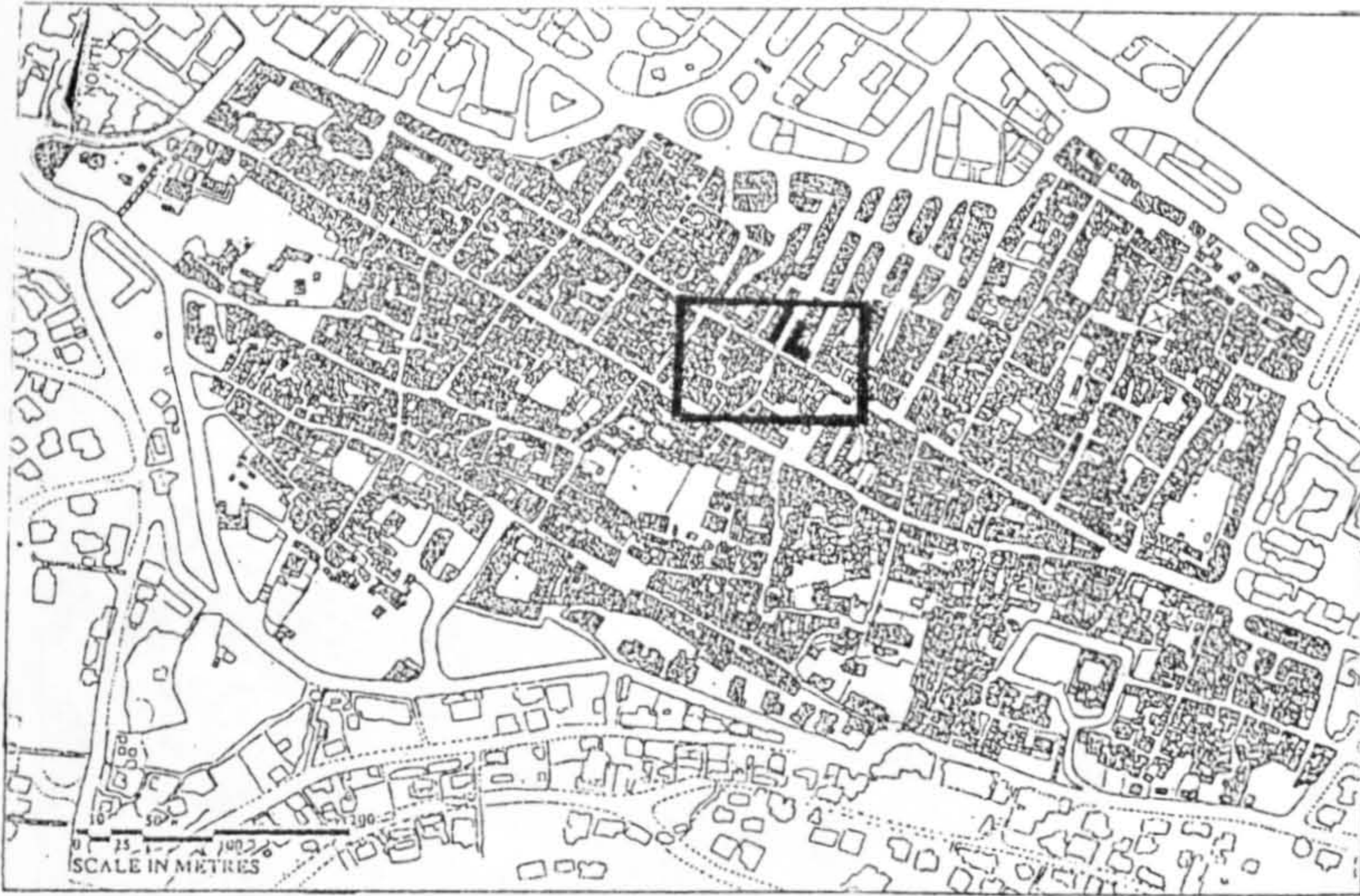
The only caravanserai within the Old Town is *Al-Wakalah Al-Farrokheyah*. Named after the Mamluk Prince *Farrokh*, who built it in 1029-30/1620 (Nimir, 1975, vol.1, p.77). Also, it is called *Al-Wakalah Al-Gharbeyah*; the western caravanserai, as it lies near the Western Gate of the town. Its gateway leads into an open courtyard, with an arched arcade around. The ground floor was used for lodging camels and horses, and hay storage. A stony stair case just near the gate leads to the upper chambers that was sheltered by a well-built arcade. See figure (4.33).



- 1. Khan Hindiyyah (1).
- 2. Khan Al-Tujjar.
- 3. Khan Hindiyyah (2).
- 4. Khan Hindiyyah (3).
- 5. Khan Al-Sahah.
- 6. Al-Wakalah Al-Farrokiyyah

Figure (4.30): Hotels; Khans, and the Caravanserai; Al-Wakalah within the Old Town.

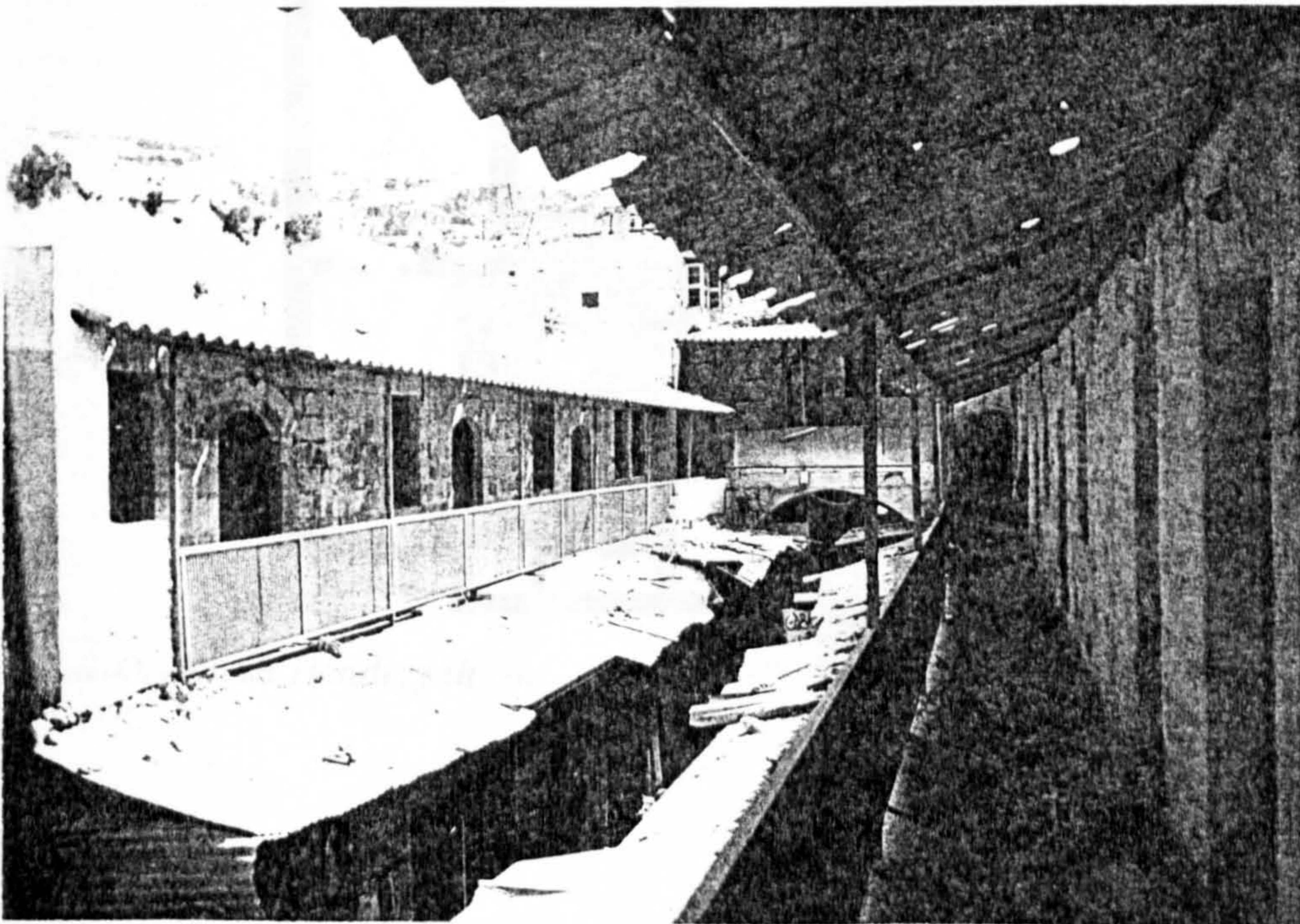
Figure (4.30): *Khan Al-Tujjar*:



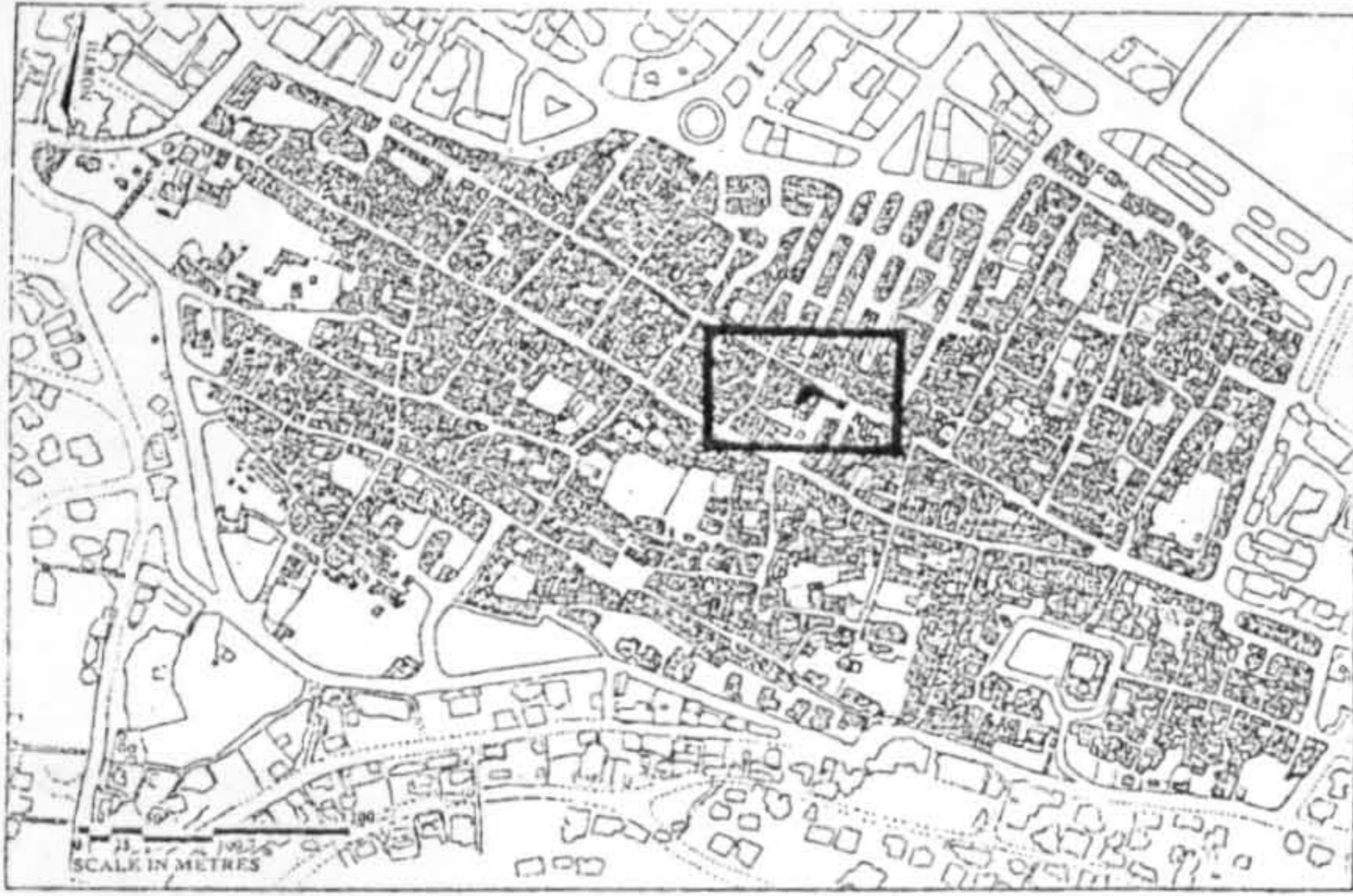
A. Location within the Old Town.



B. Site plan.



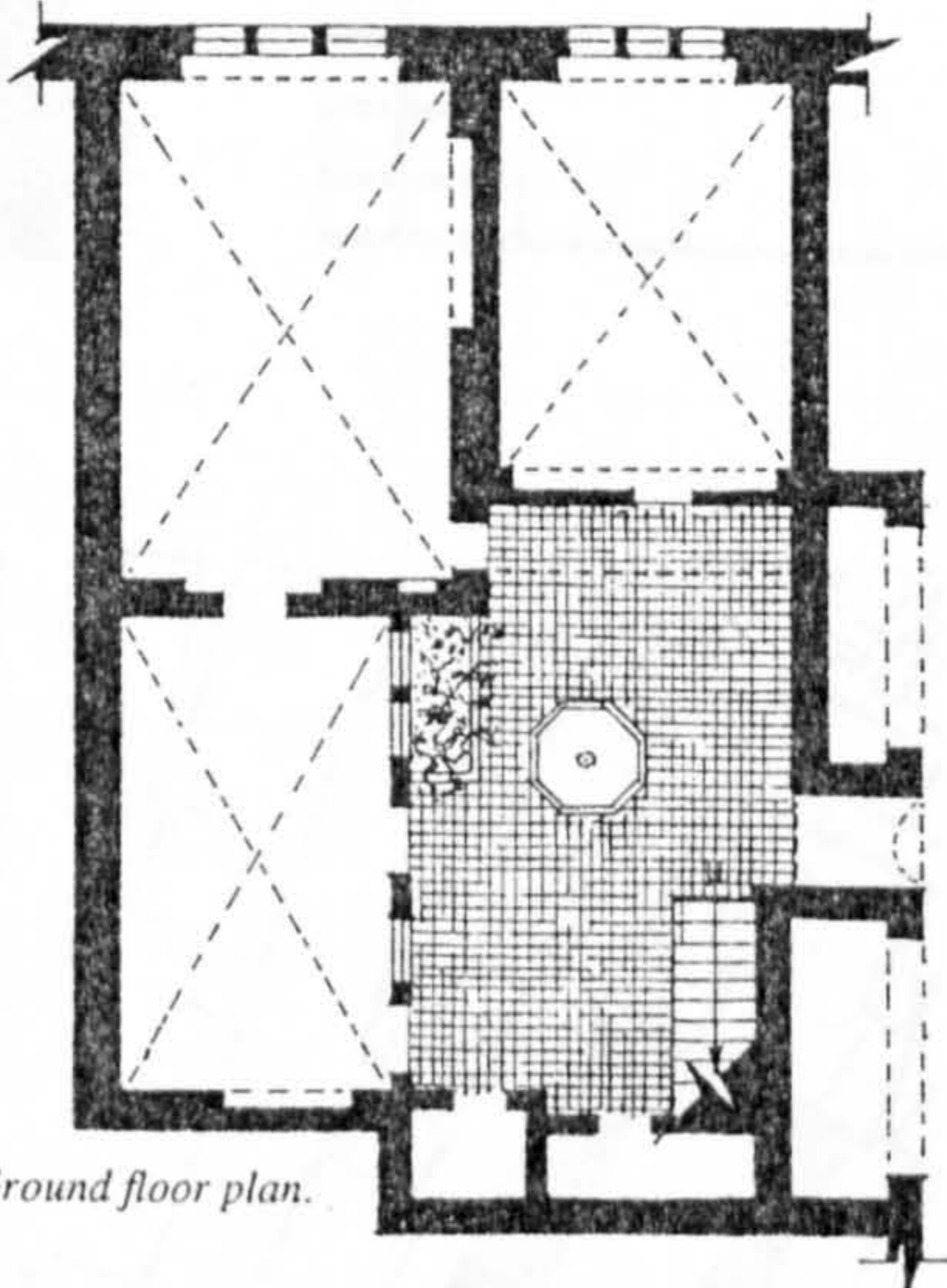
C. General view, looking north. Source: Courtesy of Dr Burgoyne, 1987.



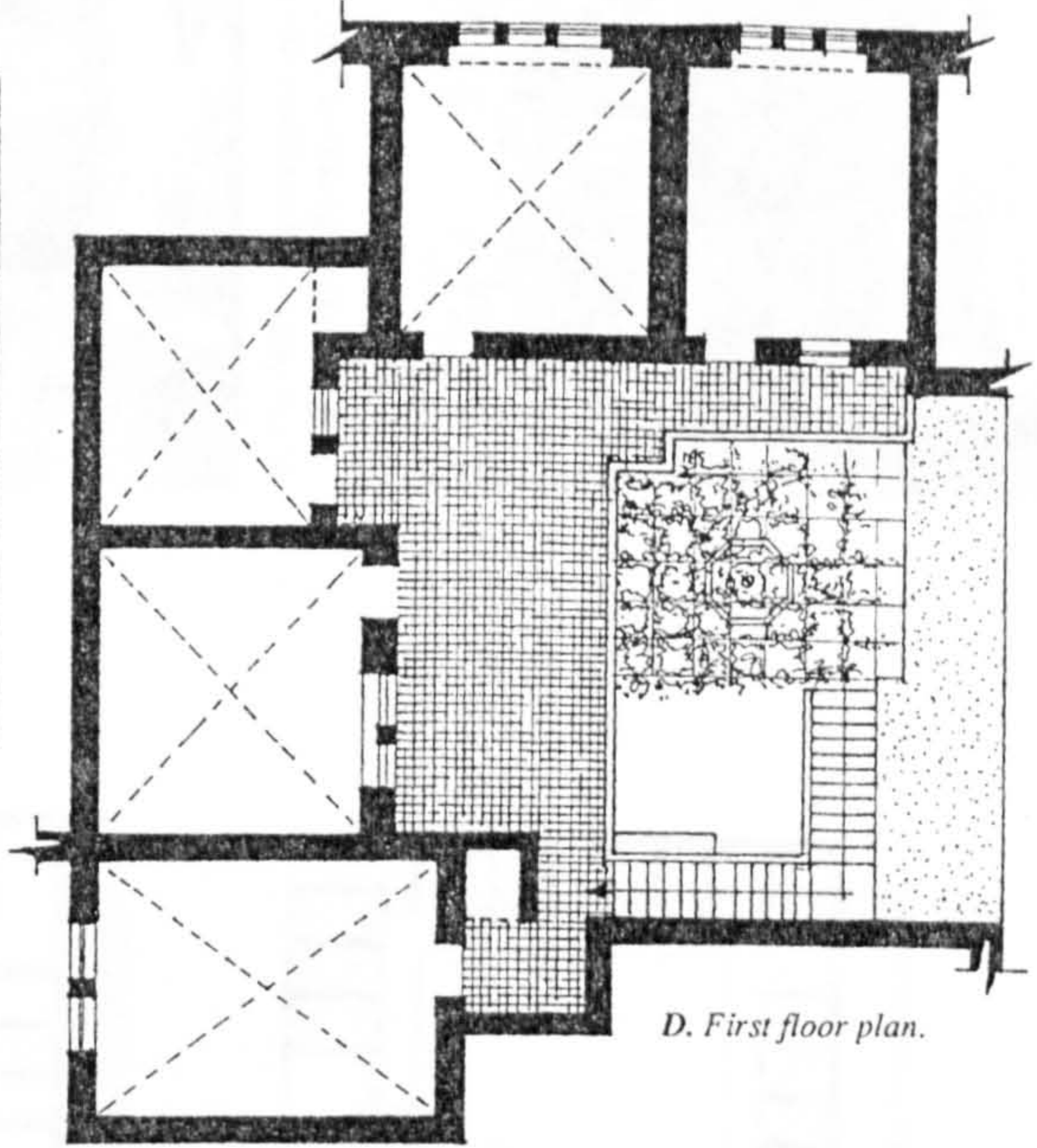
A. Location within the Old Town.



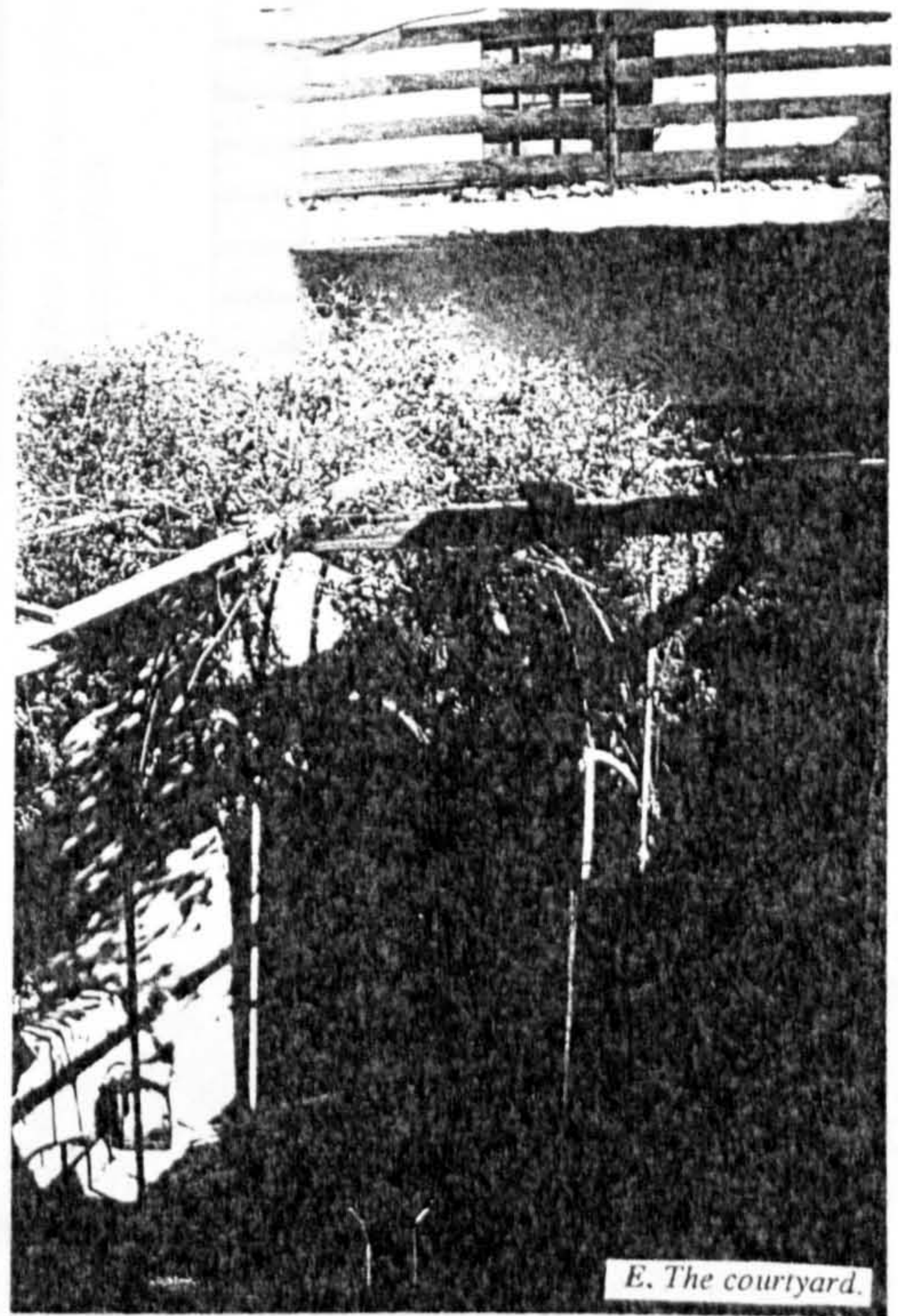
B. Site plan.



C. Ground floor plan.



D. First floor plan.

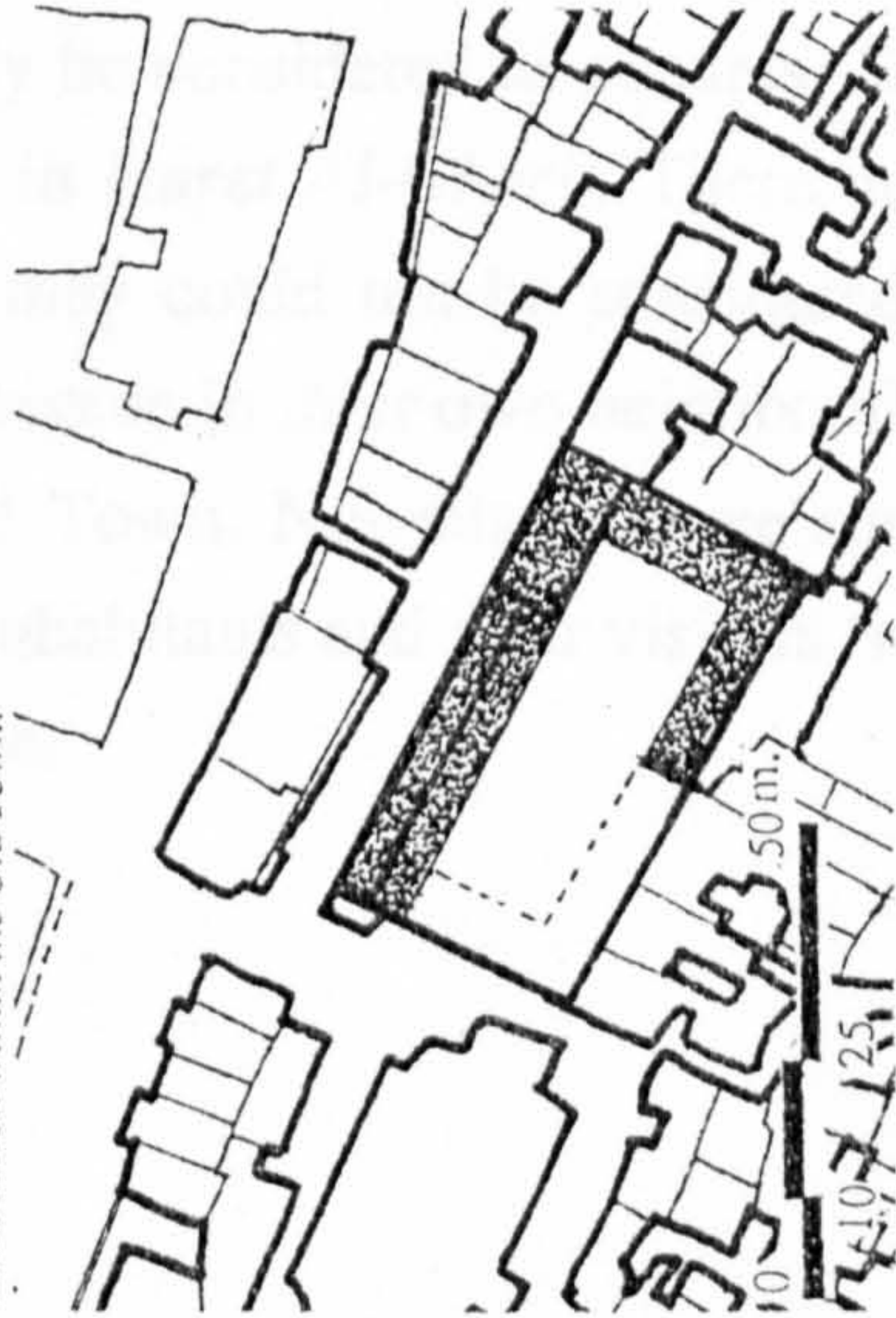


E. The courtyard.

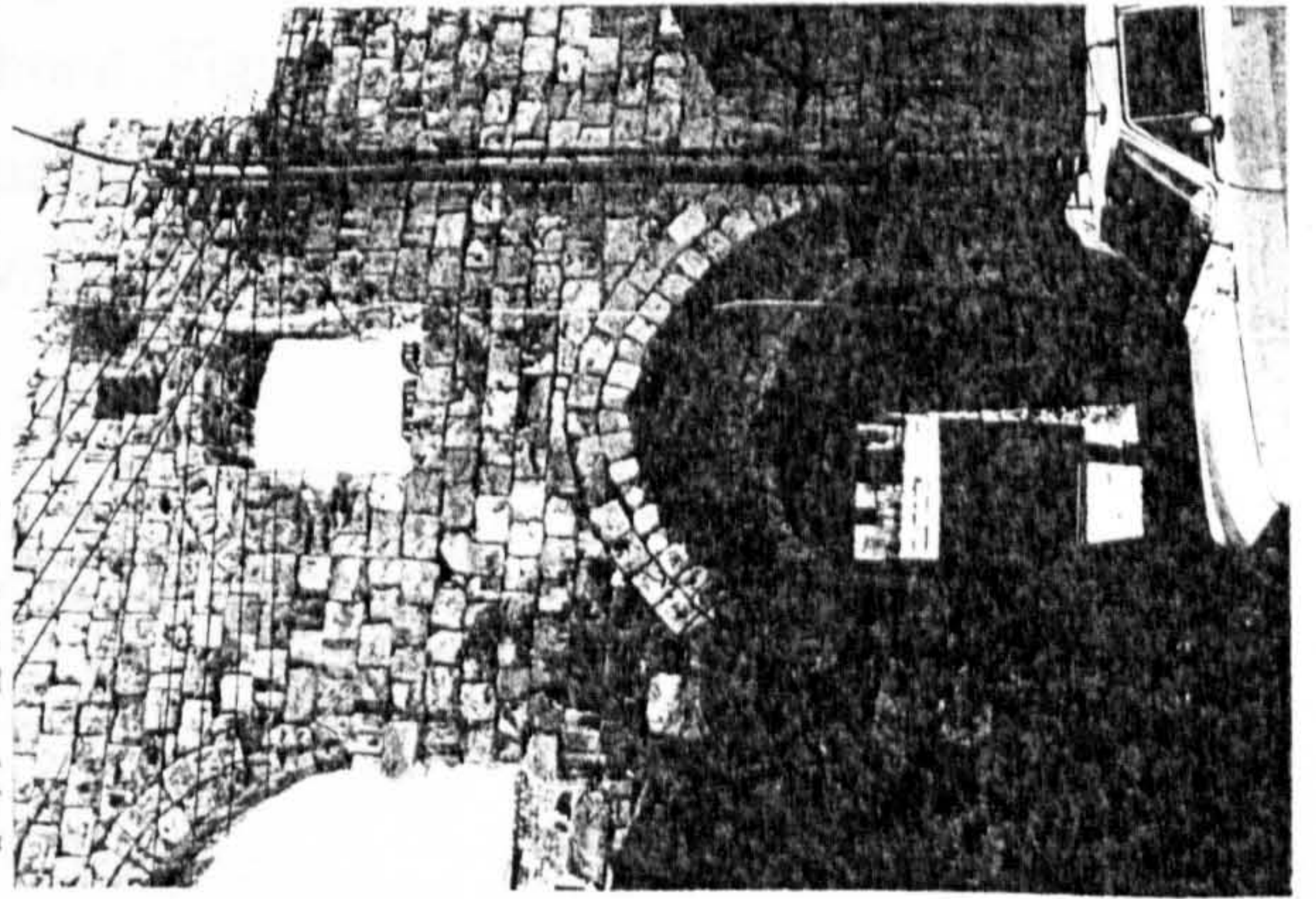
Figure (4.32): Khan Hindiyyah (3).



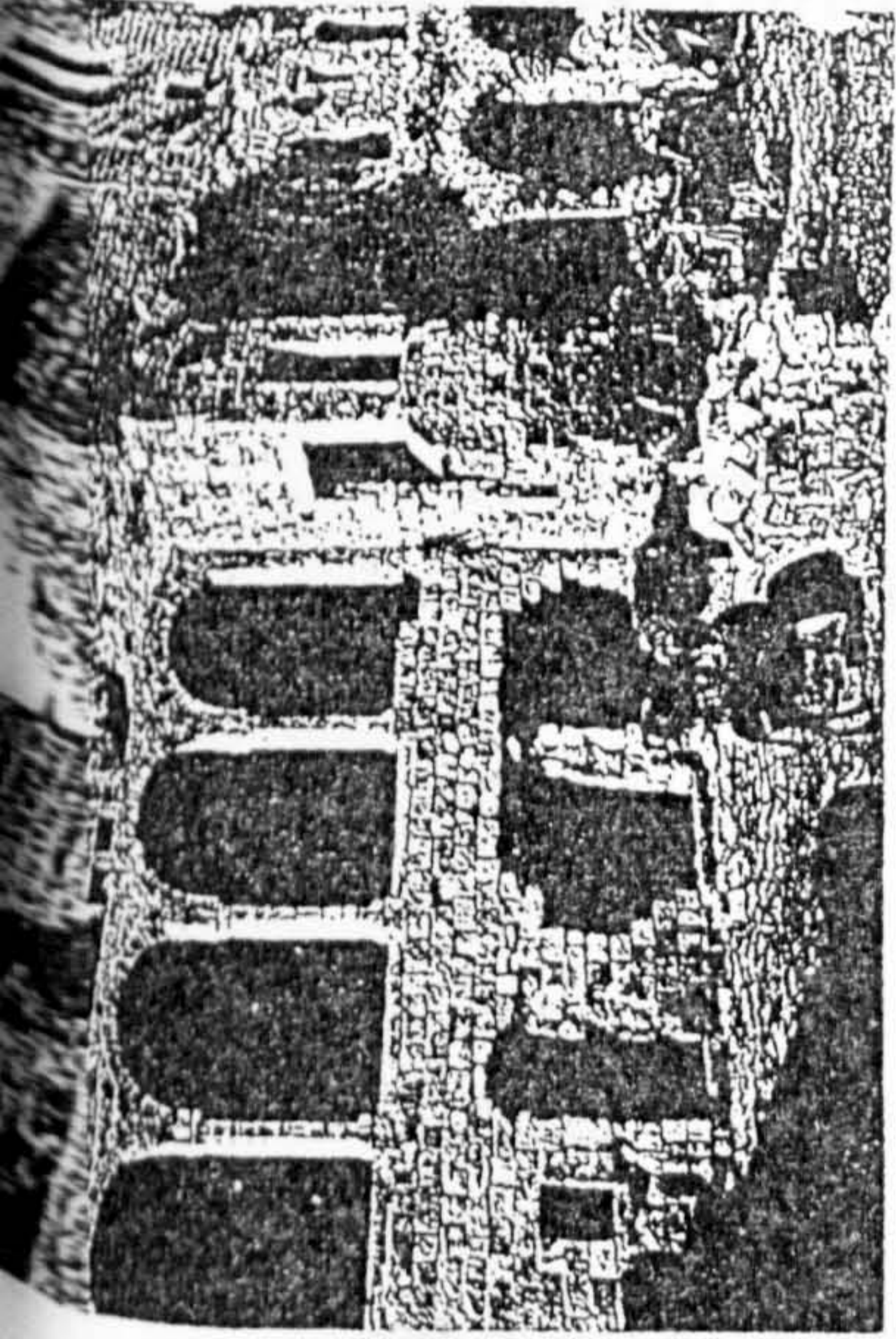
A. Location within the Old Town.



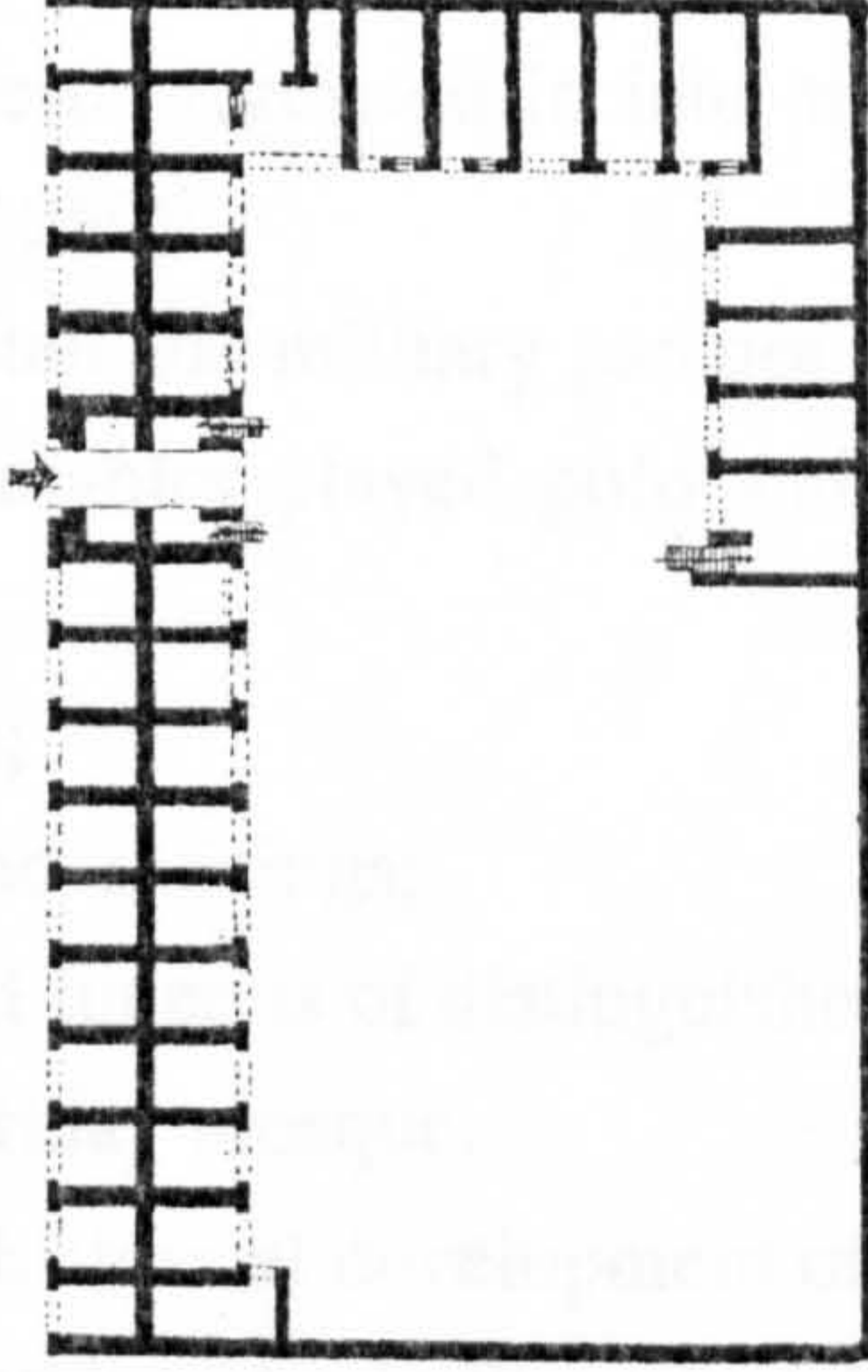
B. Site plan.



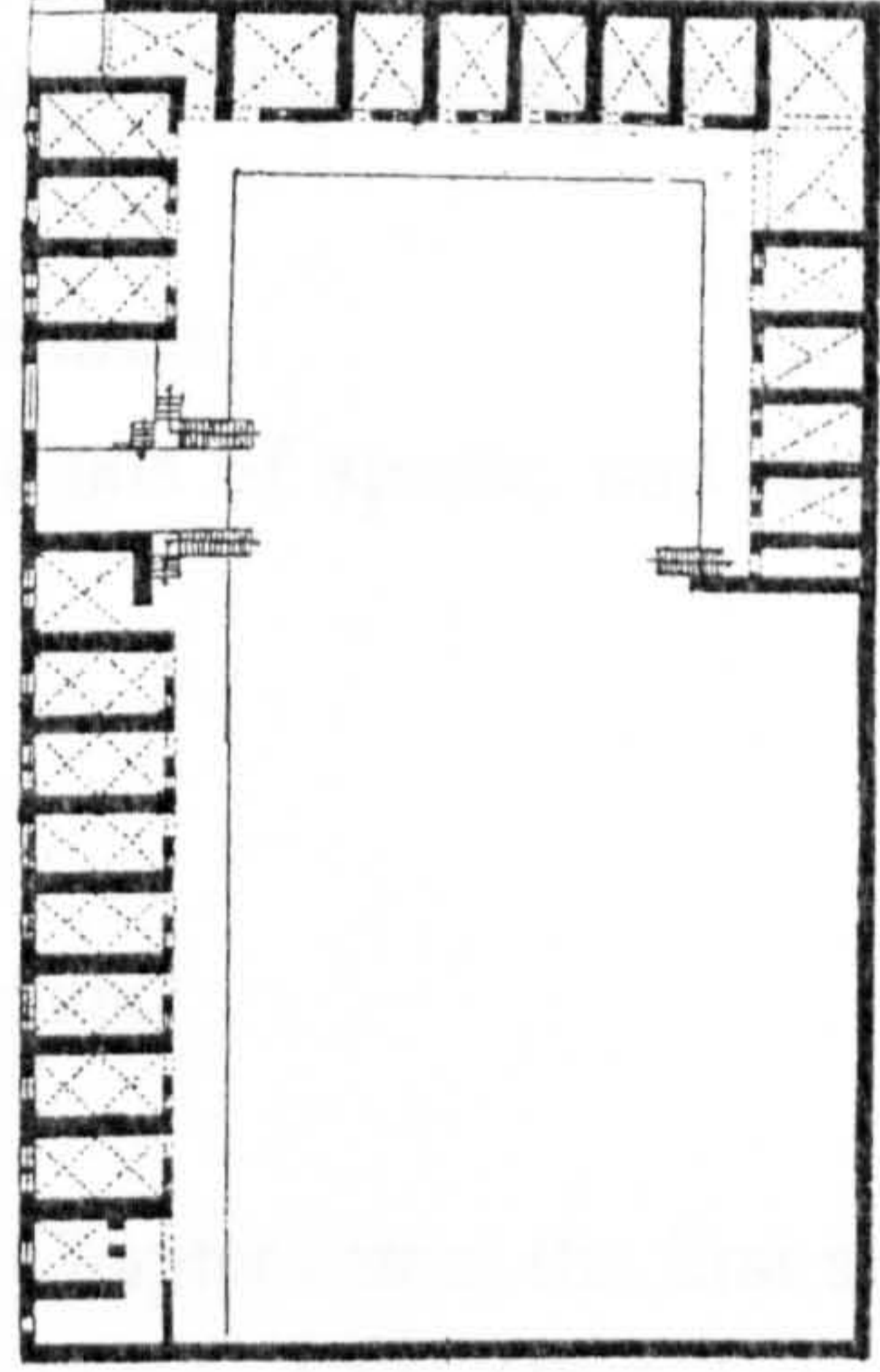
C. The main gate. Source: Courtesy of Dr Burgoyne, 1987.



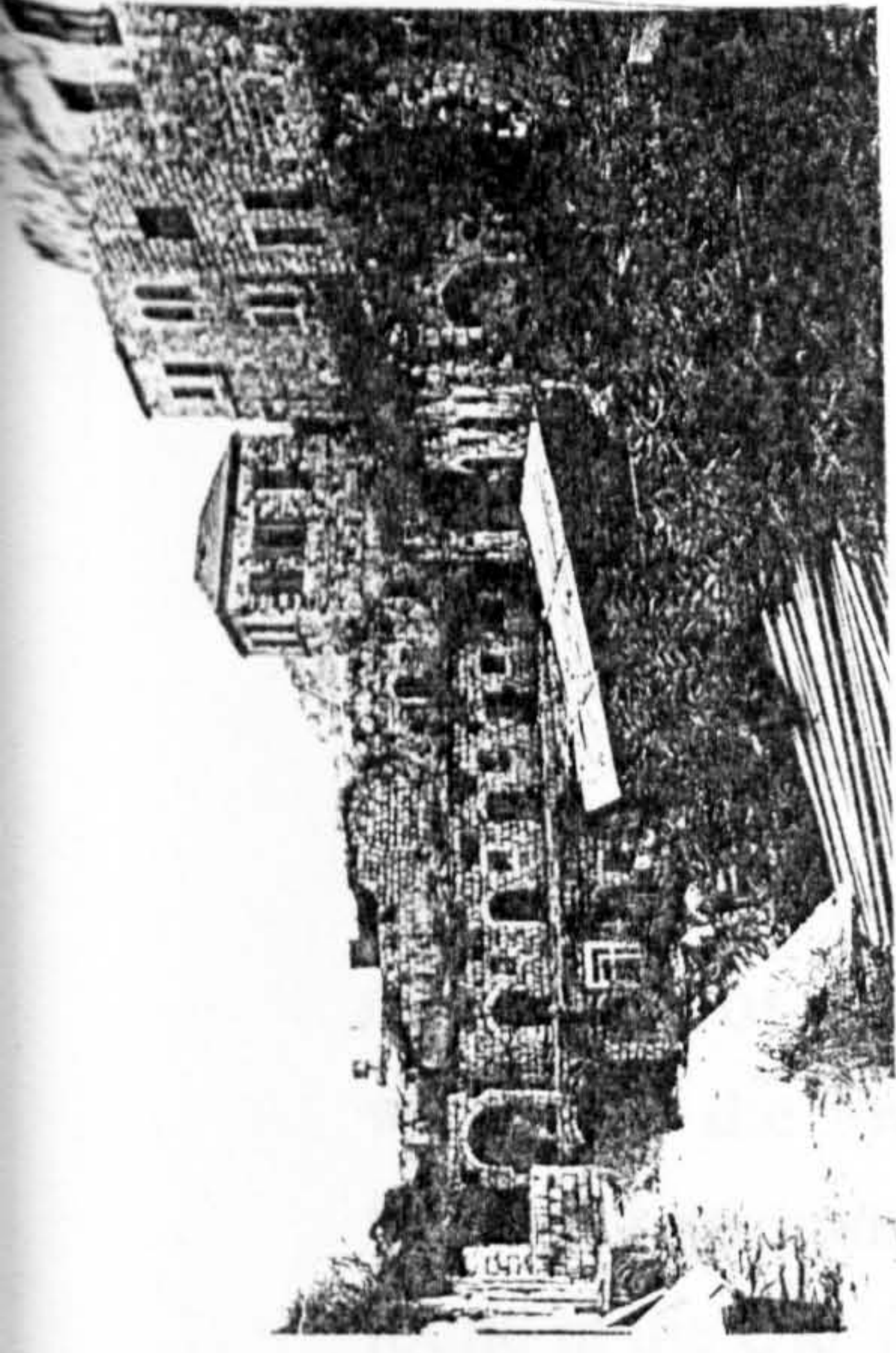
D. The building in 1926. Source (Jausan, 1927.a).



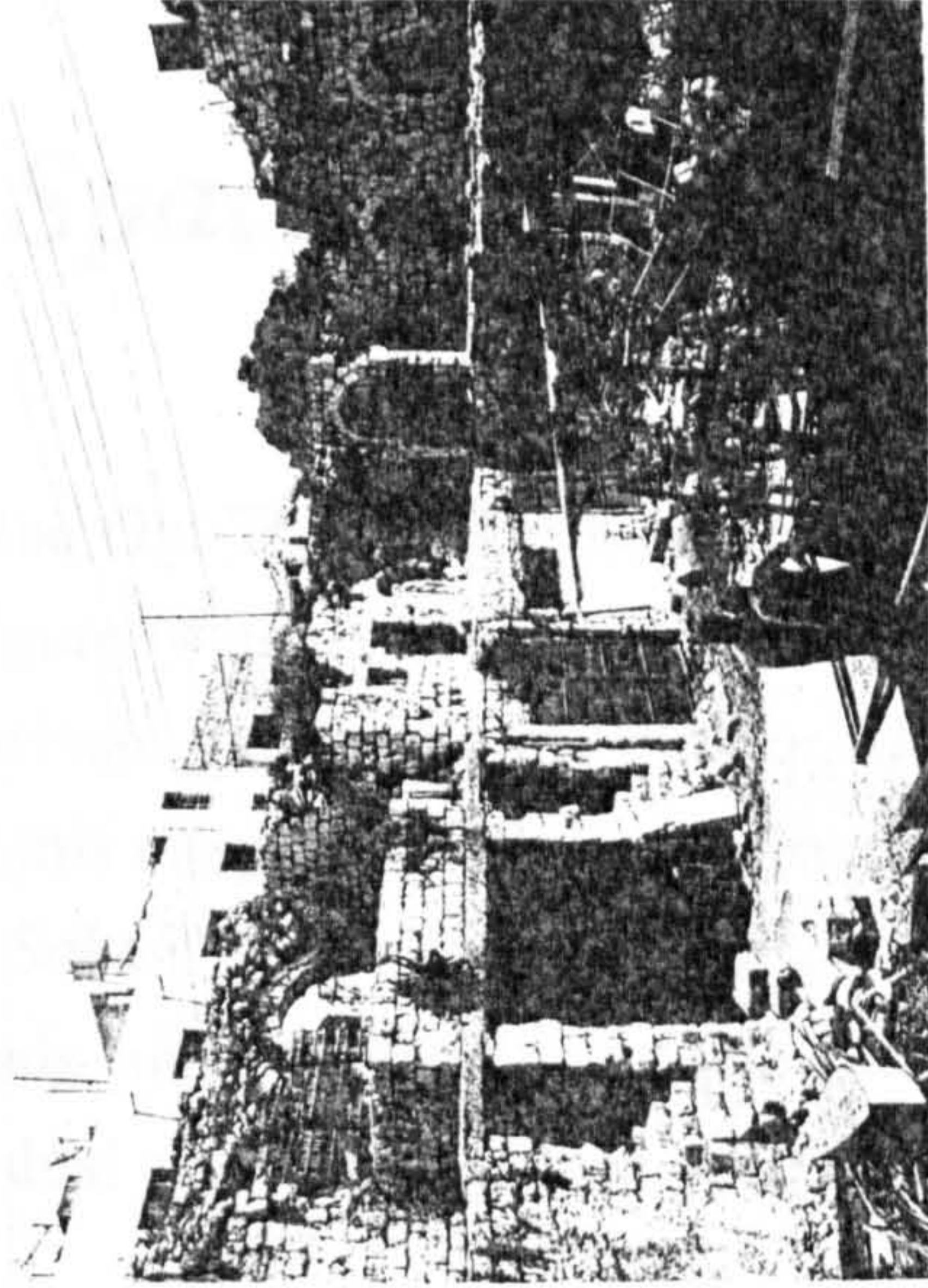
F. Ground floor plan. Source: Courtesy of An-Najah University Arch.al students, 1989.



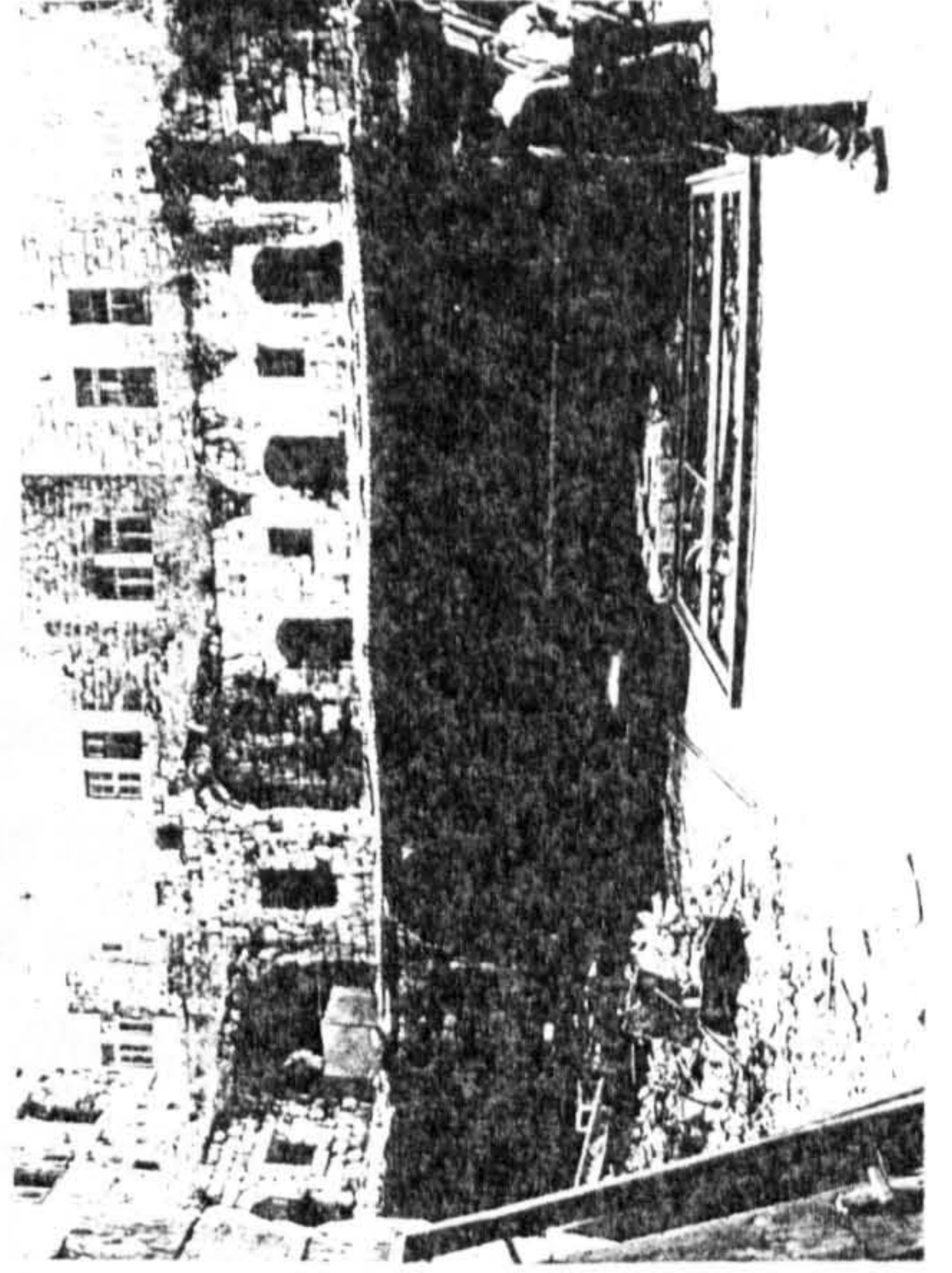
H. First floor plan. Source: Courtesy of An-Najah University Arch.al students, 1989.



E. The interior south-eastern elevations. Source: Courtesy of Dr Burgoyne, 1987.



G. The interior north-eastern elevations. Source: Courtesy of Dr Burgoyne, 1987.



I. The interior north elevation. Source: Courtesy of Dr Burgoyne, 1987.

Figure (4.33): Al-Wakalah Al-Farrokheyah.

4.3.3. Open Spaces:

Open spaces within the Old Town, like those in any Islamic town, are of two types; private and public, see figure (4.34). Private open spaces are the house's courtyard; *Wasat Al-Dar*, including the private garden; *Al-Jenenah* or *Al-Hadiqah*. Both have been dealt with at the beginning of this chapter. Public open spaces are the town squares; *Mayadin*, pl. *Maydan* or *Sahat* pl. *Sahah*, the public gardens, which were located outside the town walls, and the town roads and streets; *Turuq*, pl. *Tariq*, or *Shwarec* pl. *Sharec*. The following sections will deal with these public spaces and the traditional street pattern found in the Old Town.

4.3.3.1. Squares:

Generally, squares were originated in late medieval Arab cities for many purposes according to Dr. Ismail (1969):

1. Processions of the sultan and military parades took place there;
2. The sultan and the notables played polo and various kinds of sports, and attended horse races there;
3. Commercial activities;
4. Political gatherings and uprisings;
5. Public executions, and funerals of distinguished persons; and
6. An extension to the Friday mosque.

As mentioned in the historical development of Nablus (Chapter three) the first square was *Sahet Al-Manarah* which was built against *Jamec Al-Nasr* in 1301/1883. Later, the clock tower and a fountain (which was brought from *Hammam Al-Qadi*) were built in this square (Nimir, 1975). Besides this square there are two large yards in the town, which could hardly be considered as squares; *Sahet Al-Tinah*, in *Haret Al-Qaryon*, and *Sahet Al-Yarmok*, in *Haret Al-Gharb*. There are other small squares built in the third-order streets, but they could not be considered public squares because they belong to special groups of people in their own neighbourhood. Figure (4.34) shows the three main squares in the Old Town. Nowadays, these squares are used as parking places for the motor cars of the inhabitants and their visitors, which disturb the visual scene of the town and reduce its value.



- Main Squares
- Gardens
- Streets
- Houses courtyards.

Figure (4.34): Open spaces within the Old Town.

4.3.3.2. Gardens:

Generally, Islamic cities have no greenery or trees in public open spaces; streets and squares. The Old Town of Nablus until the beginning of this century was surrounded by cultivated gardens of fruit trees, vegetation plains, with plentiful water resources, see figure (4.35). The inhabitants used to go out for entertainment and picnics. The Old Town used to have no public green areas inside the walls until 1301/1883, when *Sahet Al-Manarah* was established with few trees left from the replaced garden. The new suburbs have been established with plenty of trees on both sides of the new streets and almost every building has its own private garden. As a result of this, the Old Town's residents built some gardens within their neighbourhoods as shown in figure (4.36).

Gardens required a lot of attention and care from their owners. Because of this, gardens are not found in any public domain. Public gardens used to surround the Old Town of Nablus, as earlier mentioned, which were used as recreation areas. Private gardens were within the town walls and generally found in private big houses and palaces. Usually, they were located in the inner parts of the houses in order to give their users the complete freedom and the full privacy. But if it was not the case they must be surrounded by high walls. These gardens were irrigated from local springs. Water used to be brought by pottery pipes and stored in open pools near the main summer setting areas used for entertainment of the inhabitants and their guests.



Figure (4.35): Traditional gardens used to surround the city before its expansion.



Figure (4.36): New gardens within secondary squares within the Old Town. Source: Courtesy of Dr Burgoyne, 1987.

In some lanes narrow greenery could be found on top of a stony wall beside a residential building, see figure (4.37). Actually, such greenery portions are not gardens but they might be built to keep the ownership right of the land and not to merge with the nearby street. Nowadays these green portions are ill-maintained and full of dry bushes.



*Figure (4.37): A narrow garden on the street side within the Old Town in a bad condition.
Source: Courtesy of Dr. Burgoyne, 1987.*

4.3.3.3. Streets:

A. Street Importance:

"When we speak of streets, our readers must not imagine them to be similar to European streets formed by the front of lines of houses, private or public; but the streets of Nablus, like those of other Oriental towns, are only passages between dead walls, excepting where the bazaars break the monotony. These are the Eastern shops or market-places, and they are comparatively numerous in Nablus" (Mills, 1864, p.88).

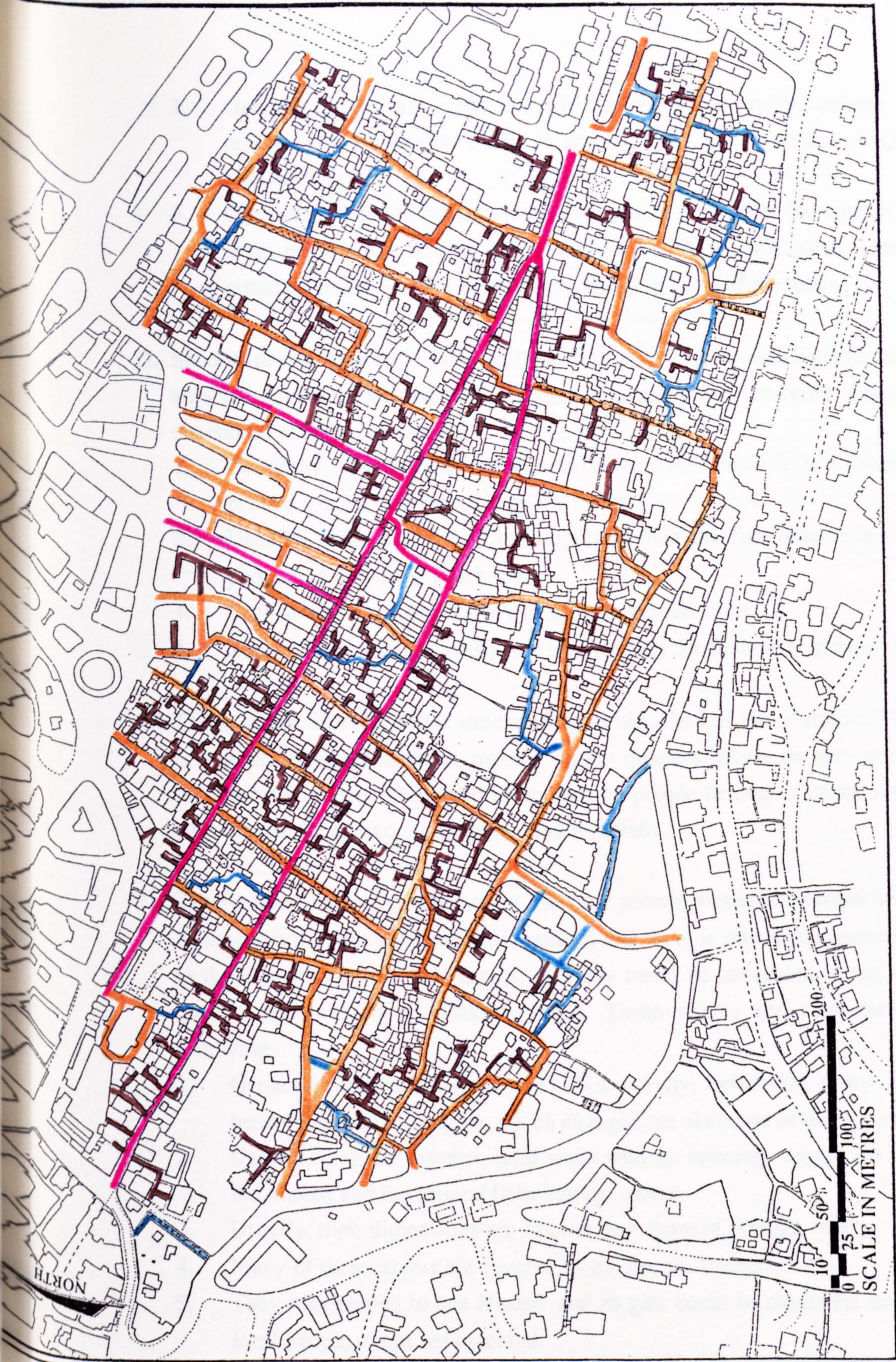
Streets within the Old Town, especially within residential areas, are simply passages between the different buildings of the town, see figure (4.38). The Old Town streets could be classified into thoroughfares and dead end streets. According to their importance, location and users' density, the Old Town thoroughfares are composed of three types, the first, the second and the third-order streets, see figure (4.39).

1. First order streets: which form the backbone of the street system. These streets are the most important streets in the network, and consist of the two main central streets; *Jamec Al-Kabir and Al-Nasr* streets and their extensions, as well as the other streets connecting the town centre with the important areas in the new town. The main characters of such streets are:

1. These streets accommodate most of the important public buildings; main mosques: the Great Mosque; *Al-Jamec Al-Kabir, Jamec Al-Nasr, Jamec Al-Bayk, Jamec Al-Hanbaley* and *Jamec Al-Khadr*, as well as the two Christian churches which are located in *Al-Nasr* street. Also the main commercial markets and bazaars: *Soq Al-Sultan*, which includes *Soq Al-Qumash*, and *Soq Al-Jadidah*.



Figure (4.38): A residential street within the Old Town. Source: Courtesy of Mr F. Yacish, 1991.



- 1st order St. —
- 2nd order St. —
- 3rd order St. —
- Cal-de-sacs. T

Figure (4.39): Streets classification within the Old Town according to their importance.

2. Generally, they are wide enough for pedestrian traffic volume and could accommodate vehicular traffic in special hours, except in *Soq Al-Qumash* and *Soq Al-Jadidah*.
3. Generally, they are open to the public use as they never have gates, except the main bazaar; *Soq Al-Qumash*, which used to have such gates. The only gates could be found on such streets were the main gates of the town.

II. Second-order streets: these streets are the main access routs within and between adjacent quarters. They tend to form short cuts across the first-order streets. The main characters of such streets are:

1. Generally, they are the connection between *Al-Ahowash*, as private and semi-private spaces, and the main public streets.
2. Usually, these streets are less important than the first-order streets, and their pedestrian density is much lower.
3. Such streets are found mostly in the commercial areas.
4. Their dimensions, generally, are smaller than the first-order streets.

III. Third-order Streets: These streets could be identified as minor streets. They provide access and linkages to areas, mainly, within quarters which are not serviced by the second-order streets. They tend to be used by people belonging to the area or others who require frequent contact there (Hakim, 1986).

IV. The dead end streets; cal-de-sacs: They are private properties, owned and shared by its users, mainly the residents. It is noticed that there is no specific pattern of linkage to the hierarchy of through streets, and they could be connected to any of the three types mentioned above (Hakim, 1986). These streets are characterised by the followings:

1. Generally, they are without any public activity. Nowadays, many of them have been converted into shops, which changed the character of this type of street.
2. Usually, they are massive solid walls with no openings except the entrances of the houses and the ground floor storage rooms.
3. Usually, their dimensions are smaller than those of through streets.
4. Many of these streets are covered by the houses structure.
5. They may belong to one *Hwash* and its gate could be closed for any reason the local people might see essential.

B. Street System:

The original street system of the Old Town could refer to the Roman grid system of town planning, especially in the central and the northern parts of the town. What confused the author is that the Roman grid system is more clear in the northern part, especially *Haret Al-Habalah* that was built at the time of Prince Yosuf Al-Nimir in the 11th/17th century than in the southern quarters where the Roman Niapolis used to exist (Nimir, 1975), see figure (4.40). These irregularities in the grid system might be caused by one or more of the following factors:

1. Topographies of the southern parts are more steep that demanded that the streets did not follow the grid to decrease the gradient and make them suitable for transport in the town, see figure (4.41). It is possible that the Romans, initially, did not follow their usual grid system to overcome this problem.
2. Social and cultural changes occurred to the people through the long time of the town history, especially after Islam. These changes, of course, were reflected on the built environment and Muslims alter their buildings and opened new streets to make the town fit the Islamic way of life and to meet the Islamic cultural needs.
3. Natural and human catastrophes happened in the town during its long existence, since its foundation in AD 72 till nowadays, such as the destructive wars, especially in the Crusaders period (492/1099-583/1187) through which the town buildings or even complete quarters were destroyed or burned many times (see chapter three). Adding to these destructive events several major earthquakes hit the town, the last of which was the 1346/1927 earthquake. During the rebuilding process, new streets were designed and implemented replacing the demolished streets and altering the original grid system.

The Old Town was built along two main axes; *Qasabat*, pl. of *Qasabah*. These thoroughfares follow the topography line of the valley from east to west. Both of them run almost in a straight line the whole length of the town, from the eastern gate to the western one passing through its centres. At the eastern end they joined to form one main street, which used to be the Roman colonnaded street, parts of which and some buildings' foundations were discovered during construction works along this axis, but unfortunately no obvious remains still exist (Nimir, 1975), also see figure (3.1). The building where these two main streets joined is the Great mosque of the town which used to be the Roman basilica (Fanni, unpublished paper). These two main streets have been widened

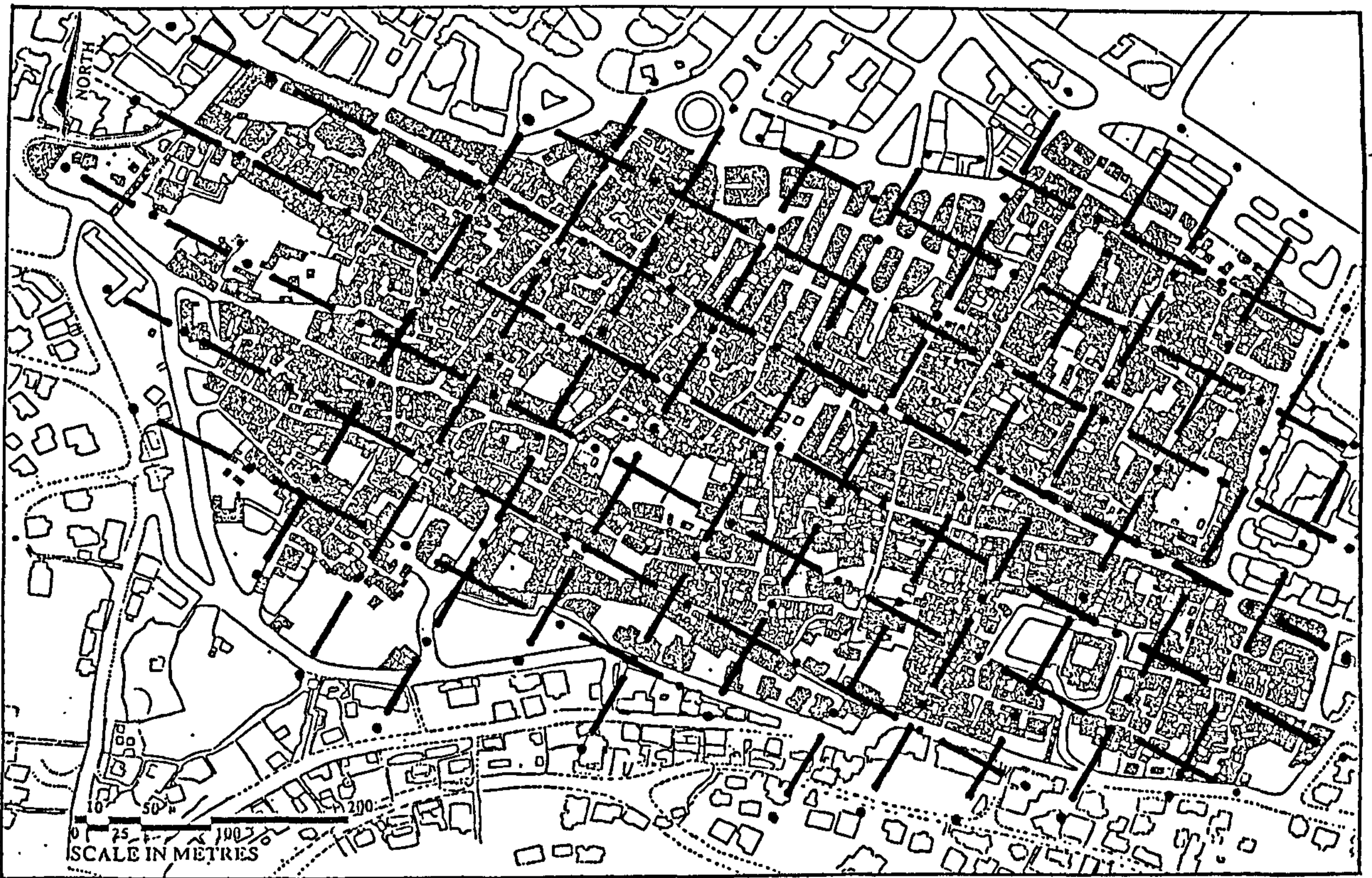


Figure (4.40): The Roman grid system which might existed in the Roman city.

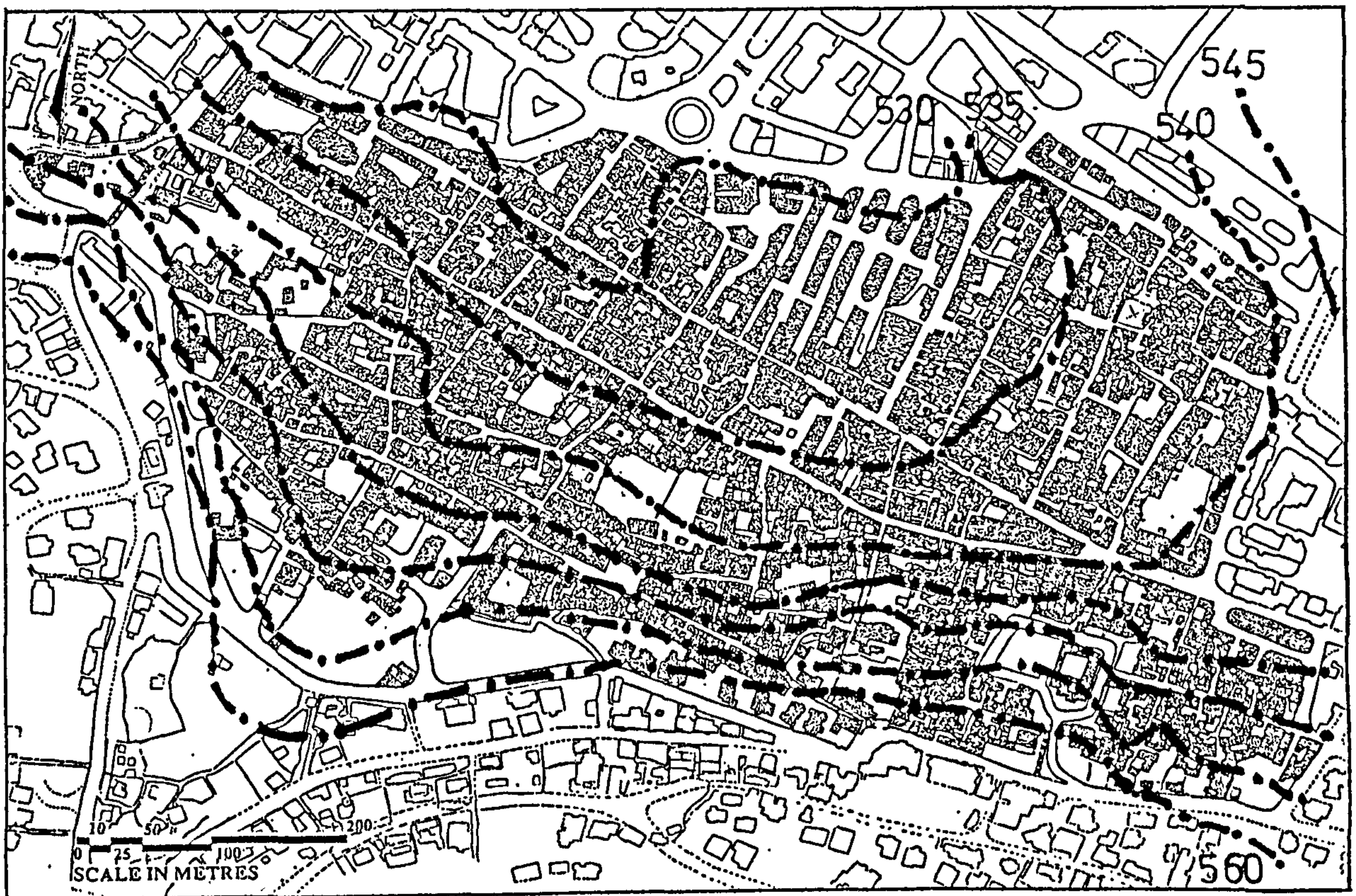


Figure (4.41): The Old Town's topography. Source: Basic maps from Nablus Municipality.

after the 1346/1927 earthquake (Nimir, 1975). Several streets open onto these main thoroughfares. Most of these streets are, almost without exception, narrow and irregular. They connect the town commercial centre with the residential quarters around it. Gates used to be placed at the entrances of such streets and very few of them still exist.

C. Street Pattern:

The maze of narrow lanes and dead-end alleys, that are vaulted in places to afford shelter from the sun in summer and the rain in winter, gave the Old Town a picturesque and charming character, see figure (4.42). Periodically a minaret or an ornamental doorway provides a landmark to help orient the town visitors, see figure (4.43). This amazing street pattern resulted from the charming composition of the historic buildings and structures, which is influenced by the buildings' line, heights, masses, texture, colour, the openings' form and pattern, and the special usage of decorative elements within the buildings, themselves, and within other structures, see figure (4.44).

Generally, the building heights of the Old Town are varied from two to four storeys, with some exceptions of five storeys. The fifth floor is, usually, built with special light weight materials. The height of a building, usually, depends on its function. For example, soap factories consisted of two storeys, bath-houses consisted of one storey, with one or more domes. Hotels; *Al-Khanat*, and the caravanserais; *Al-Wakalat* consisted of at least two storeys.

D. Street Dimensions:

Street dimensions of the Old Town are varied according to their importance; first, second or third order streets. The more important the street is, the larger its dimensions will be. Street's width varies from about 1.2m, in private lanes, to 13.3m, in main streets. The width of covered streets varies with the height. The standard policy of defining the street width in Islamic towns was based on the teachings of the Prophet Muhammad. One of his sayings in this concern is:

"If you disagree about the width of a street, make it seven cubits" (Karim, 1938-9, vol. II, p.238).

Seven cubits are about 3.50 metres, and they are the minimum width of public thoroughfares. They allow two facing fully loaded camels to pass without any trouble (Hakim, 1986), see figure (4.45). The minimum public street height is also about seven cubits; the height of the loaded camel. Generally, the wider the covered street is the higher it will be.



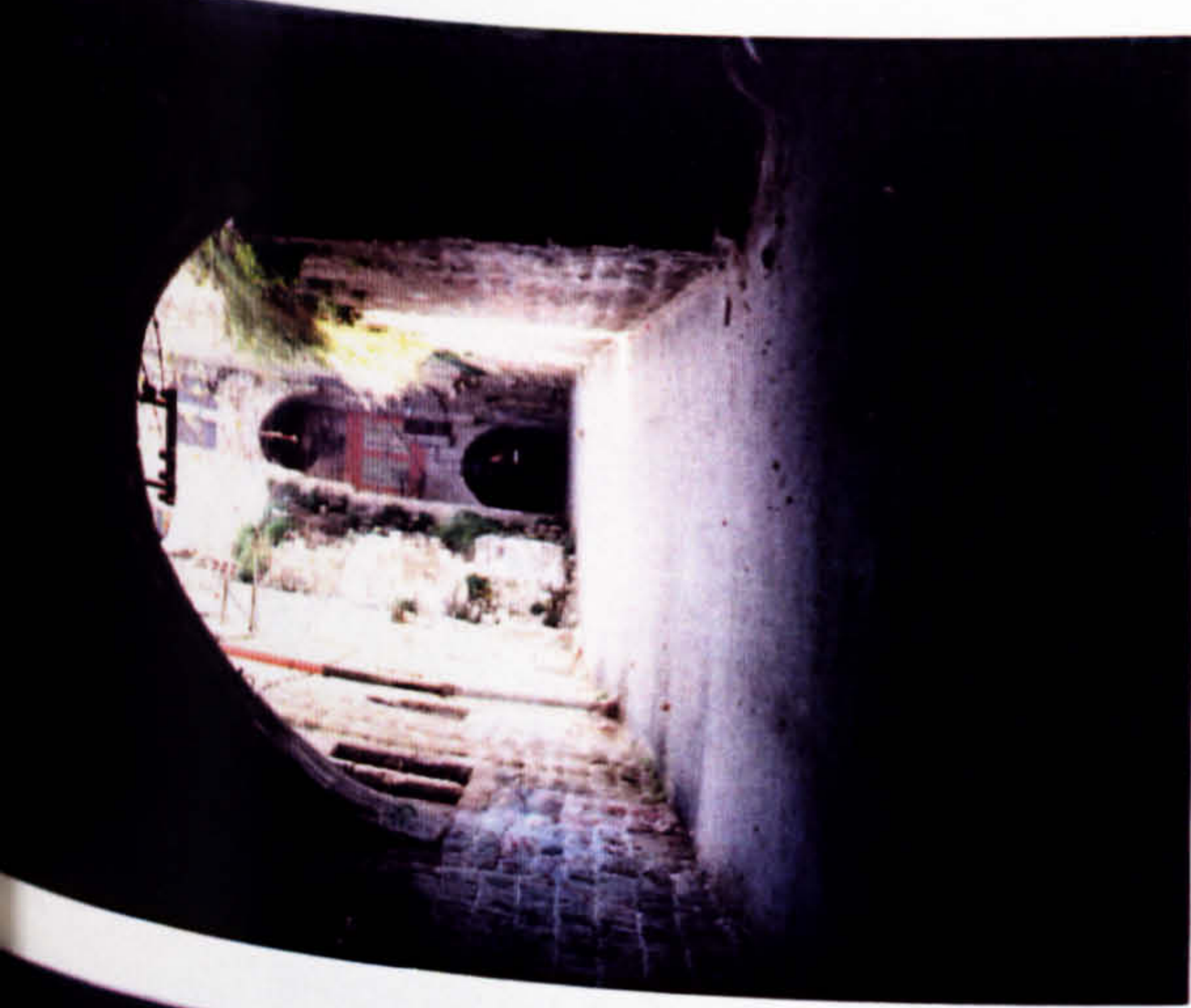
A. Small lane near Al-nimir palace.



B. Street near Jami' Al-Saton. Source: Courtesy of Mr. F. Yaish, 1991.



C. Source: Courtesy of Mr. F. Yaish, 1991.



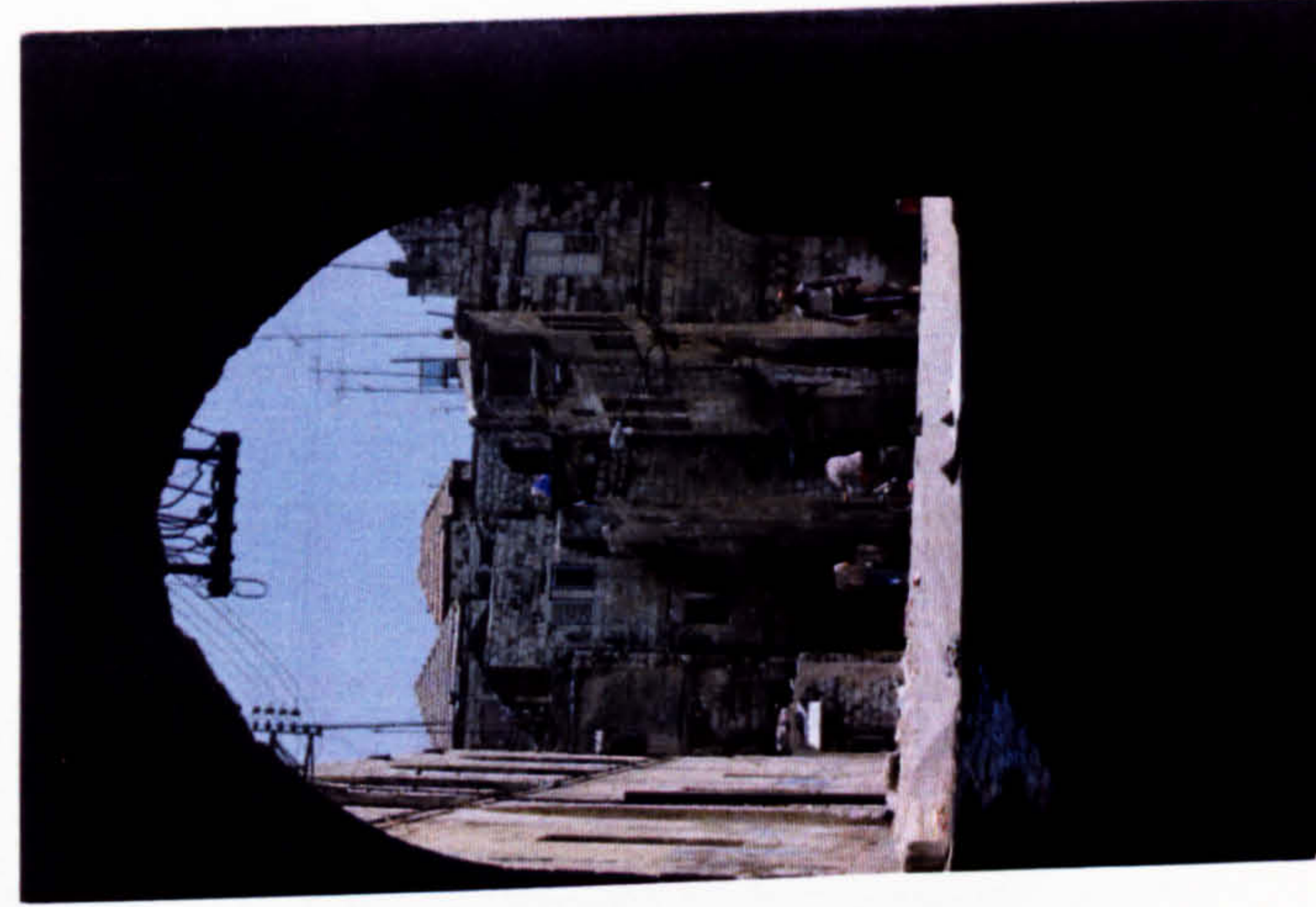
D. Source: Courtesy of Mr. F. Yaish, 1991.



E. Source: Courtesy of Mr. F. Yaish, 1991.



F. Source: Courtesy of Mr. F. Yaish, 1991.

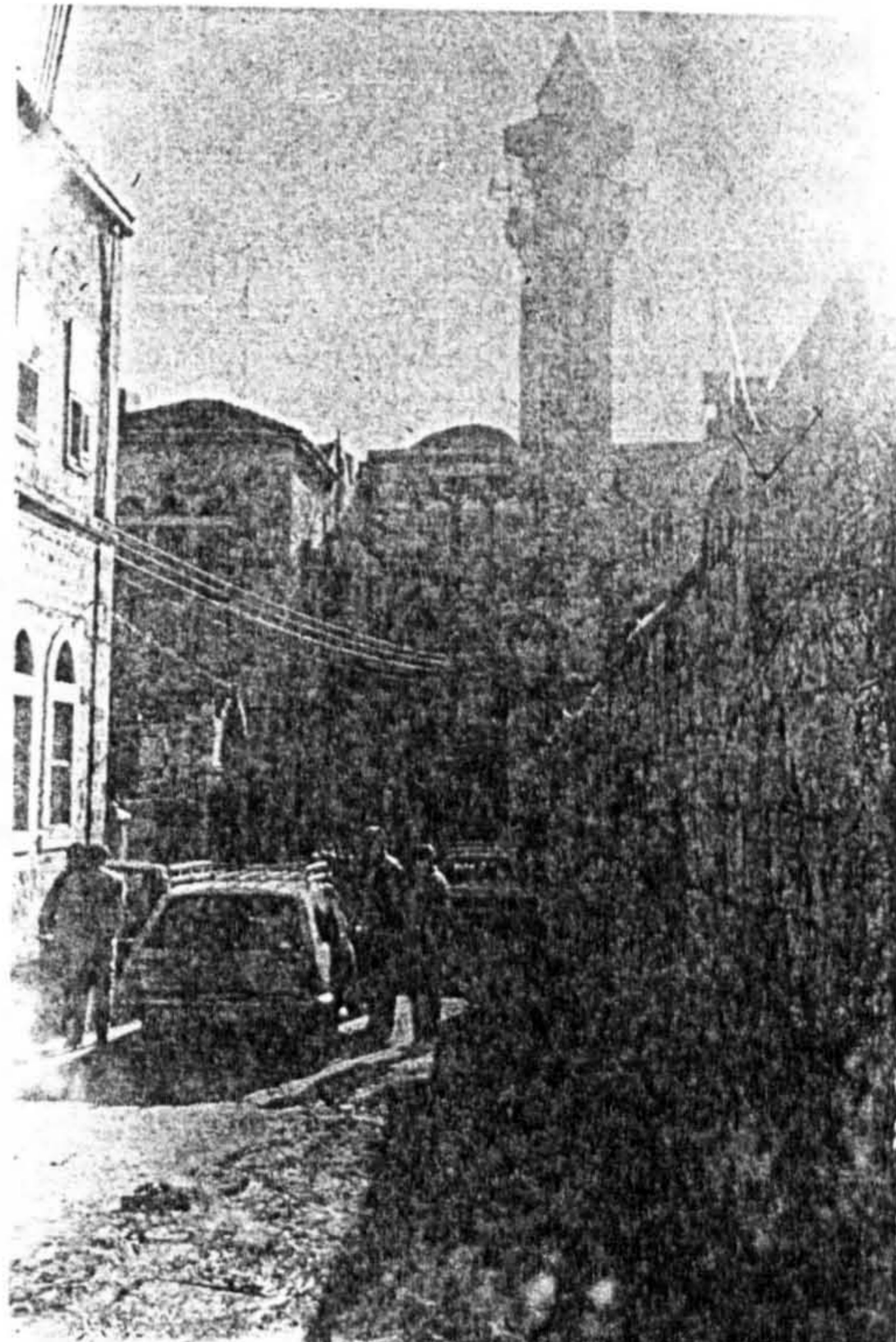


G. Source: Courtesy of Mr. F. Yaish, 1991.

Figure (4.42): Examples of the beautiful frequent street covering within the Old Town.



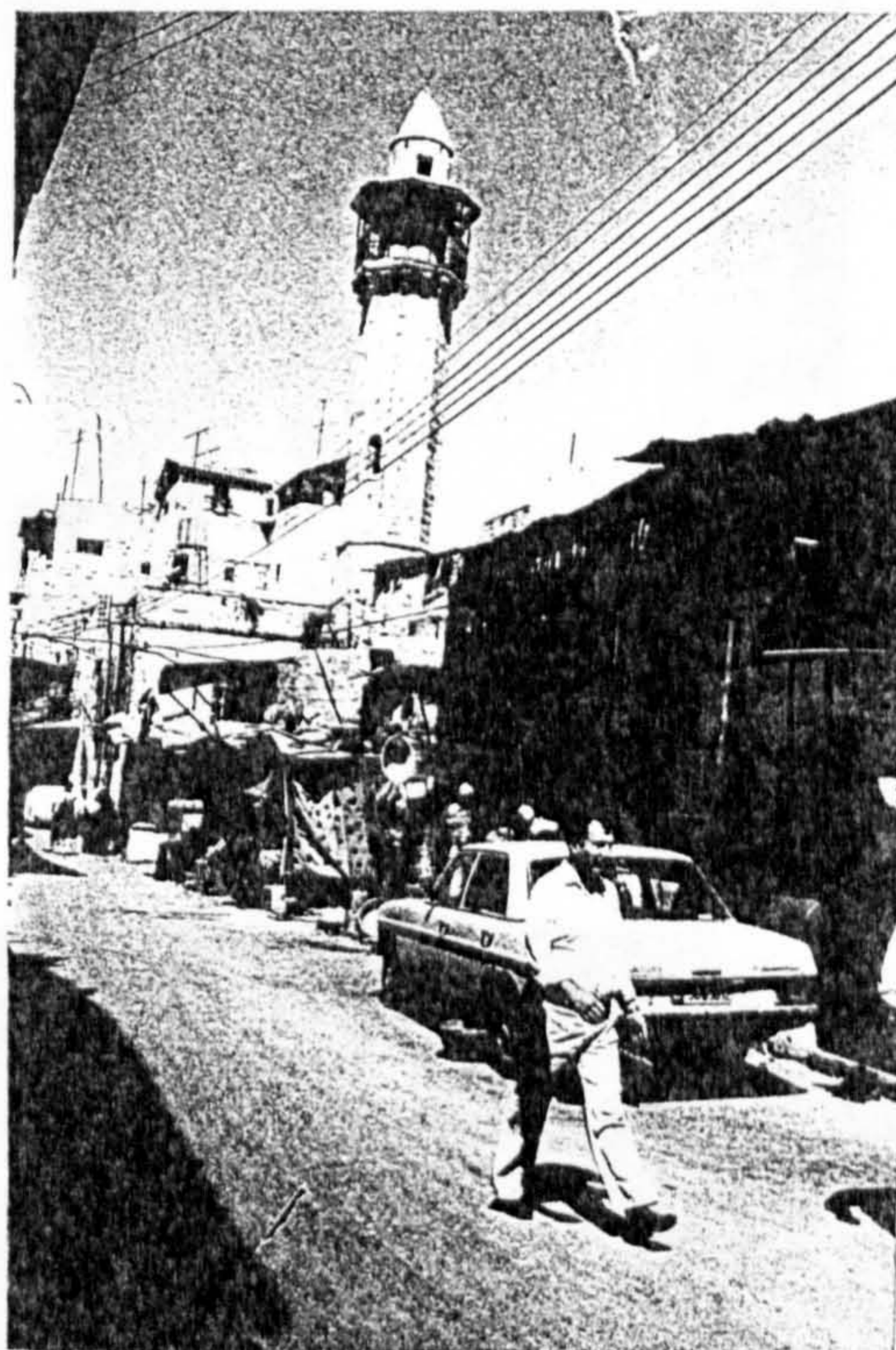
A. The minaret of Jami^c Al-Nasr.



B. The minaret of Jami^c Al-Khadir.

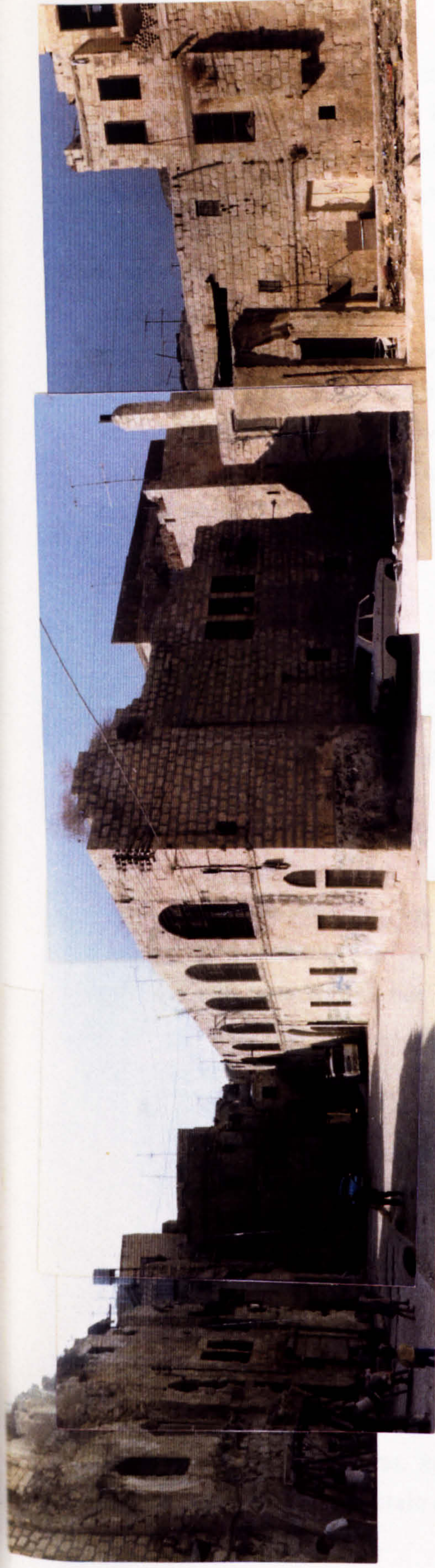


C. The minaret of Jami^c Al-Kabir.



D. The minaret of Jami^c Al-Hanbali.

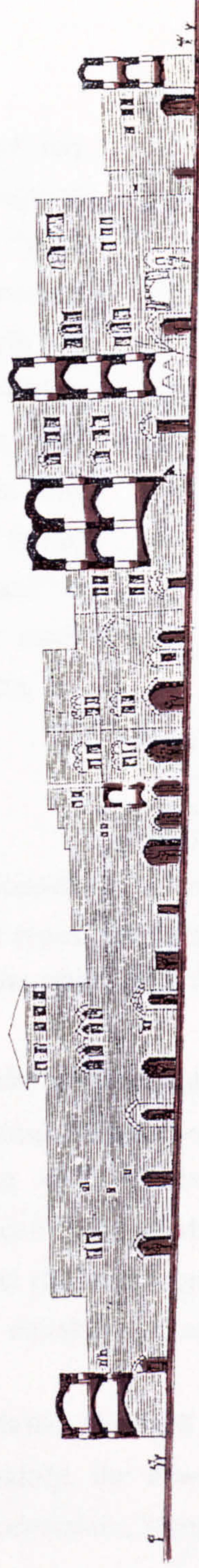
Figure (4.43): Minarets as important land marks within the Old Town.



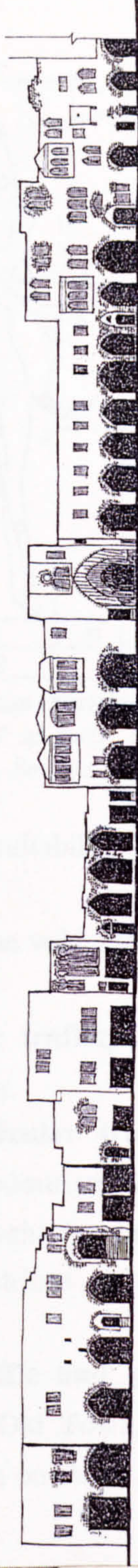
A. Sahet Al-Qaryon.



B. Notice the building line on the edge of the street.



C. Building height variation is one of the main characteristics of the Old Town. Here within Haret Al-Qaryon - Residential area.



D. Building height variation within commercial area.

Source of all the architectural drawings and plates: Courtesy of An-Najah University Archal students, 1989.

The Old Town's streets as those of any Islamic city are characterised by the frequent changes in their width, see plate (B) of figure (4.44). This phenomena plays an important role in providing the Old Town with its beauty and charm. The pedestrians walking around the town through such streets, will enjoy the variety of street views. But this phenomena causes much trouble to the motor vehicles. Stress on drivers will increase as they must give more attention and be more careful while driving through these streets.

E. Street Type:

The Old Town streets could be classified, according to their suitability to hold pedestrian and vehicular traffic into four types, see figure (4.46):

1. **Streets suitable for pedestrians only** when for any reason the vehicular traffic cannot use the street.
2. **Streets suitable for either the pedestrians or vehicular traffic**, as their dimensions cannot allow the simultaneous use by both of them.
3. **Streets suitable for parking with either through vehicular traffic or pedestrians.** The street, basically, is suitable for both pedestrians and the vehicular traffic, but it happens that some on street parked vehicles, made the remaining part of the street suitable for either the pedestrians or through vehicles.
4. **Streets suitable for pedestrians, through vehicular traffic and parking vehicles.** These streets are, mainly, the new streets in the Old Town, which allow the free use for all the pedestrians, through traffic, with on street parking spaces.

F. Street Furniture:

Elements of the Old Town's street furniture include its pavement, lighting, sun and rain shading, and the drinking fountains. The topographical location of the Old Town on the foot of Mount Gerizim, made some streets have steep gradients, especially those perpendicular to the two main streets. The traditional way of treating these streets is to

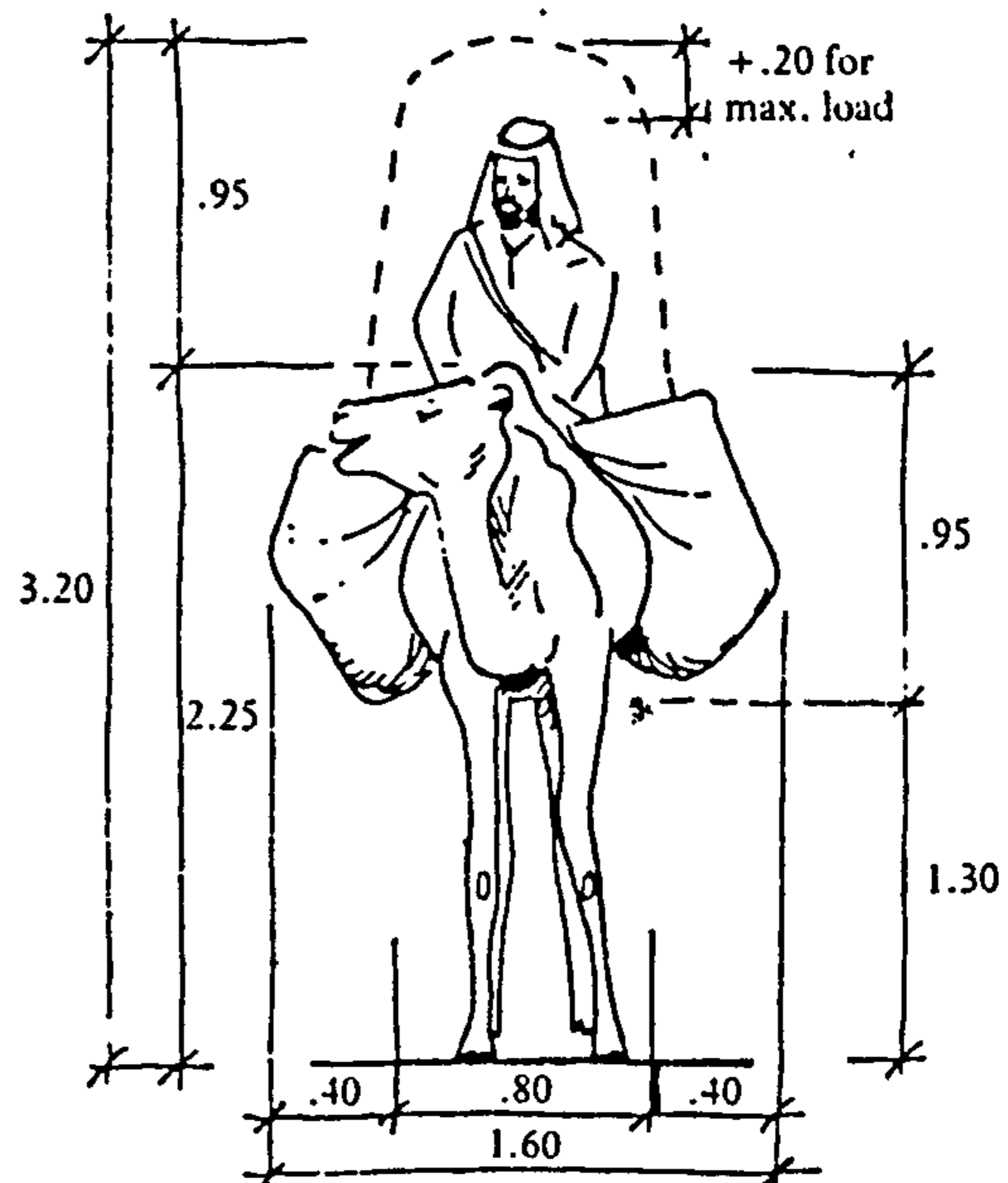
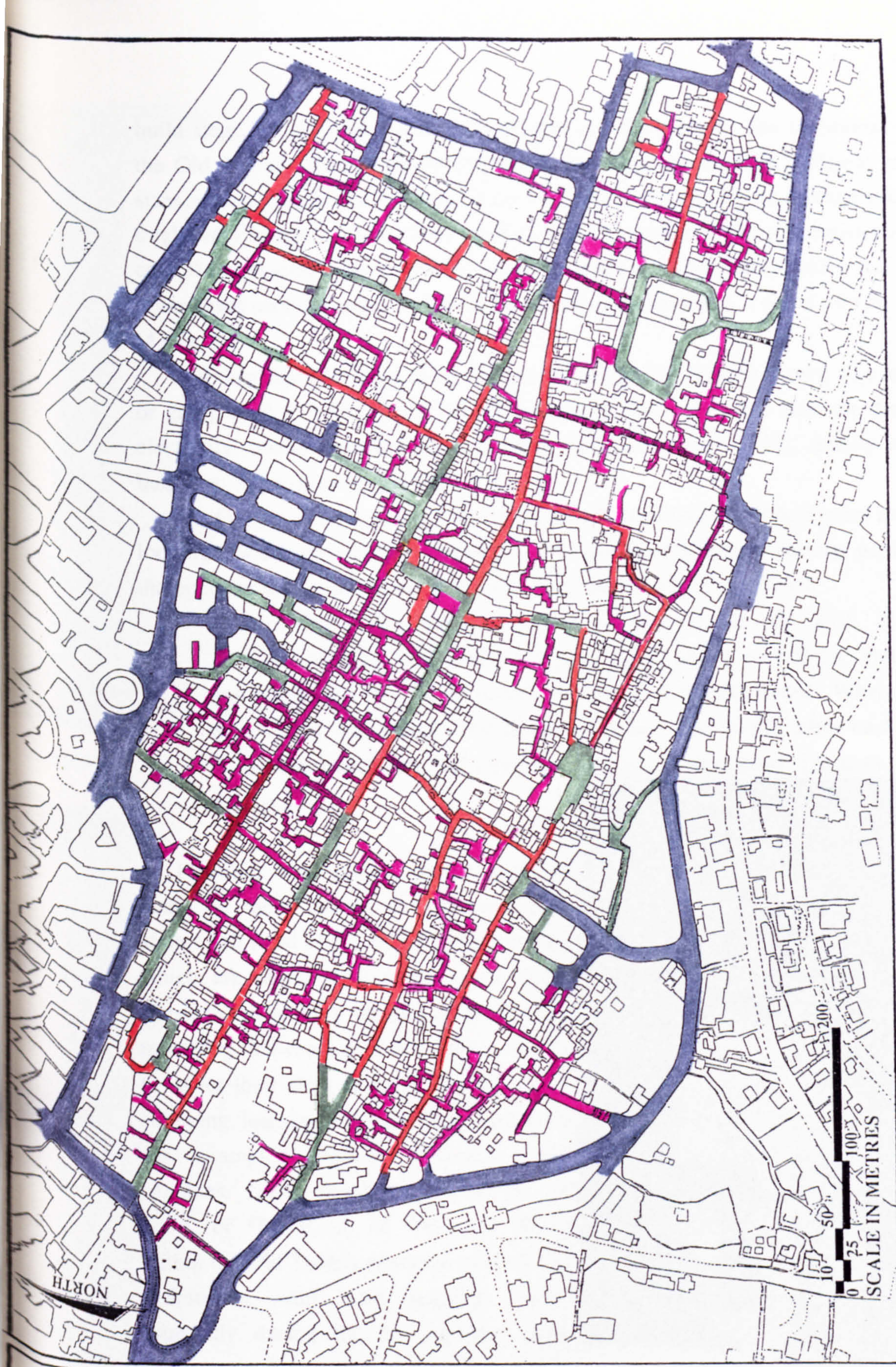


Figure (4.45): Maximum horizontal & vertical dimensions of a fully loaded mature Arabian Camel. Source: (Hakim, 1986).



- Pedestrians only
- Pedestrians or vehicular traffic
- Parking with either vehicular traffic or pedestrians.
- Free vehicular traffic.

Figure (4.46): Classification of the Old Town streets according to their suitability to different traffic types.

build steps, which are suitable for both man and his animals. The traditional paving of the Old Town's streets was the flagstone. The flagstone unit has different rectangular sizes, varied from about 10 cm to 60 cm in length, and about 25 cm average width, which might vary in some places. They are laid down in perpendicular successive rows with a central longitudinal row, represent the direction of the street, and usually this row has a lower level used for rain water drainage system. The thickness is about 10 cm, see figure (4.47)

Lighting elements were never existed within the Old Town's streets, so every person or group used to carry his or their own oil lamp. But today, and after the discovery of electricity, modern electric lights existing there, see figure (4.48), usually hanged on buildings' sides or on the ceilings of vaults.

The Old Town's streets have no public attraction elements, public shaded sitting areas looking towards the streets for example. This was mainly because staring, particularly to the opposite sex, is not allowed in Islam. The Prophet Muhammad said:

"Avoid sitting on thoroughfares", they (his companions) said: it is strenuous to avoid as it is our gathering places where we talk in. "But if you insist then you should respect the rights of thoroughfares". What are these rights, they asked, "Avoid staring, do not create harm, salute back to those who salute you, bid to honour and forbid dishonour" (Amarra, no date, p.284).

Essential and useful public services could be found within all the first order streets and most of the second order streets, which are commercial streets, and where Muslims spend long periods of time while travelling between different parts of the town for their daily journeys to work, pray, shopping, learning and other daily activities, for example, drinking fountains, and canopies. Many fountains; *Subul*, pl. of *Sabil*, or *Uyon*, pl. of *Ain*, are found within the Old Town's streets to provide the pedestrians with cold running water, especially during the hot summer days. There are at least twenty drinking fountains within the Old Town, see figure (4.49), and (4.50).



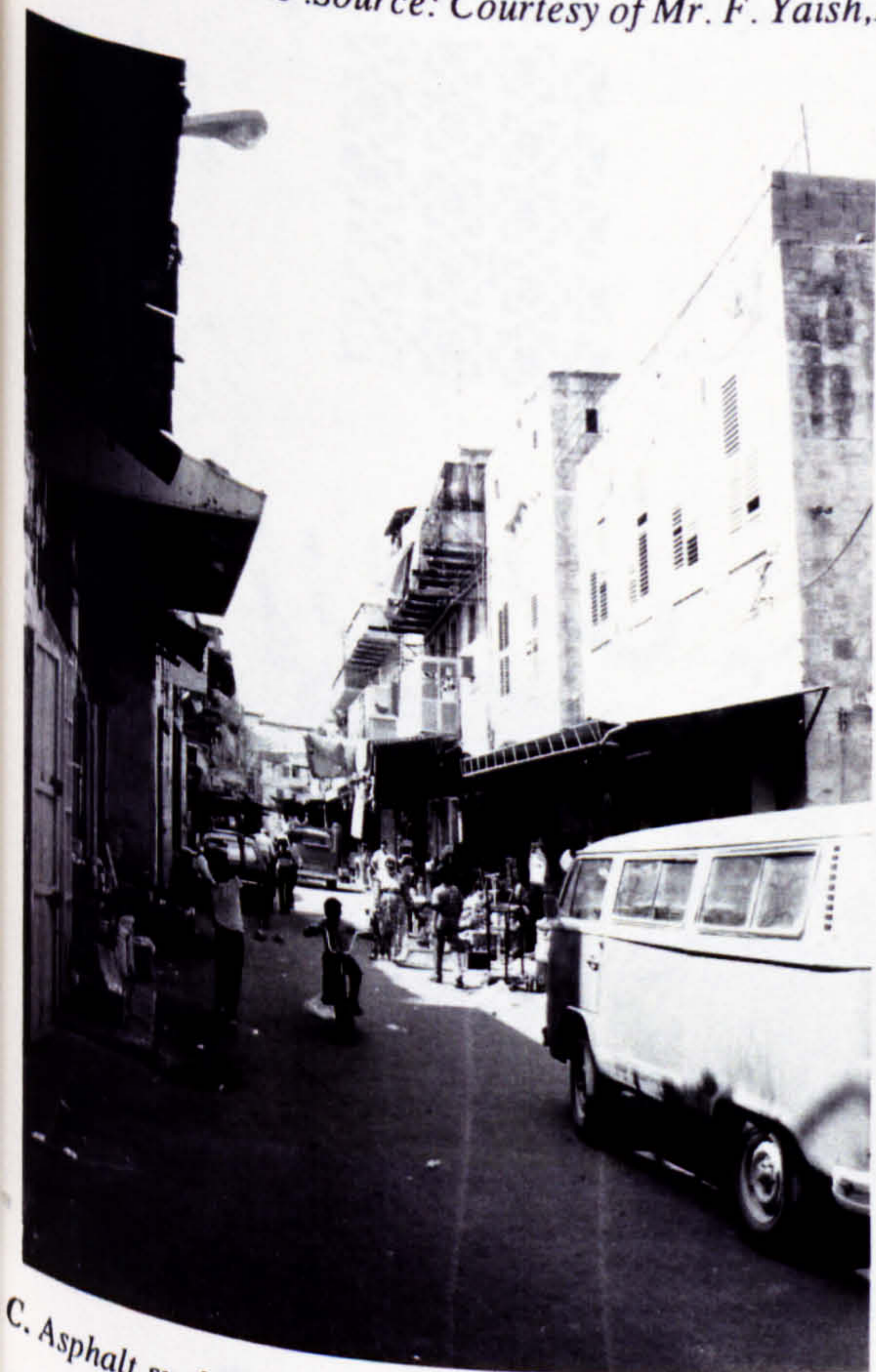
Figure (4.48):
An example of the electric lamp used within the Old Town's streets. Source: Courtesy of An-Najah University Arch.al students, 1989.



Traditional flagstone .Source: Courtesy of Mr. F. Yaish,1991.



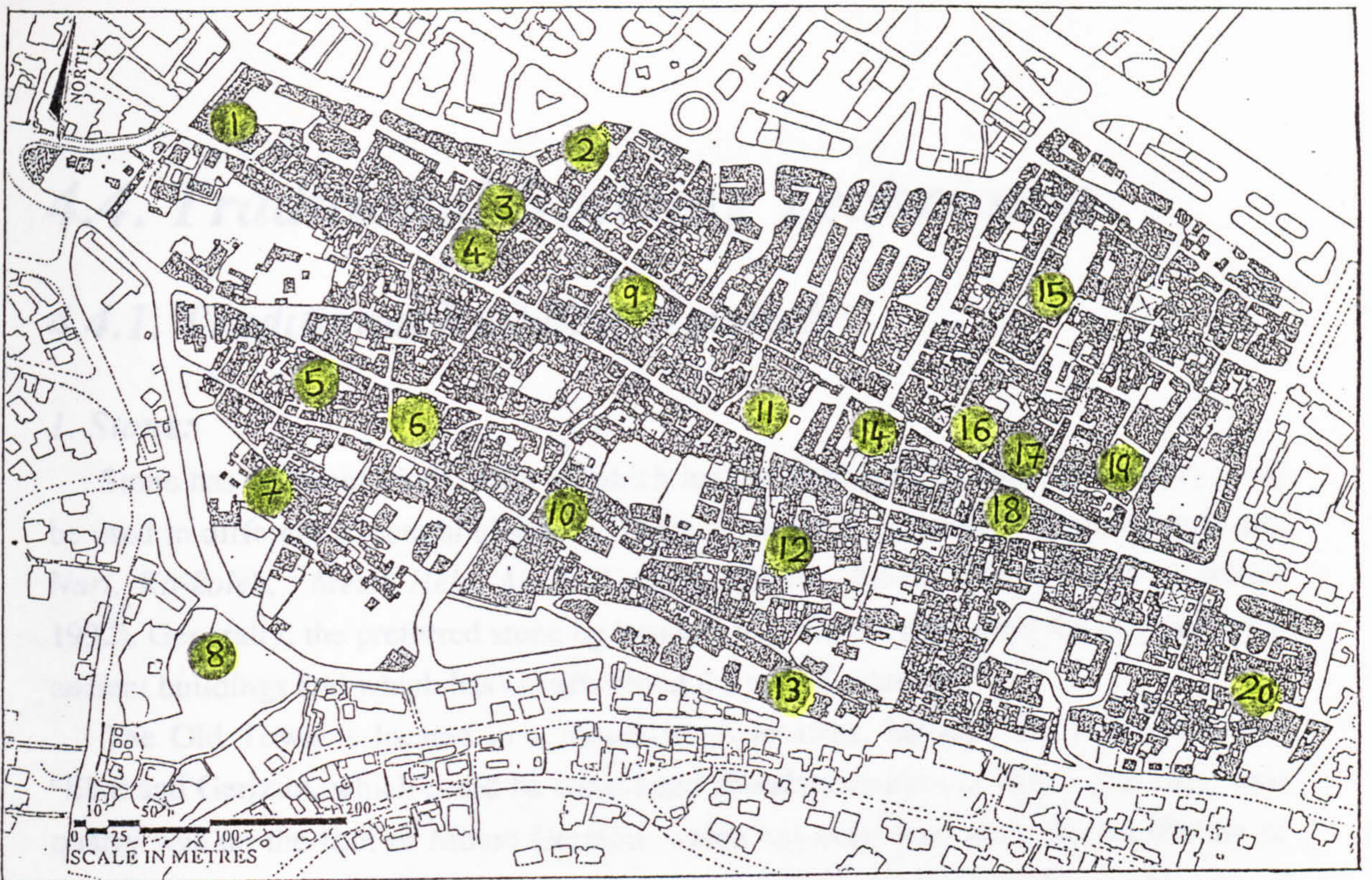
*B. Asphalt surface within pedestrian areas.
Source: Courtesy of Mr. F. Yaish,1991.*



*C. Asphalt surfaces within vehicular traffic streets.
Figure (4.47): Types of street surface within the Old Town.*



*D. Concrete surfaces and steps.
Source: Courtesy of Mr. F. Yaish,1991.*



- | | | | |
|-----------------------|-------------------------|---------------------|---------------------|
| 1. °Ain Al-Khadir. | 2. °Ain Badran. | 3. °Ayish. | 4. °Ain Al-Tudmani. |
| 5. °Ain Al-°Ajibeh. | 6. °Ain Al-Saton. | 7. °Ain Al-Khadrah. | 8. °Ain Al-cAsal. |
| 9. °Ain Al-Salahi. | 10. °Ain Al-Al-Nablusi. | 11. °Ain Al-Sit. | 12. °Ain Al-Sbat. |
| 13. °Ain Al-Qariyon. | 14. °Ain Al-Sukkar. | 15. °Ain Al-Faqqos. | 16. °Ain Al-Taher. |
| 17. °Ain Al Saqqayeh. | 18. °Ain Al-Kas. | 19. °Ain Gawazen. | 20. Bi'r Al-Dolab. |

Figure (4.49): Fountains; °Uyon, within the Old Town.

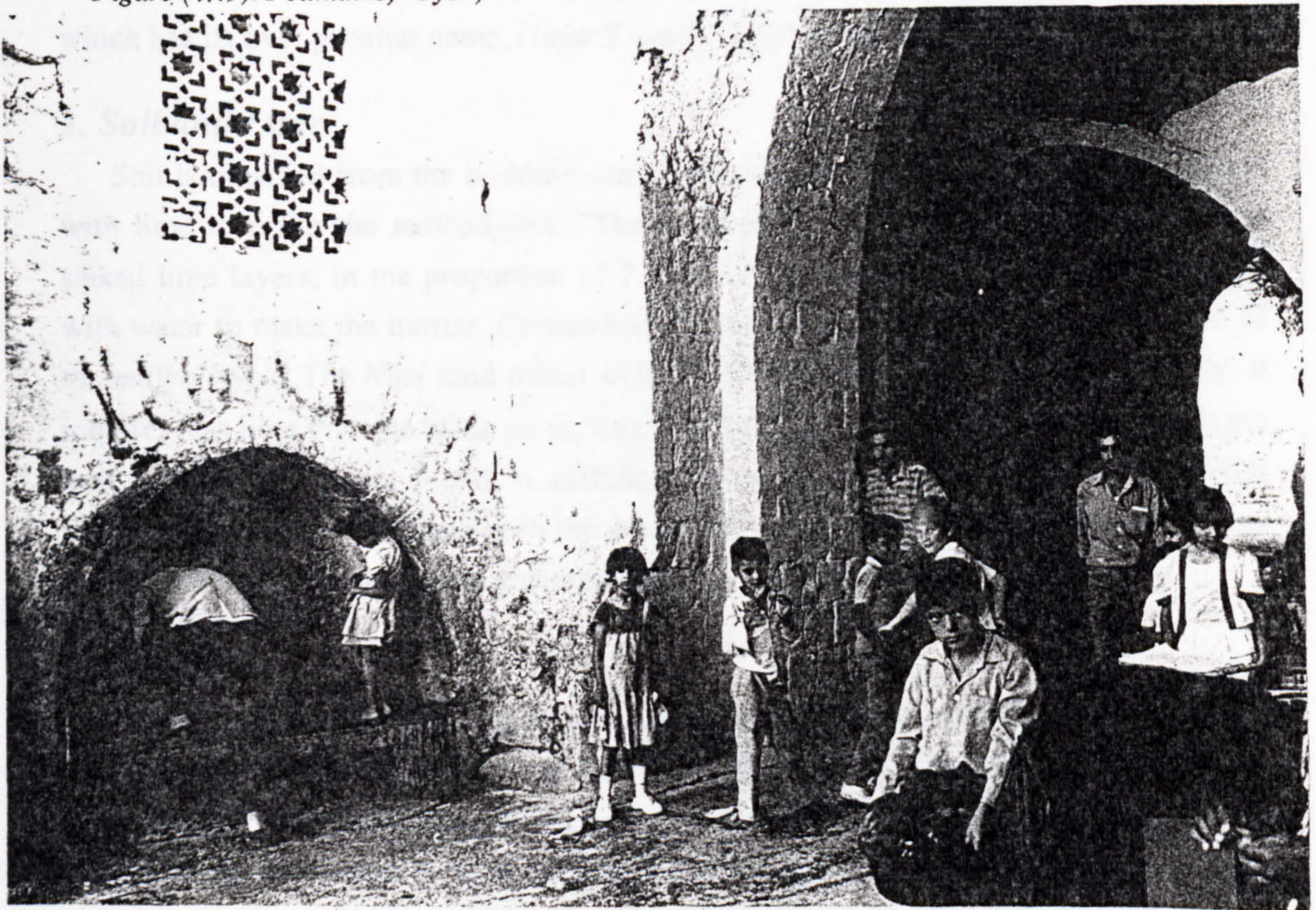


Figure (4.50): °Ain Al-Saton. Source: (Burgoyne,1987)..

4.4. *Traditional Building Techniques:*

4.4.1. *Traditional Building Materials:*

1. *Stone:*

Stone has different kinds, each of which has its own specifications, and which could be used in different structural elements. These stone kinds, as called by local people are: *Nari*, *Ka^ckoleh*, *Mezzi Helo*, *Mezzi Yahodi*, *Malaki*, *Aswad*, and *Huwwar* (Canaan, 1932). Generally, the preferred stone by builders was that brought from the ruins of some ancient buildings and which has already stood the test of centuries.

The Old Town is located in a mountainous location, between the two mountains; ^cEbal and Gerizim, which could be considered abundant sources of stone. The first stone quarry was on the foot of Mount Gerizim, which has been used since the foundation of the city during the Roman times. Another stone quarry was established on the foot of ^cEbal Mountain, which belongs to the Nablus Municipality. It was the usual process to take out the stone from the site itself, if it is available in enough quantities and good quality, if it was not the case, the obtained stone could be used in the inner layers of the structural elements. Stone could be dressed to have many different textures, each of which has its own peculiar name, *Hajar Tubzah*, *Hajar Mufajjar*, *Hajar Musamsam*.

2. *Soil and Lime:*

Soil is obtained from the building site as the excavated earth is screened then mixed with lime to make the *majboliyyeh*. "The *majboliyyeh* is a circular heap of earth and slaked lime layers, in the proportion of 2:1 or 3:1" (Canaan, 1933, p.3). This is mixed with water to make the mortar. Certain kinds of earth are preferred in the preparation of the *majboliyyeh*: The *Nari* sand mixes well with the lime and binds the stones firmly. It requires less lime than the black earth, which makes a good but weak mixture. Sand is the best material but is not found in sufficient quantities in Nablus and its mountainous region. Red earth is used only with the rubble stone in the interior layers, for as soon as such a mortar is exposed to sun and atmosphere it loses its binding properties.

3. *Water:*

Water is an essential building material, and which plays an important role in bonding the structural elements together. The water carriers are known as *Saqqayin*, pl. of *Saqqqa*. Formerly the water was brought in goat-skins *Qirbah*, pl. *Qerab*. If the builder has no cistern on the site, water must be transported on donkeys. A donkey carries two to three *Qerab* or four tins (Canaan, 1932). The *Qerab* have been later replaced by Kerosene tins, but nowadays water pipes are in use.

4.4.2. Traditional Construction Methods:

Figure (4.51): Building a traditional stone house in a Palestinian village.

Source: (Graham-Brown, 1980).



Al-Banna' or *Al-Mu^callim*; the master mason, who though lacking any training in architecture, has nevertheless gathered from experience much practical knowledge, used to plan and to execute the house, from the first stone till the work ends. Also the inhabitants themselves, use to help building their own houses, and form the most required labour (Canaan, 1933).

In the following paragraphs, the traditional construction methods of the main structural elements will be briefly described, to give a general background of these discarded construction methods. These construction methods are of great important as a part of the Palestinian heritage and culture, Because of that they must be revived, if not to build by, then at least to learn how to preserve the existing structures.

1. The Foundations:

Al-Mu^callim marks the course of the foundation, which dug by hired workers, or by the owner's relatives. The excavation continues until a sound stratum is reached. Occasionally the trenches are five to ten feet deep. When the solid rock is exceptionally deep and it is too expensive and dangerous to dig down to it, the trenches are dug as deep as the proposed height of the house. In such cases a firm and a hard layer of earth is chosen for the foundation courses. The lower courses are made

broader than those built on the solid rock. Another method is to dig at a distance of two or three metres large square holes, two metres square, all along the foundation lines. In these holes thick strong piers (*Soma^cah*, pl. *Soma^cat*) are built. They are joined by strong and broad arches built of *Lat* (large flat slabs of the hard stone). The top of the arches should not rise, as a rule, higher than the level of the ground. The foundation construction is built of rubble stone and mortar. The breadth of this wall must be 20-40 cm more than that of the house wall, and as a rule not less than 120 cm (Canaan, 1933, pp.1-2).

2. The Walls:

The walls are of two kinds, structural bearing walls and partition walls. The walls must rest on the foundation arches. Walls used formerly to have a thickness of 80-120 cm to support not only the weight of the roof but to withstand also the thrust of the vault. The walls are usually built in two stone layers, the outer courses and the inner courses, see figure (4.52). The core of the wall is made of small rubble stones and mortar. The master-mason, the *Mu^callim*, who supervises the whole work, builds at the same time the important parts of the building, namely the outer course, windows, doors and vaults.



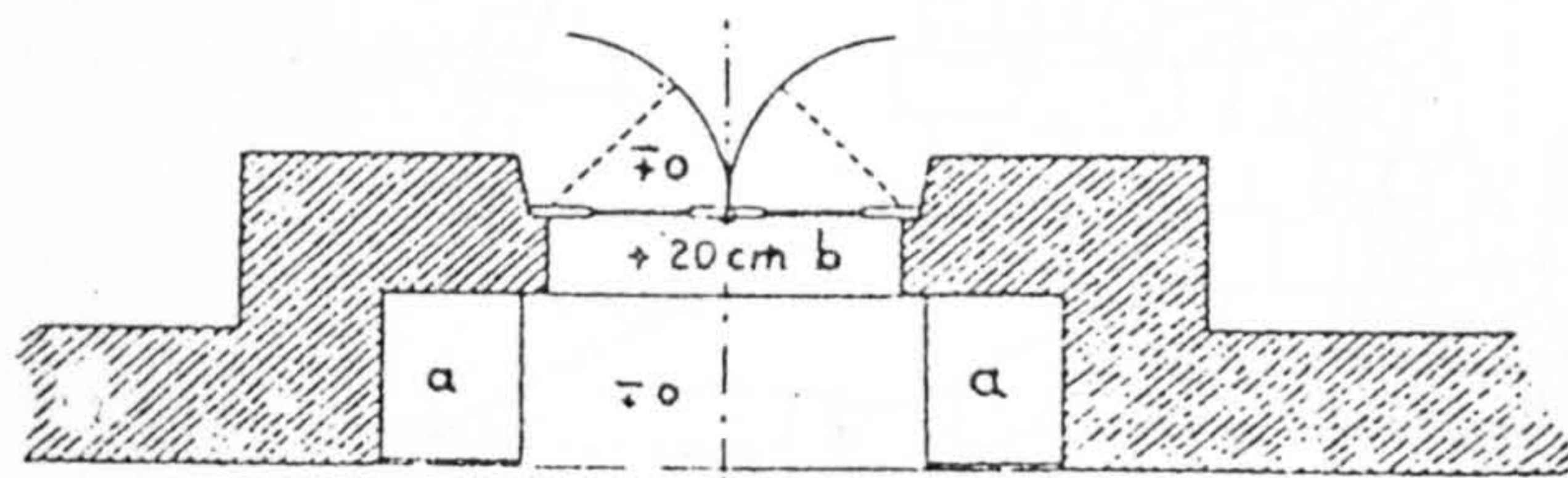
Figure (4.52): A cross-section of a collapsed traditional wall.

Most of The Old Town houses are built with *Hajar Musamsam*. Undressed stones are used for the inner courses. The *Yahodi* or *Mezzi Helo* stone kinds are usually chosen for the outer courses while *Nari* is preferred for the inner. Large stones are used for the corners (Canaan, 1933).

3. The Openings:

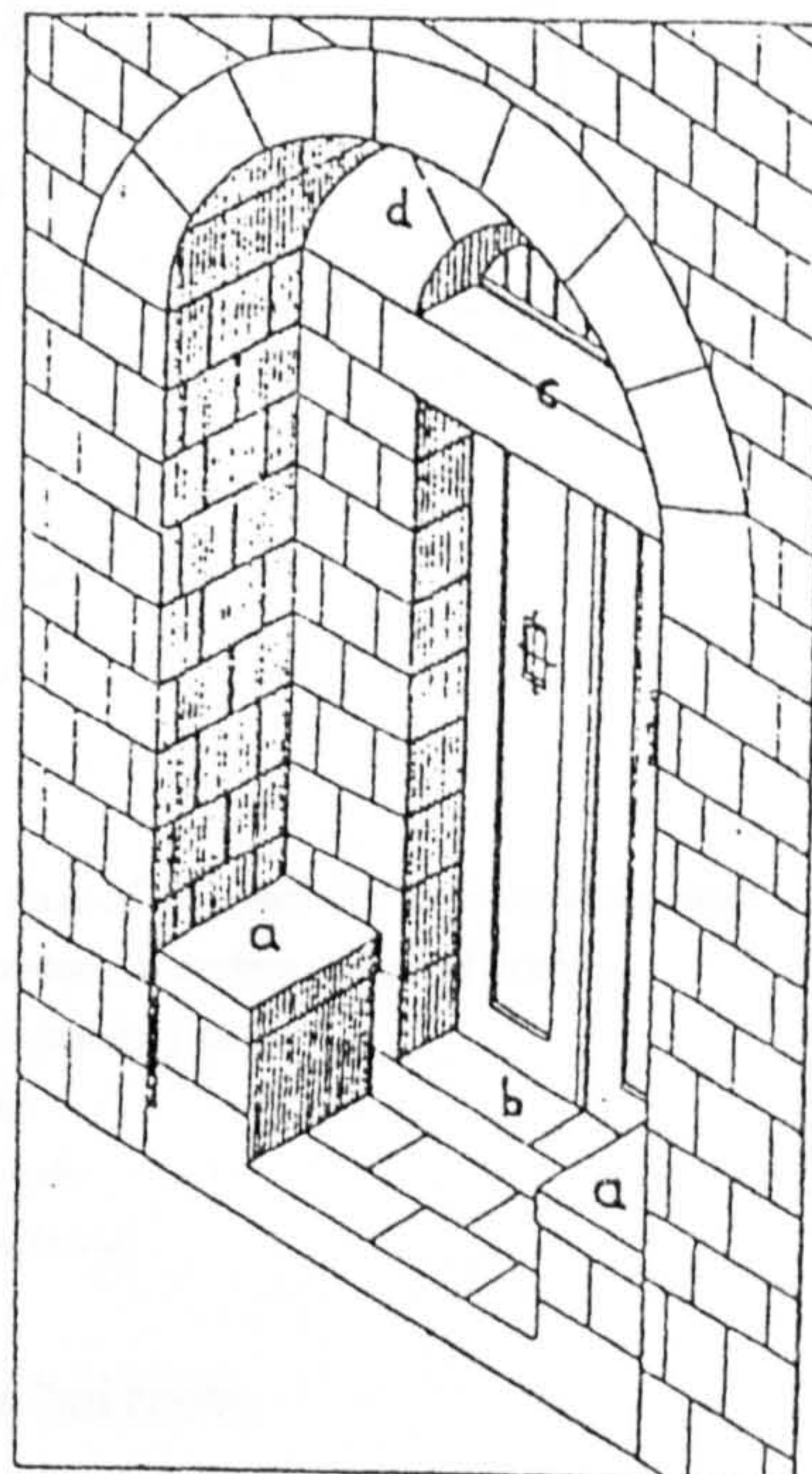
The stones surrounding doors and windows are dressed more finely than the other stones of the building. Every such stone presents two dressed surfaces. Such stones are called *Slah* (jambs). Those of the door are also known as *Saddaghat*. *Al-Slah* stones are so arranged that one stone runs with its long axis in the outer course while the next stone runs through the thickness of the wall. The first is called *^cAraqah*

and the second *Kalbeh*", see figure (4.53). To relieve the lintel *Shasheyeh* or *Atabeh* of windows or doors from the superimposed weight a *Hammal* (revelling arch) or a *Qamt* (flat arch) is constructed. *Al-Qamt* stone is composed as a rule of an odd number of stones. Occasionally the space between the arch and the door is used as a window (Canaan, 1933), see figure (4.54).



- a. Stone seats; *maqad*.
- b. *Dawwaseh*.
- c. *Shasheyeh*.
- d. *Qos hammal*; the first stone of arch.

Figure (4.53): A detailed traditional door. Source: (Canaan,1933).

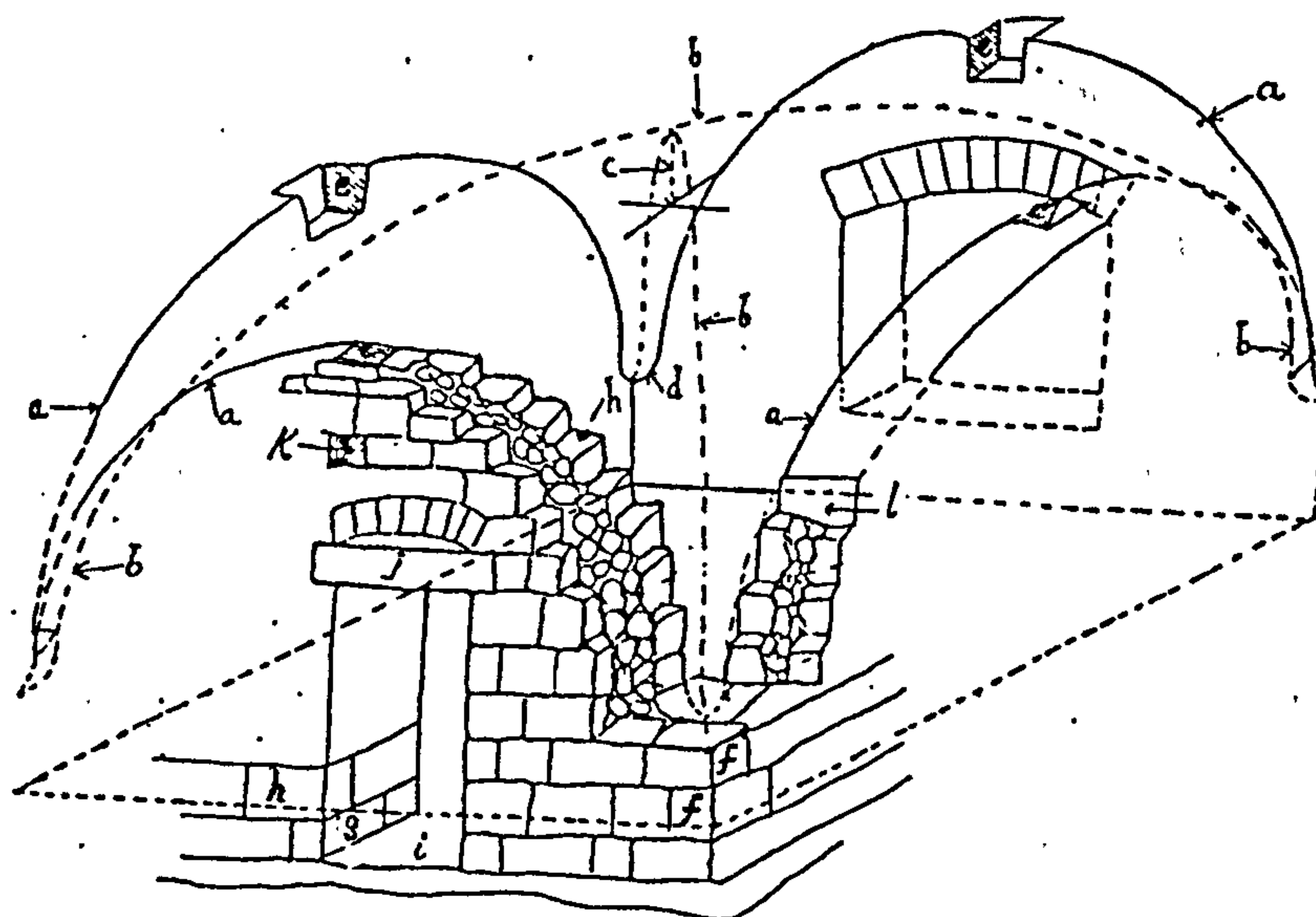


4. The Roof:

The traditional roofing system was the stone vaults. Vaults are of three different kinds, cross vault, barrel vault, and domes. The roof is constructed over the upper part of the four semicircular, pointed, segmental or elliptical form walls, according to the desired shape of the vault. The vault construction method was as the following:

A. The cross-vault:

This vault (figure (4.55)) is not carried by the thick walls alone, but chiefly by the four *rukab*, which are strong pillar-like projections at the corners. The ribs of the cross-vault which are the continuation of *Al-Rukab*, are known as *Suak* or *Dla*. Sometimes, *Al-Rukab* grow gently from the corners and develop only slowly in pillar-like projections. The first projecting stone of an elevated *Rukbeh* is known as *Zefr*. When the work has reached this stage *Al-Muallim* makes *Al-Tobar*; the framework to coincide with the arch-like walls, which are known as *Helal*; crescent.



- | | |
|--|--|
| a. Future lines of penetration between the walls and the vault. | b. Future lines of diagonal ribs to grioned the vault. |
| c. Difference in height between wall arches and diagonal arches. | d. Bracket stone at springing line of arches. |
| e. Sockets to receive beams for the tobar of the vault. | f. Zawayah (corner) stone. |
| g. Kalbeh. | h. Araqah. |
| l. Burtasheh. | j. Shasheyeh. |
| k. Opening for ventilation (a small Taqah). | l. Musmar Stone. |

Figure (4.54): Schematic sketch of a traditional cross-vaulted room.
Source: (Canaan,1933).

When the area of the house is large a strong relieving arch (*Kamar. pl. Kamarat*), used to be built over the upper surface of each *Helal*. It ran from one corner to the adjacent corner on the same side and usually protruded into the room, and was not visible from the outside. Every such *Kamar* held firmly together the structure of one wall and helped to carry the weight of the vault. When such arches were constructed in small rooms, there were either no *Rukab* or they did not protrude so far into the room as in other cases, but sprang gently from the corners (Canaan,1933).

The skeleton of *Al-Tobar* consists of a strong piece of wood placed perpendicularly in the centre of the room; *Al-Aros*, which supports the whole framework and projects higher than the centre of *Al-Helal*. The traverse beams are of two kinds. Four beams connect *Al-Aros* with the four *Rukab*, and are called *Rammayat*, and four stretches from the central top of each of the crescent shaped walls to *Al-Aros* (*Al-Hammal*, the rafters). Small square sockets are left on the top of each *Helal* to receive these beams. The first run in a slanting direction, while the others are more or less horizontal. Such a framework is used only when each side of the room measures more than four metres. In smaller vaults one strong bar, *Maddadeh*, stretches from the central top point of one *Helal* to the corresponding point of the opposite side. From the centre of the

two opposite walls smaller beams rest on the middle of *Al-Maddadeh*. In some parts, the four *Rammayat* beams are replaced by another kind of frame. On both sides of each *Rukbeh* are placed vertical bars. Their tops are joined by a traverse piece of wood. This frame is called *Jahsh*; foil. From each end of the upper transverse piece of *Al-Jahsh* a beam stretches to the centre of *Al-ʿAros*. These beams are also known as *Rammayat*, since they take the place of the oblique beam. This device strengthens the corner of the vault. The upper part of *Al-Rukbeh*, which becomes broader by this method, is known as *Fakhd Al-Rukbeh*.

The wooden frame is covered with smaller beams and branches. Oak branches are preferred because of their greater strength. Old mattresses (*Husur*), thorn bushes, corn stalks and old baskets made from soft palm leaves are placed above the twigs. The whole is covered with dry grass. The surface is now covered with earth and with two layers of simple mortar prepared without lime. A lower mortar layer is the coarser, while a superficial layer, the *Malseh*, that gave the vault its final form is made smooth. As soon as the *malseh* is dry the *ʿAqd* begins. *ʿUqqad* stones, cut in a brick-like but uneven form, are used. These are chosen from the lightest kind of limestone, the *Nari*. While the *Muʿallim* is engaged in vaulting, another less trained mason fills the gaping places between the *ʿUqqad* with smaller pieces of the same stone, thus making the superficial surface fairly even. This layer is called *Al-Bardaʿah*. The cylindrical *ʿUqqad*, used to close the last part of the vault, are the *Dalaʿib* (pl. of *Dalʿobeh*). The *ʿAqd* is considered finished when the *Muʿallim* places in the centre (*Surret Al-ʿAqd*) a long perpendicular stone known as *Ghalaq* (crown- or key- stone).

The raising of the vault does not complete the house, for the finished roof is always more or less flat. The centre of the cross-vault (*Surret Al-ʿAqd*) and of the different varieties of such a vault lies always higher than the summit of the *Ahelah*. The larger the room the greater must be the difference. While in small rooms the *Surrah* is 20-40 cm higher than the walls, in larger rooms the difference is 50 cm or more. This difference of height between the summit of the *Helal* and the *Surrah* of the *ʿAqd* is called *Shaylan* (rise of the vault).

The external crescent-shaped walls, which were left un-built must be completed. The pyramid-shaped spaces between the corners of the walls and the vault are built with *Nari* stones. Sometimes the four ribs (*Suak*) of the *Tobar* do not meet in the centre of the vault at the *Ghalaq* stone; thus the ceiling is not a true *ʿAqd Salib*. They run to about 50-80 cm from the *Surrah* and end in a circular, square or elongated disk that is flat. It becomes the central part of the

ceiling. Sometimes a small and very shallow *Qubbeh* takes the place of the circular disk (Canaan, 1933).

When an elongated room is arched by two or more vaults, the central *rukab* of the long walls may project to the outside or more often to the inside. The first type is used when the house is large. It has the advantage of leaving the inner surface of the walls uninterrupted by any projection. Such a *rukbeh* is known as *bageh* as the *rukab*, as a rule, project to the inside. When the room is not very large they rise gently upwards. The central *rukab* of a house with two or more cross vaults are twice as broad as those of the corners. Such a compound cross-vault shows, if correctly and symmetrically built, a graceful form. The line connecting the centres of the different vaults runs horizontally.

B. The barrel Vault:

This type of vaulting (figure (4.55)) is called *Jamalon*, by which, formerly most houses were vaulted, as it is more simple than the cross-vault. From the whole breadth of one wall a round vault stretched to the opposite wall. The two other walls did not support the vault in any way, but were built up to close the two ends and the openings for doors and windows were usually found in them. If openings must be in one of the bearing walls, a special vault over the open is required to strengthening the whole structure.

C. The Dome:

The dome is one of the main characteristic feature of the Palestinian landscape. The dome is usually built of burned-brick tubes that are still lighter than *Al-Uqqad Al-Nari*; (light fire stone slices). Only few private houses of the better-class town-dwellers show this form of vaulting. The dome might have different types:

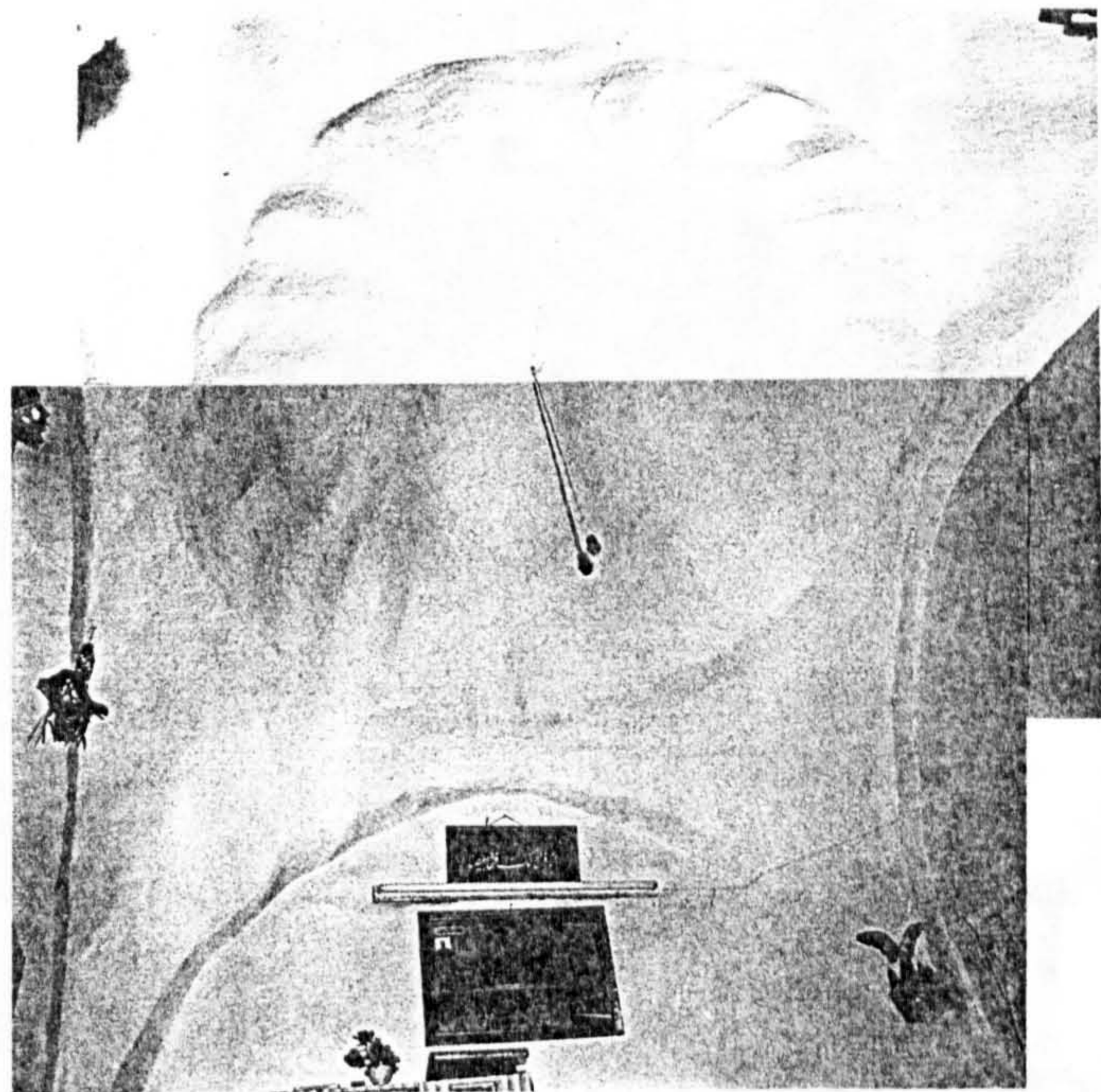
1. The simple dome built directly over the four walls of the room, see figure (4.55).
2. The dome may replace the flat circular disk, *Al-Sahn*. The four ribs of the vault end at the circumference of the base of the dome. This circumference is built of *Maqadem* stones.
3. The upper square space of the room is converted into an octagon by filling the corners with pendentives. The opening of the octagon, which is smaller than the square, is raised a little and the hemispherical dome rests on it.



A. A cross vaulted room.



B. A barrel vaulted room.

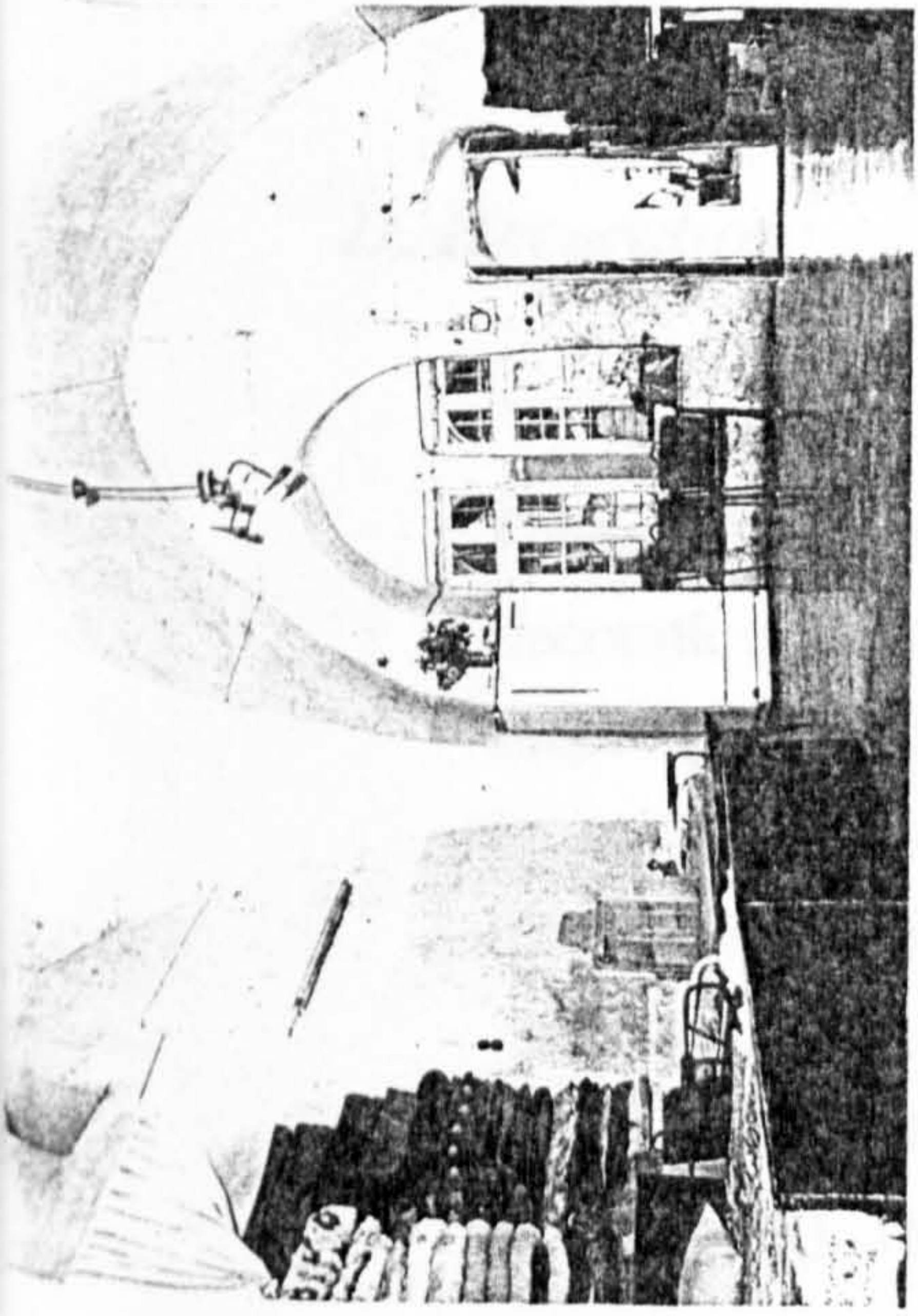


C. A small dome built directly over the four walls of the room.

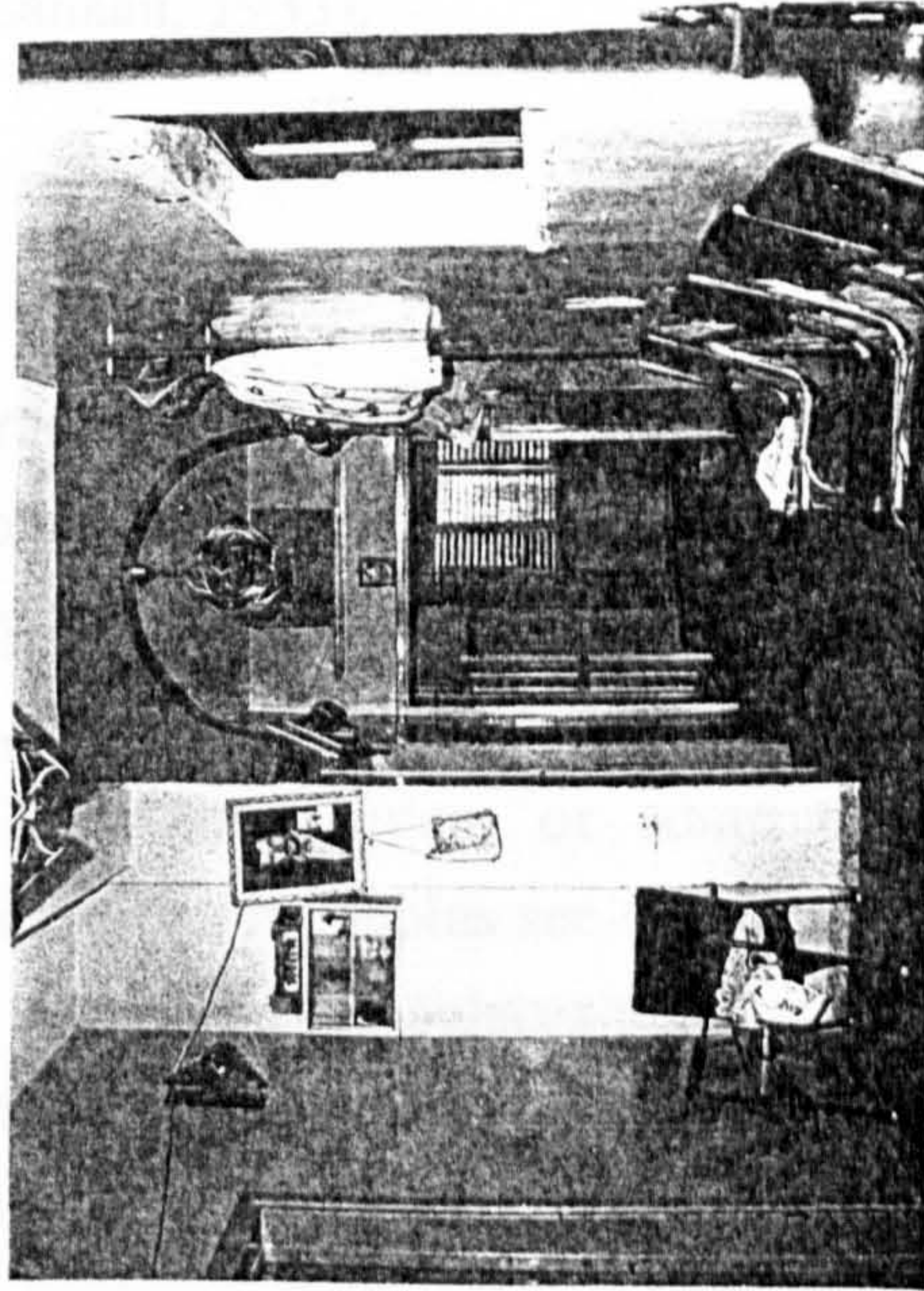
Figure (4.55): Traditional roofing types.

5. The Floor:

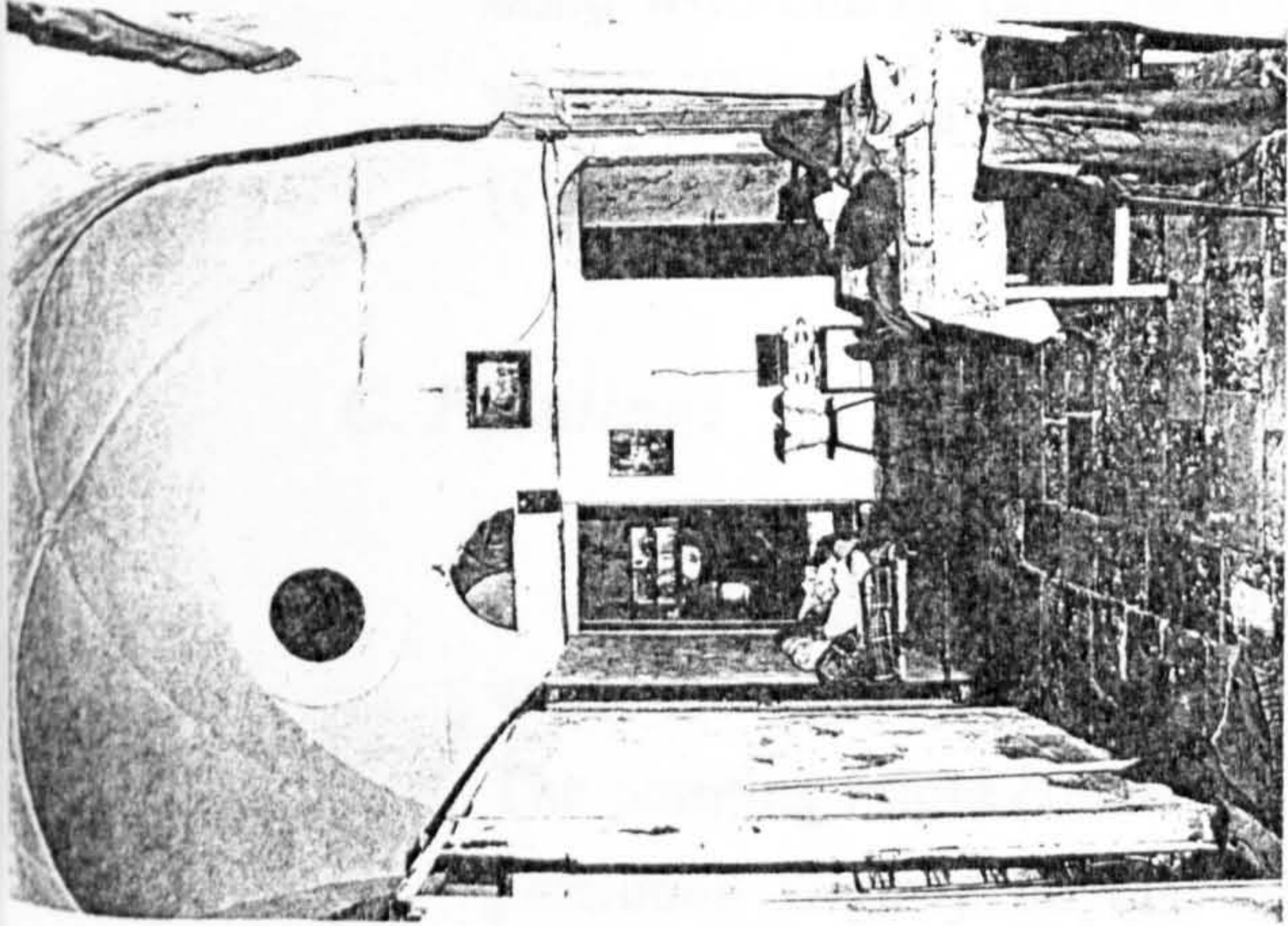
The floors of the houses are of two types: tiled floor and lime-slab; (*Maddeh*). The tiled floor constructed from flag-stones, which found in palaces and houses of rich people, some of which might have marble tiles. The lime-slab mixture consists of equal parts of lime (*Shid*) and stone powder (*Nhateh*). For two or three days the mixture is treated with water and mixed until every grain of lime is slaked. Then the floor is laid with *Maddeh* and well polished for three days, then for six more days using the smooth surface of a piece of marble and using oil and soap as a lubricant. Such a floor becomes hard and smooth (Canaan, 1933). At the beginning of this century the transitional tiles appeared. Concrete was one of its mixture main ingredients. The tile unit was an important piece of a complete beautiful drawing the whole units draw. Modern tiles, generally, have more simple finishing, as shown in figure (4.56).



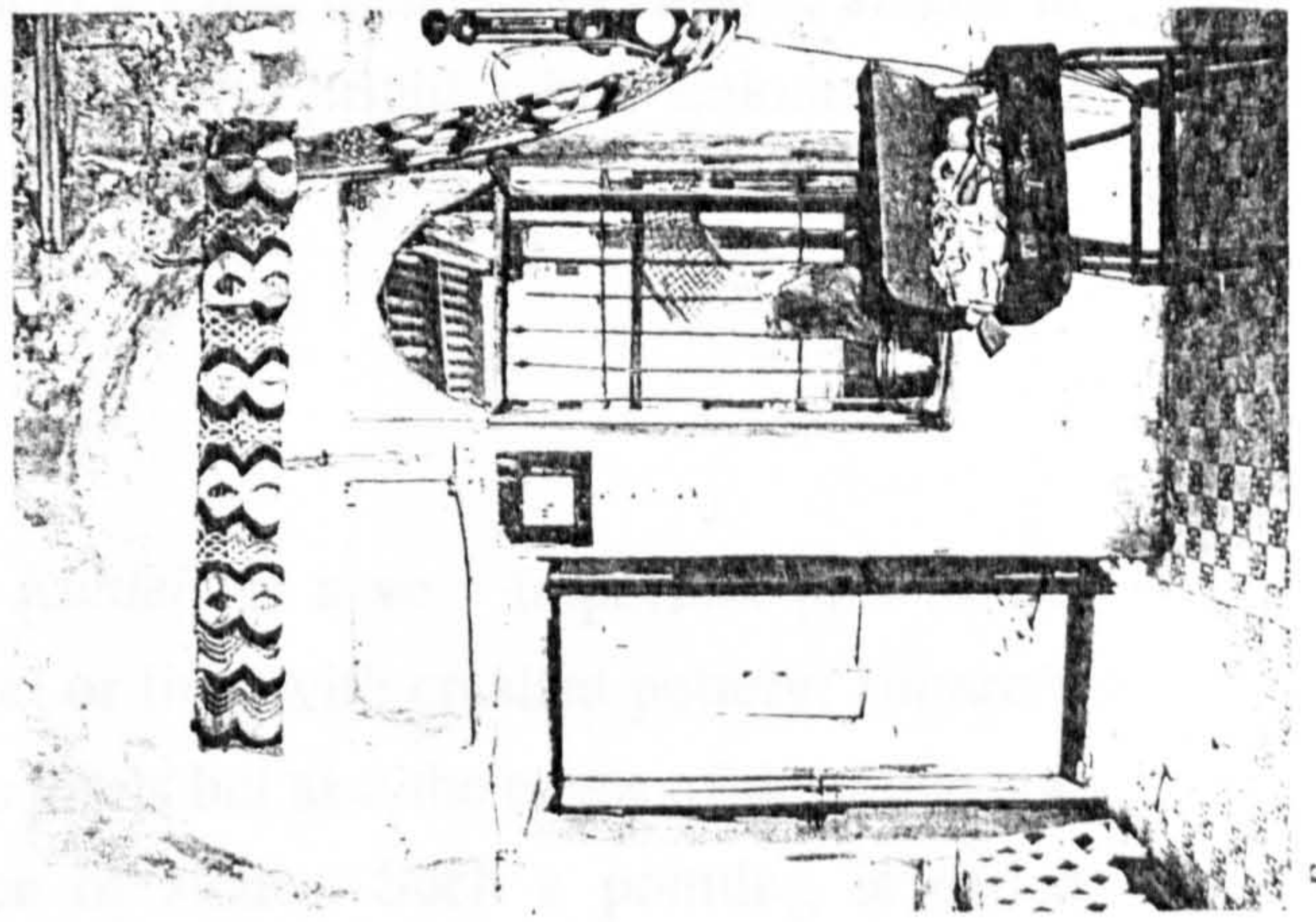
A. A traditional lime-slab floor; Maddeh.



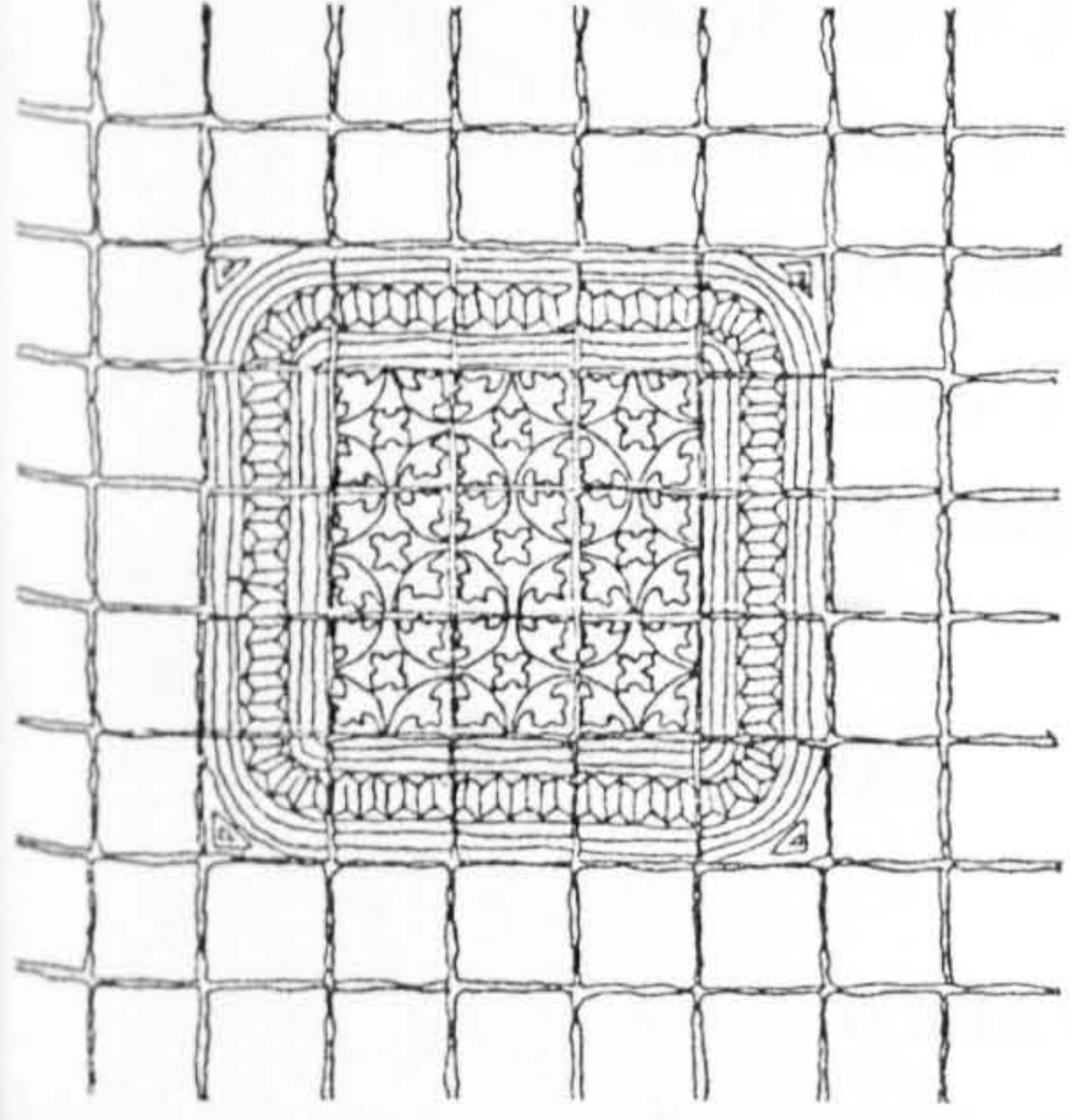
D. Modern tiled floor.



B. A traditional flagstone floor.

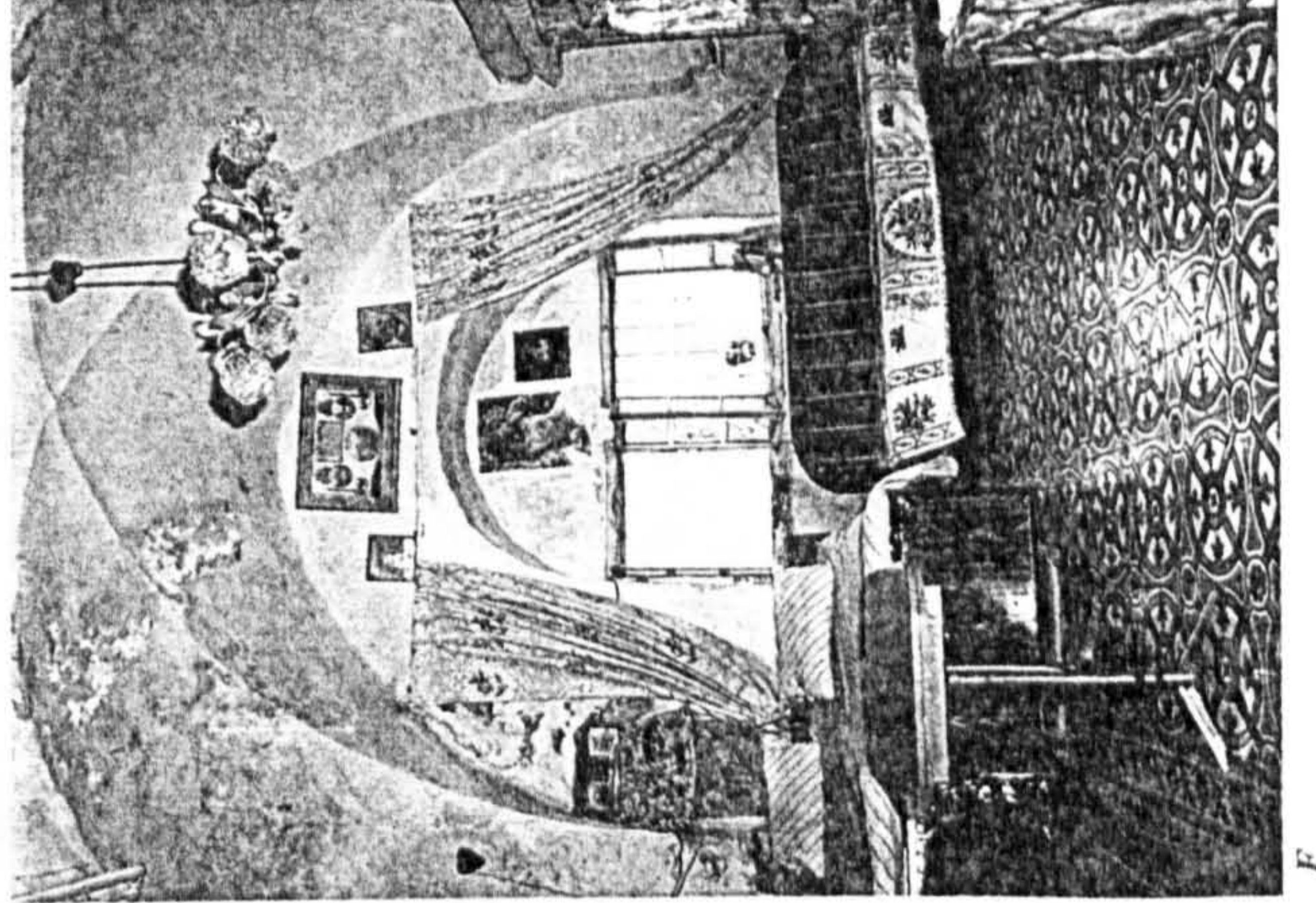
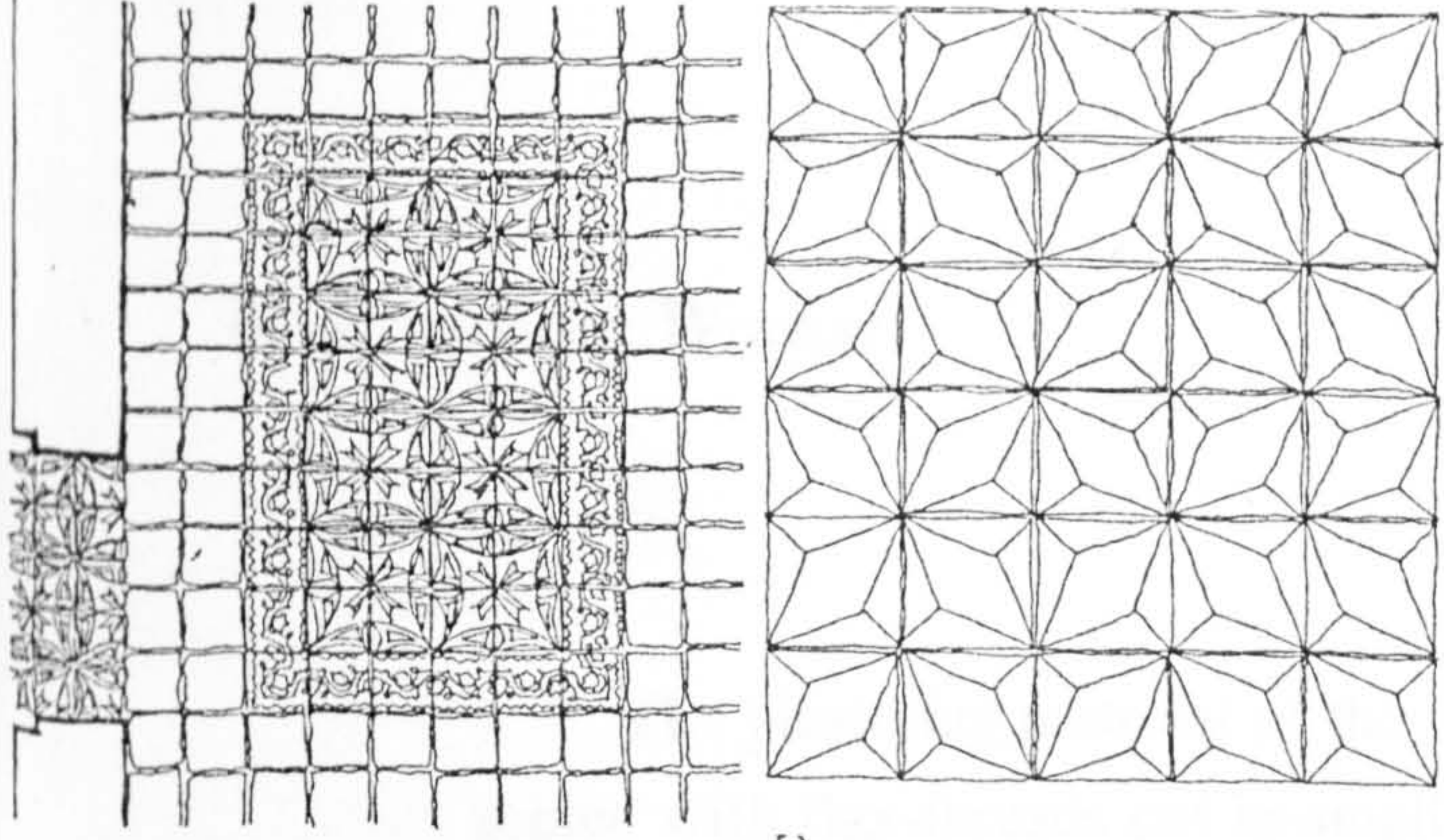


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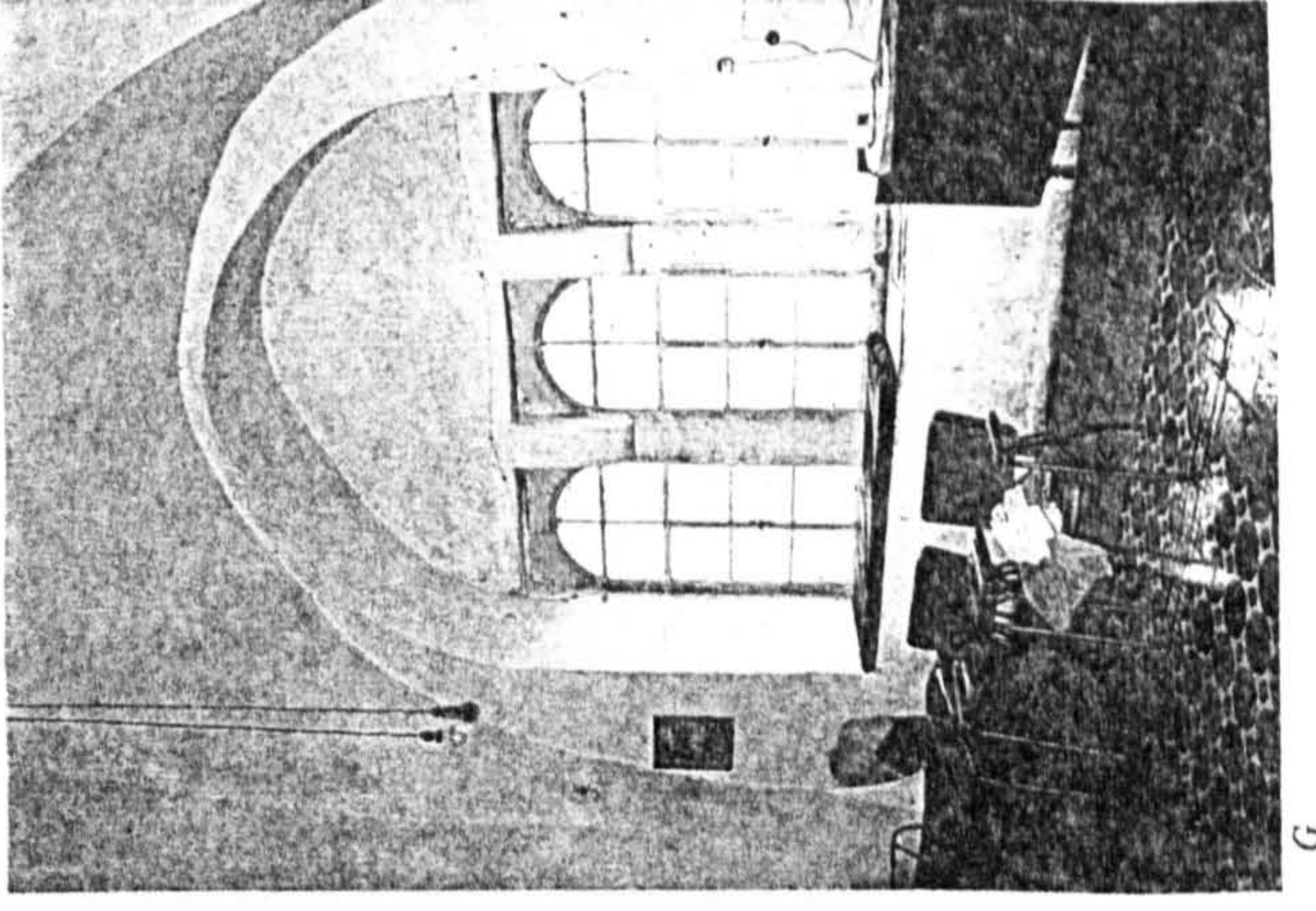


C

C. Three examples of the transitional tiled floor decoration. Source: Courtesy of An-Najah University. Arch. al students, 1989.



F



G

Figure (4.56): Different methods of floor finishing.

6. *Finishing Works:*

A. Plaster:

The plastering material of the interior ceiling and walls was made of lime mixed with flax-threads cut in small pieces. It needs to be polished for several days. Such plastering unites with the wall to make a single hard coat. The first step was to make two or three vertical lines, fifty to sixty centimetres apart, rendered straight and vertical and serve as directing lines for the remainder of the plastering. The plaster consists as a rule of three coats: *Marsheh* (rendering coat), *Sehheyeh* (floating coat) and *Na^cmeh* (fine coat) (Canaan, 1933).

B. Painting:

White wash of the building interior was the normal interior paint. It was done with one or two coats of lime and a small quantity of indigo, slaked in water. The indigo is added to counteract the bright white colour of lime (Canaan, 1933).

C. Pointing:

Pointing of the masonry joints; *Kuhleh*, is a very important part of the work. It is done with lime and *Qasrmel* or lime with crushed pottery; *Humrah*. The pointing might covers not only the joints but also the edges of the stone and protruded slightly beyond the surface of stones. Such a pointing is called *Kuhleh Arabeyeh* (Canaan, 1933).

D. Decoration:

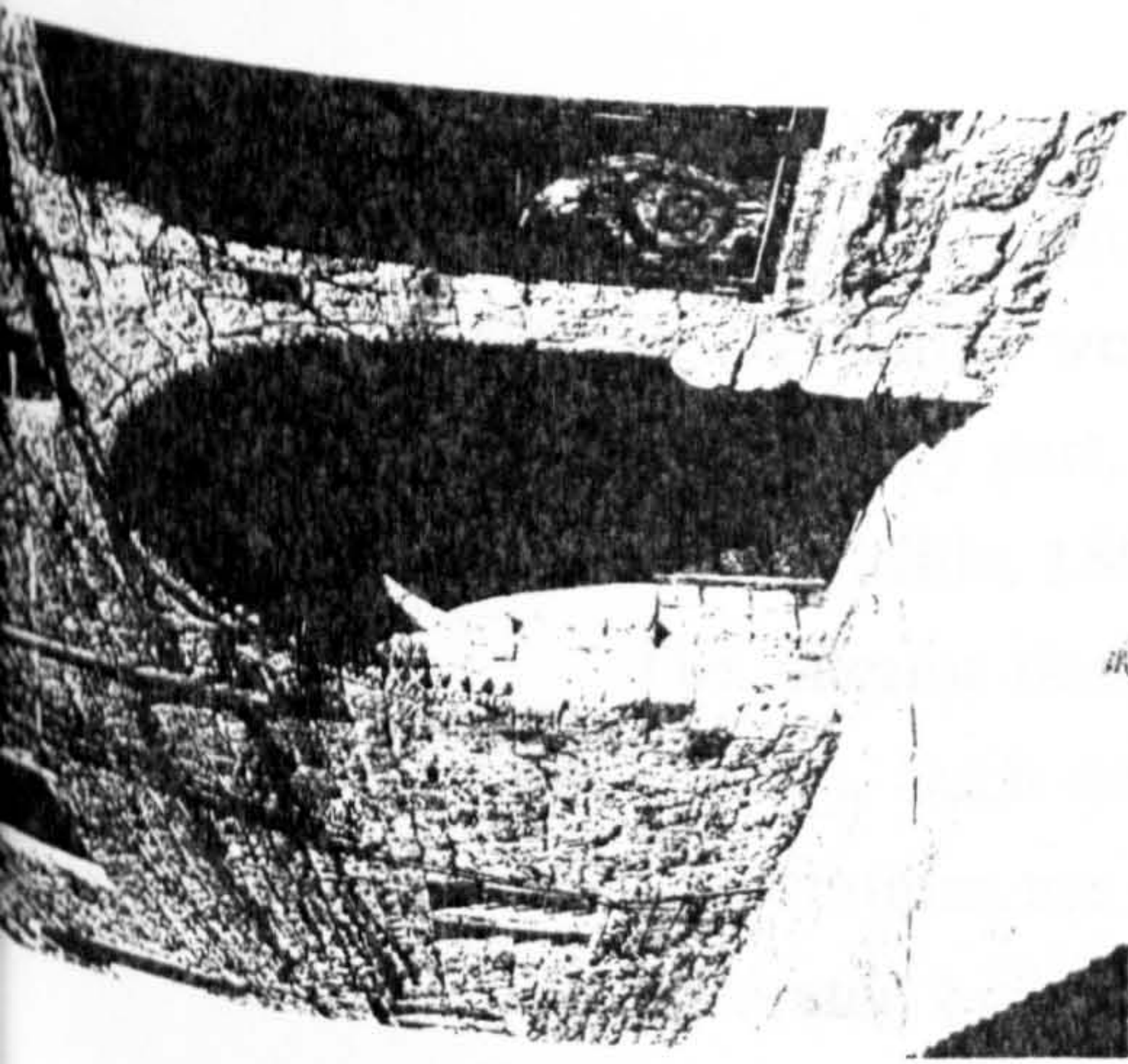
Many of the traditional buildings in the Old Town have decorative elements on the stone facades of both their exterior and interior. The decorations are mainly found around the different types of openings. Generally, most of the buildings, have inscriptions over their main entrance, which could be some sentences from the Qur'an, or some eminent poets, for more information about inscriptions in Nablus see (Jaussen, 1927.b). More important entrances, mainly the portals of the palaces and big houses were decorated by plants or the decorations used on the famous Nablusian confectionery, see figure (4.57). The decorations on windows are nearly the same.



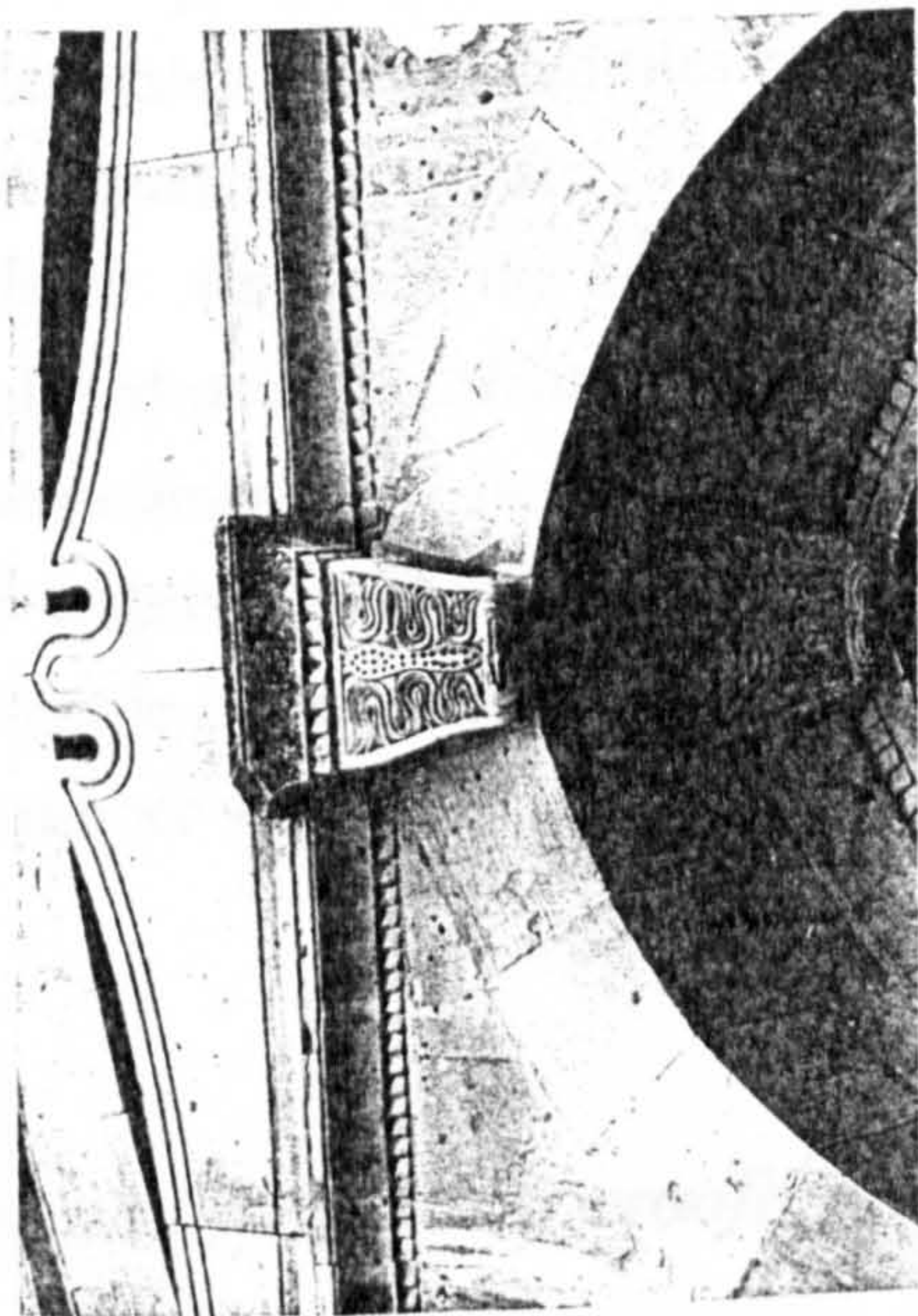
A. An inscription over the main entrance of a traditional building.



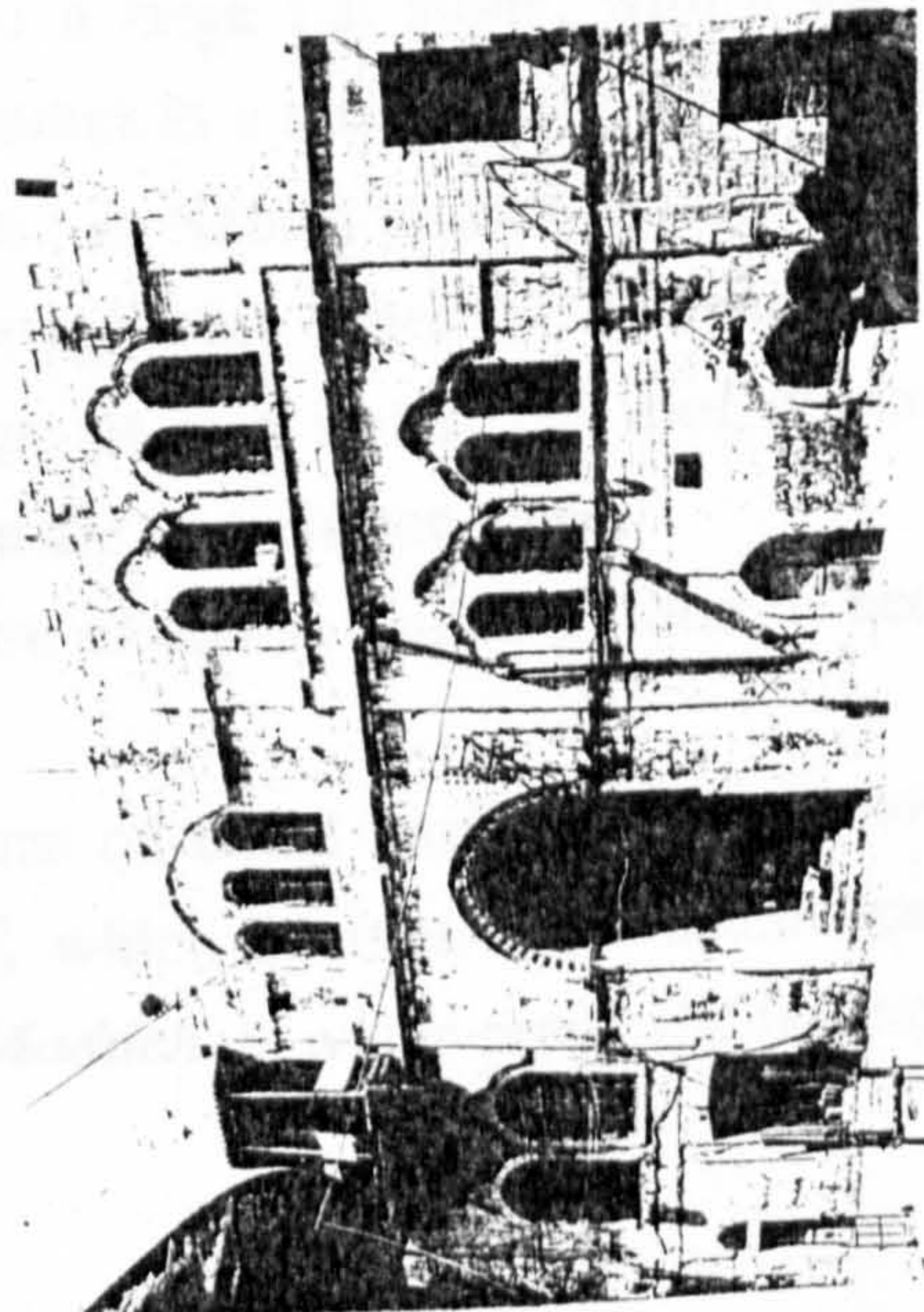
B. Sweet form decoration elements.



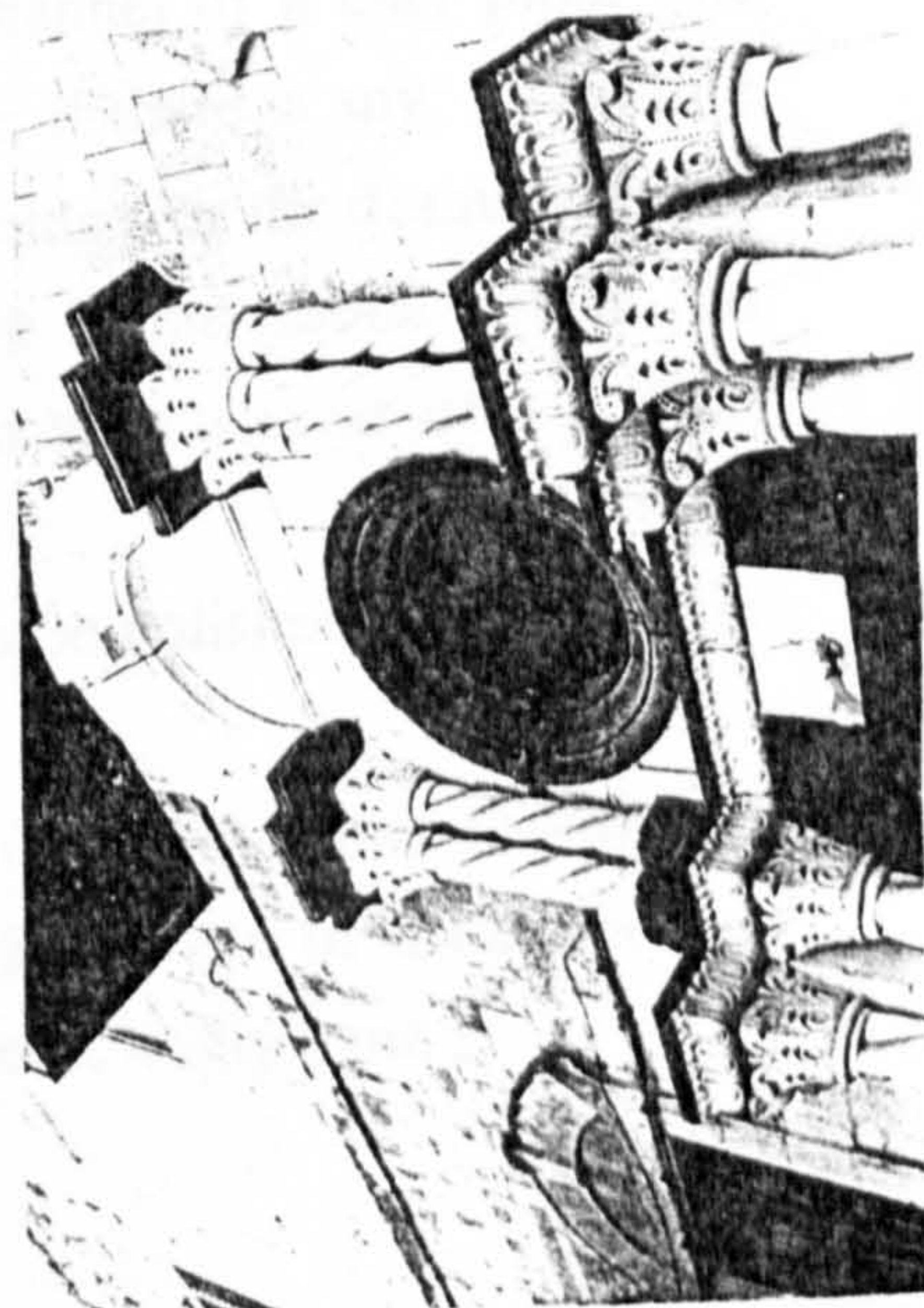
C. An ornamental doorway of a soap factory. Source: Courtesy of Dr Burgoyne, 1987.



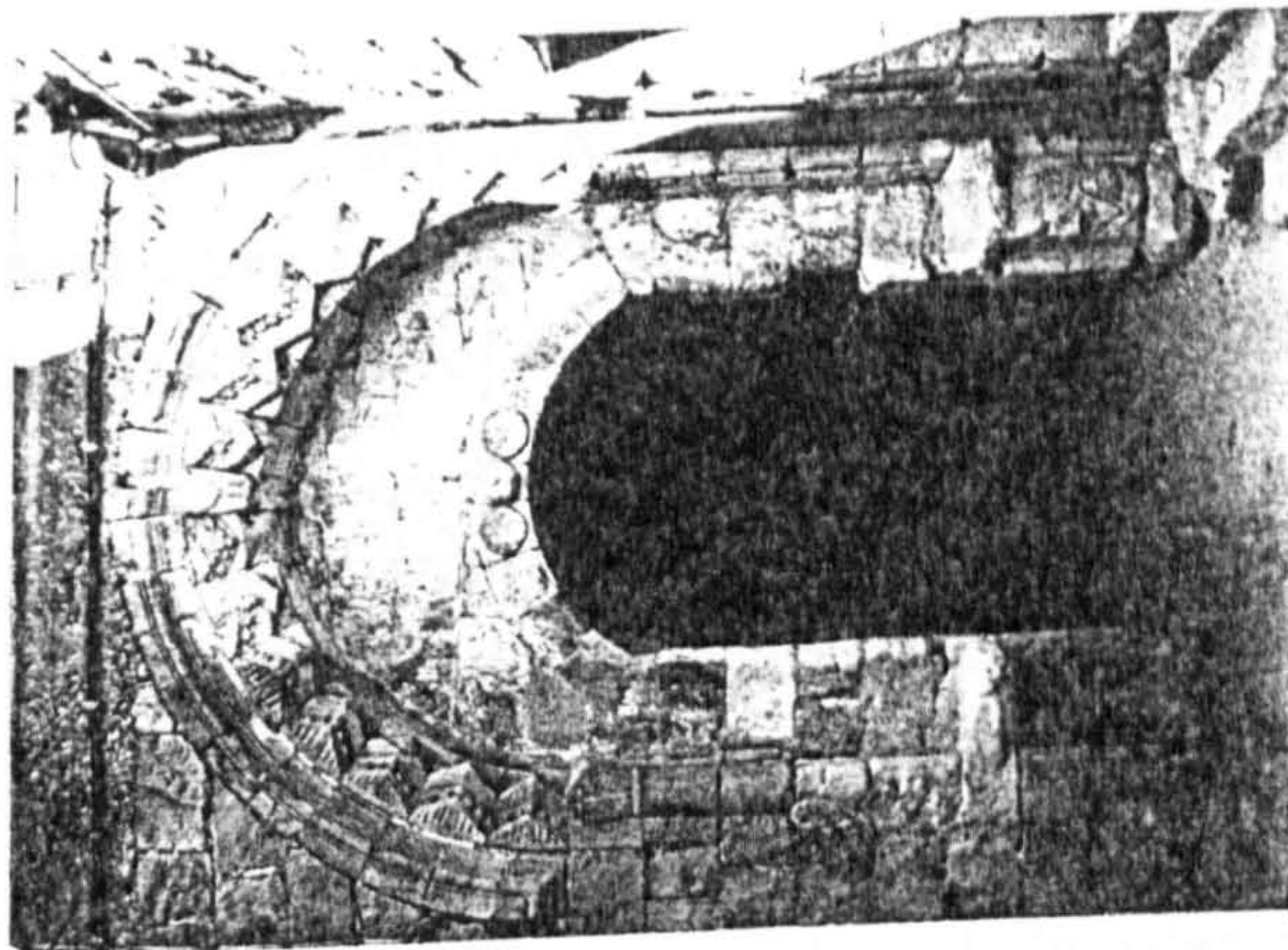
E. The crown of an ornamental doorway in Haret Al-Qaysariyyeh.



D. Ornamental facade of a residential building in Haret Al-Qaryon. Source: Courtesy of Dr Burgoyne, 1987.



F. A transitional example of ornamental doorway in haret Al-Qaysariyyeh.



H. An ornamental doorway of a semi-private lane.



G. Another form of stone decoration.

Figure (4.57): Traditional exterior decorations.

Usually, the ceilings were vaulted; they were plastered and white-washed, and like the walls, were without either inscriptions or adornments. No timber was used for any part, except for the frame of the door and the lattice work of the window (Mills, 1864, pp.108-9).

The interior decorations are more important than the exterior ones, see figure (4.58). Such decorations could be found on walls, ceilings and floors. Walls' decorations are more important in palaces and mosques. Vaulted ceilings were decorated by pottery coloured dishes attached on the vault centres and on the four *Rukab*. In the transitional style buildings and particularly in palaces, the flat timber ceilings were decorated by beautiful oil drawings, with lime engravings on the upper edges of the walls. Floors of the main rooms and halls were mainly decorated by coloured tiles or marble peaces. In winter these floors are covered by expensive carpets.

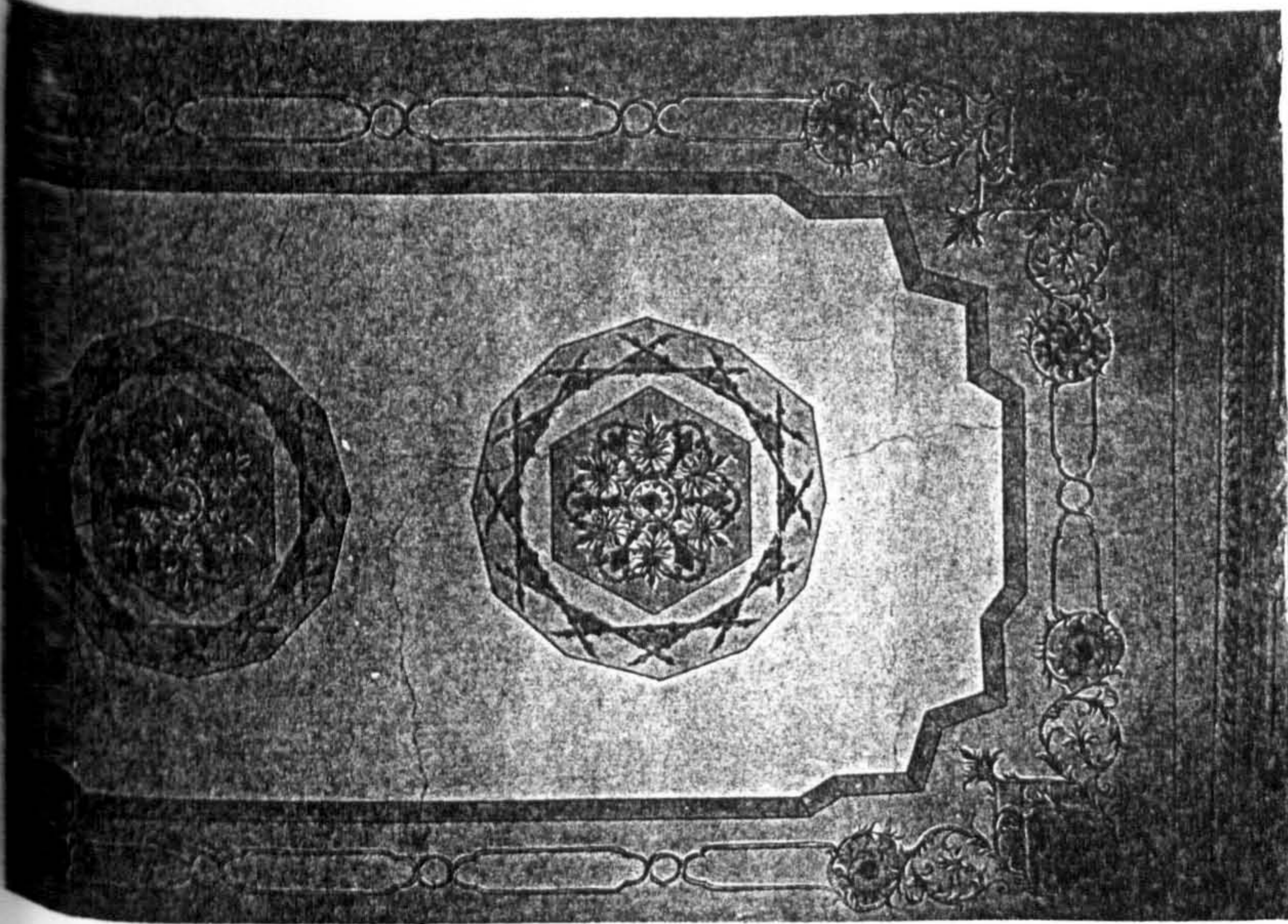
The *Mehrab* wall was the most decorative side in mosques. Verses of Qur'an were placed over the *Mehrab*, which, usually, was covered by coloured marble, and sometimes as in Jame^c Al-Khadrah the *Mehrab* is decorated by beautiful lime engravings. Also the *Menbar* was well decorated, sometimes it was built by marble or be painted to look as marble, and sometimes it was built by mahogany timber with many decorations engraved.

7. Services:

A. Rain drainage and roof water proofing:

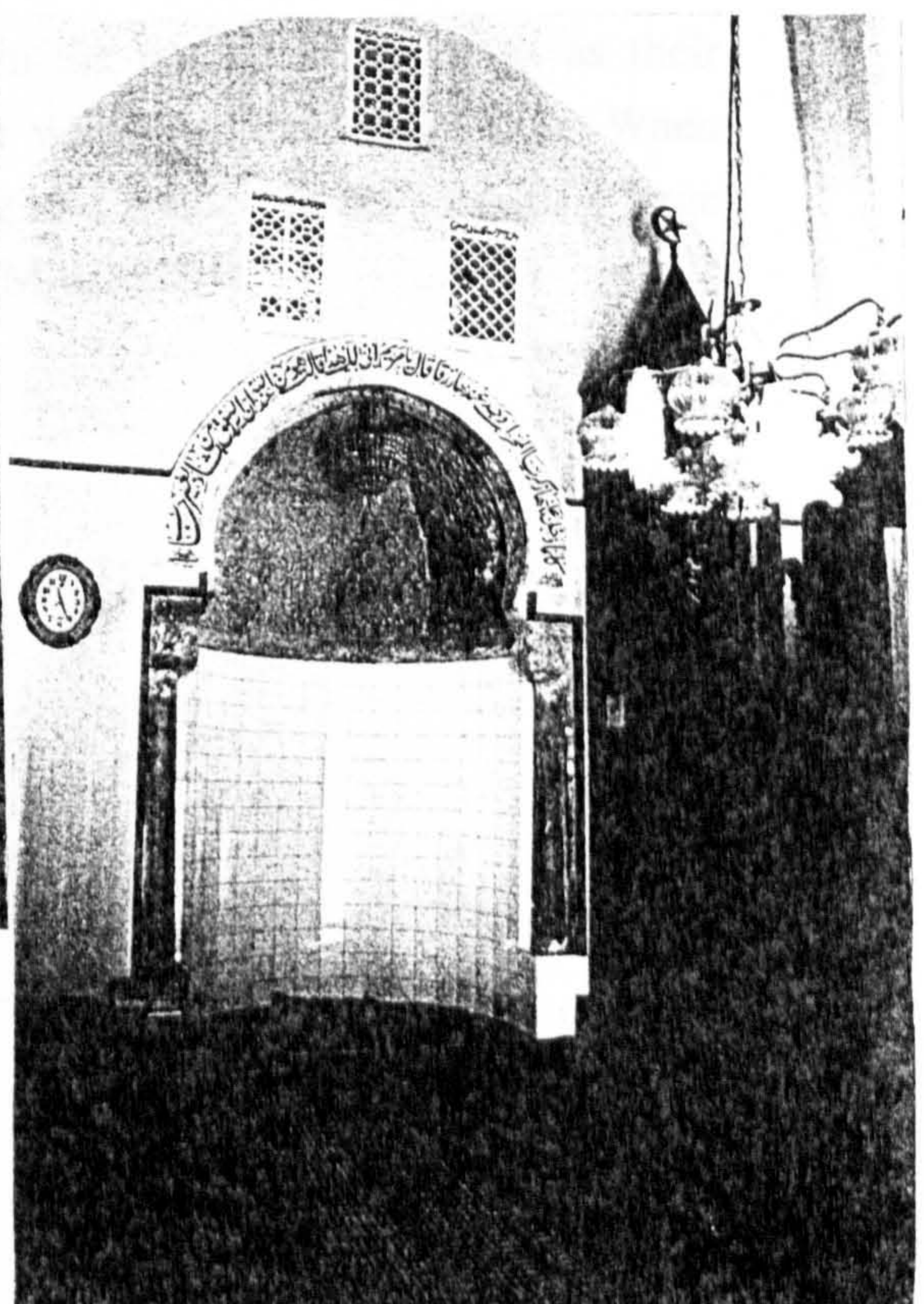
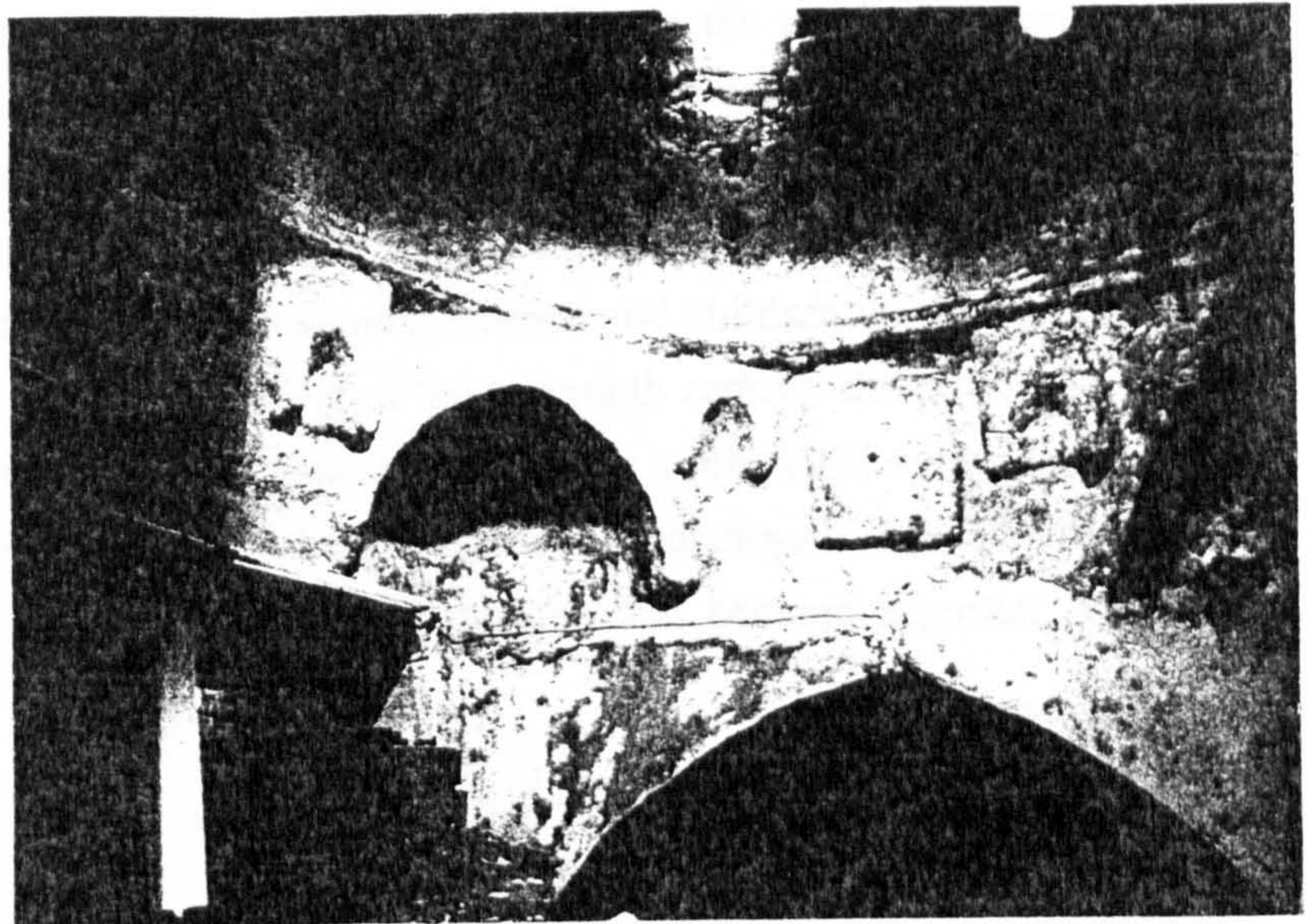
Every roof in the building is provided with a protruding spout for the discharge of rain water. Large roofs may have several spouts. The spout is either made of a large flat stone, with a curved channel or a clay pipe. The water might gather in a cistern built under the house, if there is any, it was rare to built a cistern in Nablus houses as it has many springs, or the drainage water was taken through clay pipes to the main net work in the public streets. To prevent leakage of rain water, the roof is plastered with a layer of a special mixture. There are two plaster types:

1. A mixture of coarse sand and lime. It needs to be polished for five to six days.
2. A mixture of equal parts of stone powder; (*Nhateh*), lime; (*Shid*) and *Qasrmel*, which denotes ashes taken from baking oven or a bath-house. Such a *Maddeh* is water-proof and becomes exceedingly hard.



A. An oil drawing decorated ceiling within Toqan palace. Source: Courtesy of Dr Burgoyne, 1987.

B. A decorated bath-house. Source: Courtesy of Dr Burgoyne, 1987.



C & D. A beautiful lime engravings within the Mihrab of Jami' Al-Khadrah. Source: Courtesy of Dr Burgoyne, 1987.

Flag-stone pavements are used also in roofs' surfaces. Such stones are of two kinds: small, square stones used in domes; and rectangular stones, measuring from 20 by 15 cm to 30 by 40 cm are employed in vaulted roofs (Canaan, 1933, pp. 24-25).

B. Sewage system:

Formerly, there was no definite need for a sewage system in residential buildings; because, only the kitchen used water. Kitchen water used to be gathered in containers then thrown away, mainly, in the garden. Also there was only one cooking place for most of or all the families in the residential court, *Al-Hawsh*. The toilet was usually placed in an external structure usually built in the garden or away from the main building but near a back doorway or on the main staircase. The bath room was not an essential facility to be found in residential buildings, as the inhabitants, men, women and children used to go to the public bath-houses. At the beginning of the twentieth century the public use of the bath-houses began to change, especially after the 1346 /1927 earthquake, when most of the bath-houses were badly damaged and closed. This closure encouraged private baths to be added to the houses, and became essential in every one.

C. Heating system:

There was no built heating system in the traditional buildings as their massive structural elements provide them with good heat insulation. When necessary, rooms were warmed by bringing in a brazier, in the form of a large dish placed on a stand filled with charcoal (Mills, 1864).

Chapter Five

*Problems
of the Old Town*

5.1. Problems of the Physical Fabric:

Generally, the traditional buildings are suffering from the effects of neglect and improper maintenance. These effects were represented by the leaking roofs, dampened interiors, plaster and paint falling, and the cracked walls. External stones are suffering from natural deterioration and loss of mortar, which if not treated on the long run will affect the stability of the whole structure, see figure (5.1). The general condition of the physical fabric of the Old Town is shown in figure (5.2). The condition of a building depends on its importance and usage status:

1. Residential buildings, which form the great percentage of Old Town' buildings. Most of these buildings are suffering from the same general problems above mentioned. The fact that about 40% of the Old Town's houses are deserted, and 40% are rented to the low income emigrants, explains this situation.
2. Most of the mosques' buildings are in sound condition, as they are under regular inspection. But the historic ones, such as *Jamec Al-Kabir*, *Jamec Al-Hanbali* and *Jamec Al-Bayk*, are suffering from improper treatment for their dampness problems, which as in most of the traditional buildings causes the fall of internal plaster and paint. At the moment the standard method of combating this problem is to cover the interiors with plastic plank decoration. This does nothing to solve the fundamental cause and inhibits evaporation from the walls making the problem worse.
3. Commercial and handicraft workshops are in fair condition, as their occupiers are obliged to maintain them for their business reputation.
4. Bath-houses; *Al-Hammamat*, Hotels; *Al-Khanat*, and the Caravanserai; *Al-Wakalah*, are the most neglected building type. As all of them are deserted and have no proper use.

5.2. Efficiency Problem of the Traditional Buildings:

The efficiency of the traditional buildings within the Old Town by time is decreasing. This is caused by different factors and elements within the physical nature of the buildings themselves and the environment surrounding them. The efficiency of the buildings is positively related to that of their environments. But initially it depends on the efficiency of the building itself. The low efficiency of the traditional buildings within the

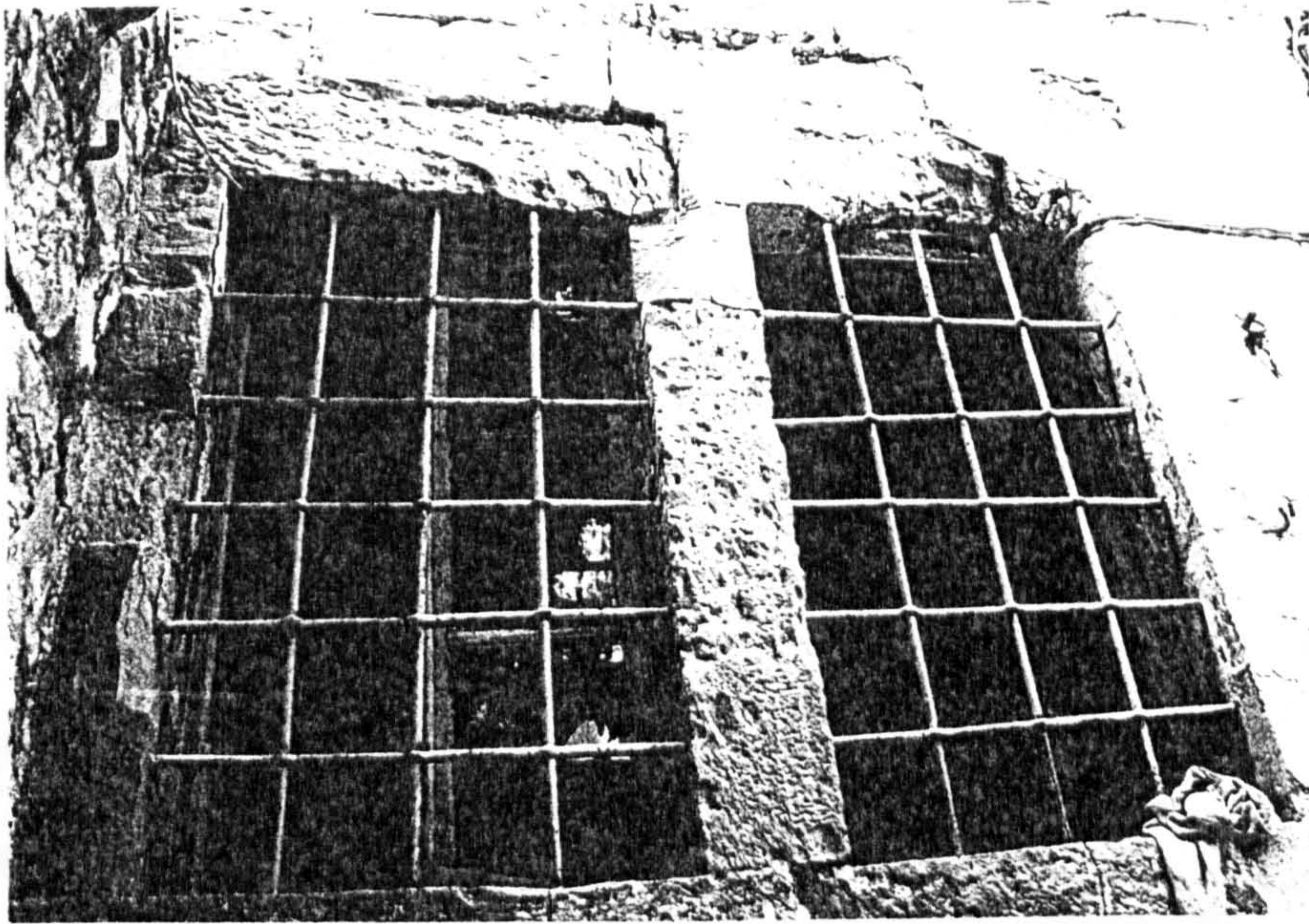
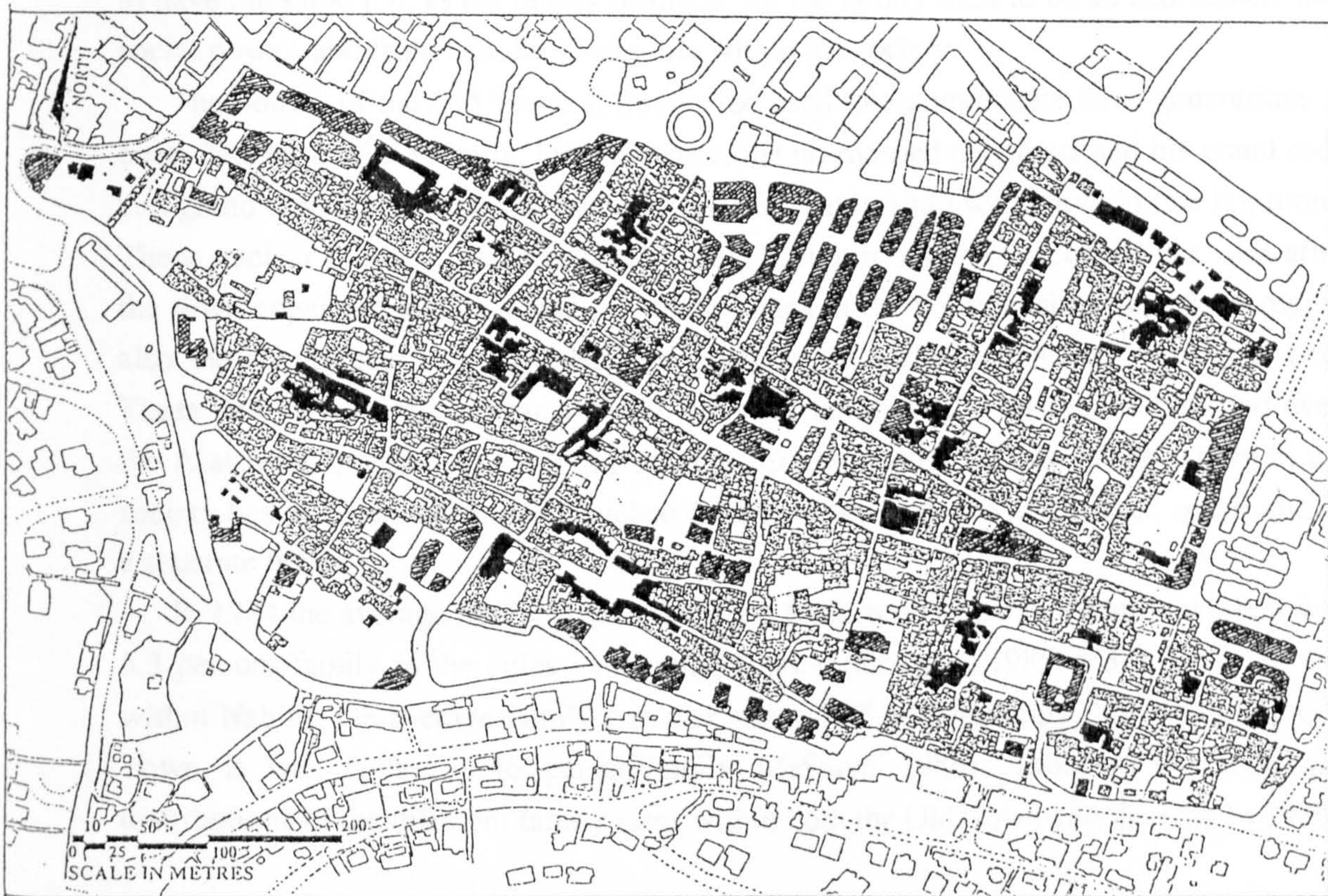


Figure (5.1): Examples of stone deterioration within traditional buildings.






-  *Buildings in good condition.*
-  *Buildings in sound condition.*
-  *Buildings in poor condition.*

Figure (5.2): The general Condition of the Physical Fabric of the Old Town's Buildings.

Old Town was reflected by the changes their residents had already done to them and the current condition these buildings have today.

5.2.1. Houses' Problems:

Efficiency of the traditional houses was clearly influenced by the social changes occurred in the Nablusian society, particularly the changes of the family type and role. The Nablusian family used to be the basic part of the society. The family members were all united behind the head of the family. Each extended family used to live in one part of the town, each part used to be called after the family living within. The family men used to have the same job, as the family business. So the family used to be an economical and social power, and from here its strong role within the society.

The houses of the Old Town at this period used to accommodate three generations at once. The head of the family, his wife, sons, the un-married daughters and his grand sons and grand daughters. Each son shaped a nuclear family and used to live in one big room. These nuclear families used to share kitchen, dining room and toilet facilities. But after the town expanded and as a result of the changes in the political situation of the region also the economical structure had been changed, as earlier mentioned in chapter two. These new circumstances scattered the extended families all over the country and even the Arab world, searching for living sources. Consequently, the role of the family in the society has declined and smaller nuclear families have been produced, each one living in a separate house.

In 1984 the average family size in the West Bank was 6.6 person/family, while it was 5.3 persons/family in the cities - including Nablus (Khayyat, 1985, p.33). In 1989, and within Nablus, the average family size was about 5.75 person/family, but within the Old Town it was higher; 6.46 person/family (Za^cnon, 1989). Table (5.1) shows the distributions of the different family sizes within both the Old Town and the City in 1989.

		Family size										
		2	3	4	5	6	7	8	9	10	11	12
Old Town		12.0	10.0	11.0	11.0	14.0	17.0	7.0	7.0	5.0	5.0	2.0
The City		13.3	10.4	9.6	12.7	14.7	16.0	10.0	5.3	3.0	3.0	2.0

Table (5.1). Source: Basic data from (Za^cnon, 1989).

As a result of the changes in the family size, the required size of the houses has been reduced. So the traditional big houses of the Old Town should be reduced to suit the new family size. Consequently, many of the big houses and palaces had been divided into

smaller housing units by the local people. As a result of the changes of the socio-economical structure of the Old Town (which will be discussed in section 5.4), these houses were divided by cheap, low quality and improper additions, see figure (5.3).

As a result of these divisions about third of the Old Town's houses consisted of one room, and more than half of them consisted of two rooms, while the situation of the whole City was about 70% of the houses consisted of three or more rooms, see table (5.2). Table (5.3) shows that the average number of rooms in the Old Town is 3.2 room/house, while it is 5.3 rooms/house in the new parts of the City.

Rooms/House						
Rooms (%)	1	2	3	4	5	6
Old Town	30.0	52.0	15.0	2.0	1.0	0.0
The City	10.0	21.0	26.7	25.0	11.3	6.0

Table (5.2). Source: basic data from (Za'non, 1989).

Room type/House			
	The Old Town	The City	
		(excluding the Old Town)	(including the Old Town)
Room/house	3.2	5.3	3.7
Bedroom/house	1.95	2.3	2.2
Bedroom-room ratio	60%	43%	59%

Table (5.3). Source: basic data from (Khatib, 1985, pp.143-6).

While the area of the houses of the Old Town has reduced, the situation was reversed in the new cities. In 1979, the average area of the West bank houses was 113 square metres, increased up to 124.3 square meters in 1984. In the same year, the average area of Nablus houses was about 130 square metres, in 1984, (Khayyat, 1985, p.36).

As a result of the new divisions within the traditional buildings, many of the created housing units lack the essential domestic facilities, such as kitchens, bath rooms, and toilets, some of which had been distributed among other housing units. Bath rooms were never existed in the old houses as the inhabitants used to go to the public bath-houses in the town. Table (5.4) shows that more than 60% of the Old Town's houses have no bathroom facility, while it is 31.1% within the new houses of the City. The percentage of houses, which share a bathroom in the City is 20.9%, but it is slightly less in the Old Town. 4.2% of the City's houses - including the Old Town, are without kitchen. Three quarters of the Old Town houses and half of the City houses share their kitchen.

A



B



C



A & B. Source: Courtesy of An-Najah University Arch.al Students, 1989.

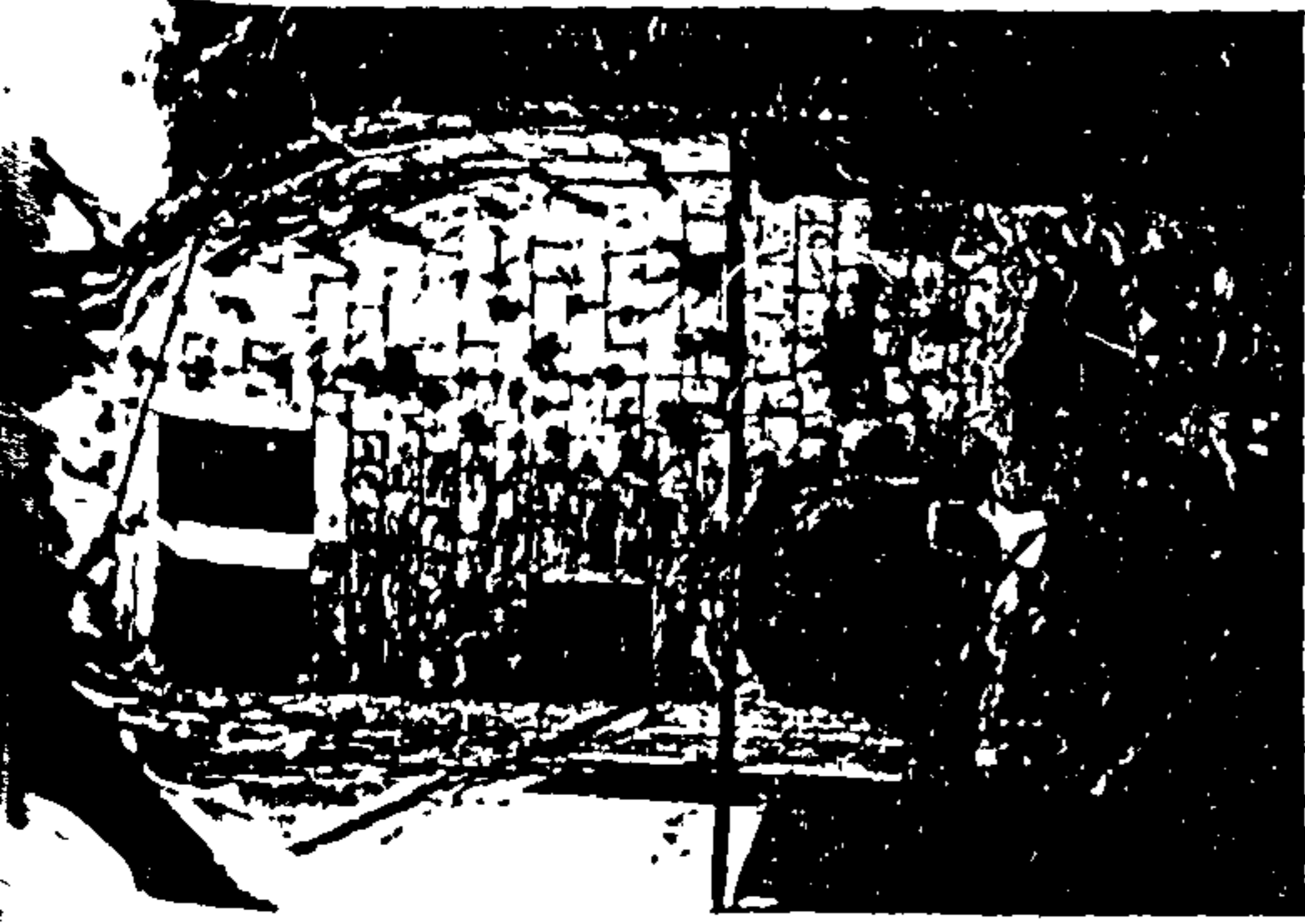
Figure (5.3): Three examples of the improper additions built within traditional buildings of the Old Town.

Domestic Facilities		
Bathroom	The City	The Old Town
More than one	2.7%	2.4%
One	45.3%	20.2%
Shared	20.9%	17.0%
None	31.1%	60.4%
Kitchen		
One	45.8%	20.8%
Shared	50.0%	76.8%
None	4.2%	2.4%

Table (5.4). Source: basic data from (Khatib, 1985, pp.143-6).

5.2.2. Public Buildings' Problems:

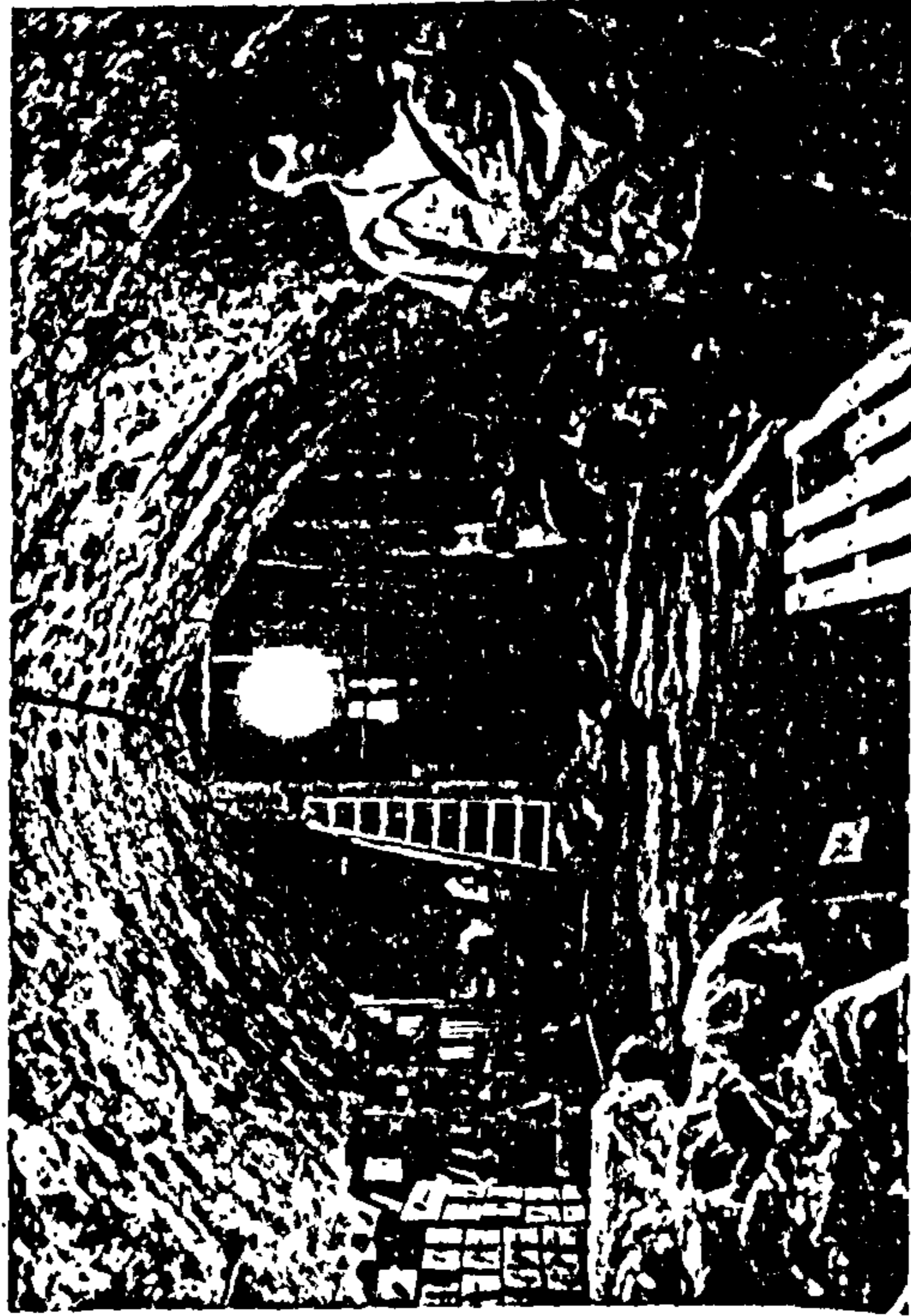
Most of the traditional public buildings within the Old Town are suffering from the low efficiency problems. The degree of the problems depends on the building type. Religious buildings are the only type that kept its traditional use and so they are operating with full efficiency. Mosques are increasing and being built in both the Old Town and the City. At least two new mosques were built in the Old Town beside the traditional ones. The Christians two churches still in use, and in good physical condition, but their only problem is the desertion of the Old Town by the Christian community, which could cause a problem for the future of these churches. Most of the traditional industrial buildings are no longer economical, because of their unsuitability to the mechanical improvements and modern productive methods. Also the dependence of the new industries on vehicular traffic is a serious problem within the Old Town. Only eighteen of the thirty soap factories within the Old Town are working, but with low capacity and un-economical costs. The same phenomena is found with the Tahini mills, sweet, leather and olive oil industries. The traditional schools, hotels, the caravanserai, and the bath-houses are all lost their original use except *Al-Jadidah* bath-house which recently closed (Dow, 1990). Most of these buildings are deserted or used as workshops or storage for the growing commercial shops, see figure (5.4).



A. A closed factory.



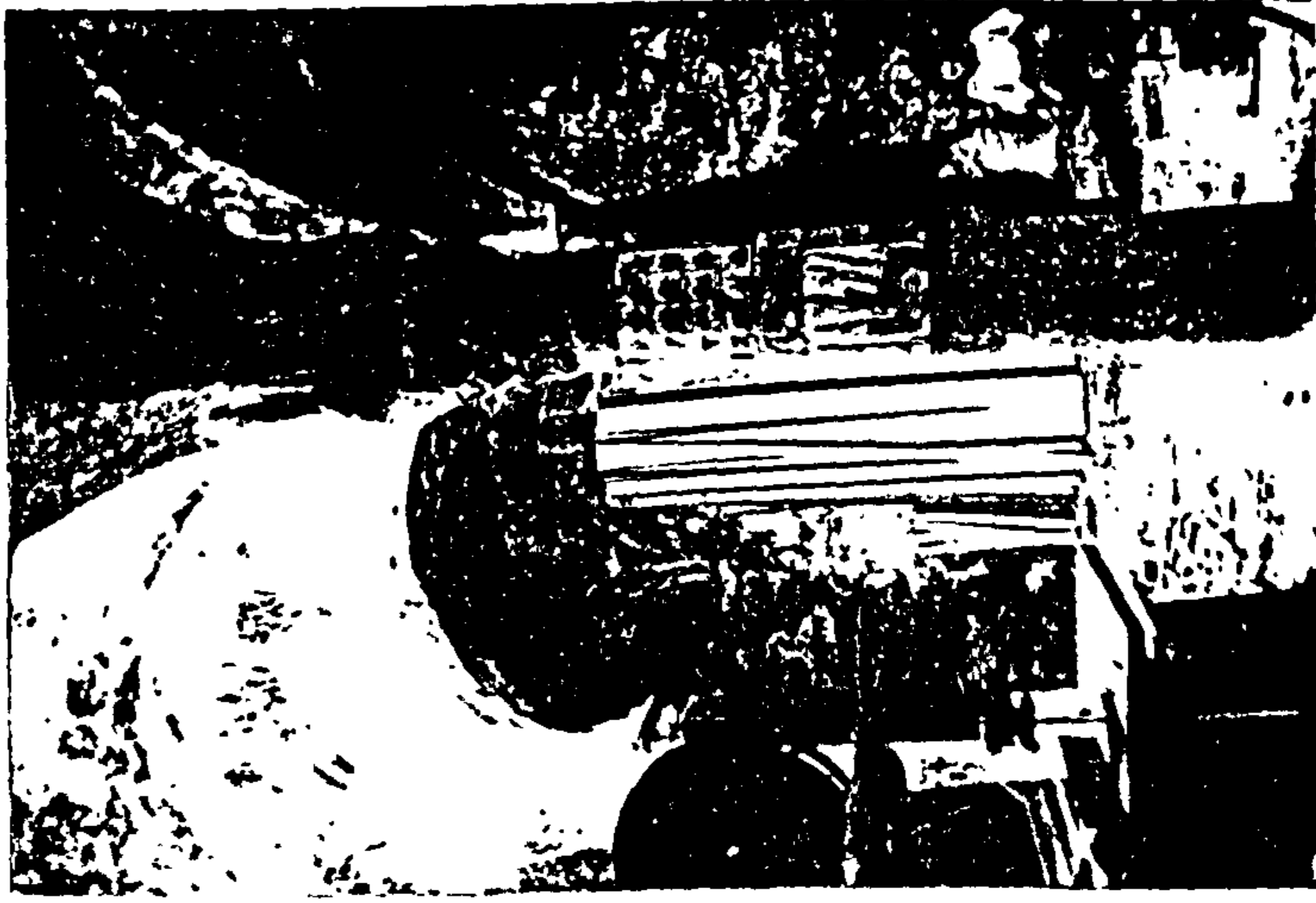
B. Deserted Family gathering (Diwan). Source: Courtesy of Dr Burgoyne, 1987.



C. Deserted Jamic Al-Masakin. Source: Courtesy of Dr Burgoyne, 1987.



D. Poor operated soap factory. Source: Courtesy of An-Najah University Archal Students, 1989.



E. Hammam Al-Baydrak, now a carpenter's workshop. Source: Courtesy of Dr Burgoyne, 1987.

Figure (5.4): Examples of un-efficient public buildings within the Old Town.

5.3. Problems of the Built Urban Fabric:

5.3.1. Street-scape:

5.3.1.1. Infrastructure:

As a result of the technological improvement, the electricity and the telephone and drinking water and drainage system wiring networks that spread all over the Old Town's streets caused a serious environmental problem by spoiling the traditional street-scape and which disturbs the historic character of the area, see figure (5.5).

5.3.1.2. Building appearance:

A. Afflicted and Gap sites:

Many of the 1346/1927 earthquake's damages to buildings were never repaired. Till this moment there was no serious effort to restore what had been damaged, few collapsed buildings remained without any treatment, see figure (5.6) plates (A) and (B); Some of them was insufficiently treated, as shown in plates (C), (D) and (E), but few were replaced by new buildings, as shown in plate (F).

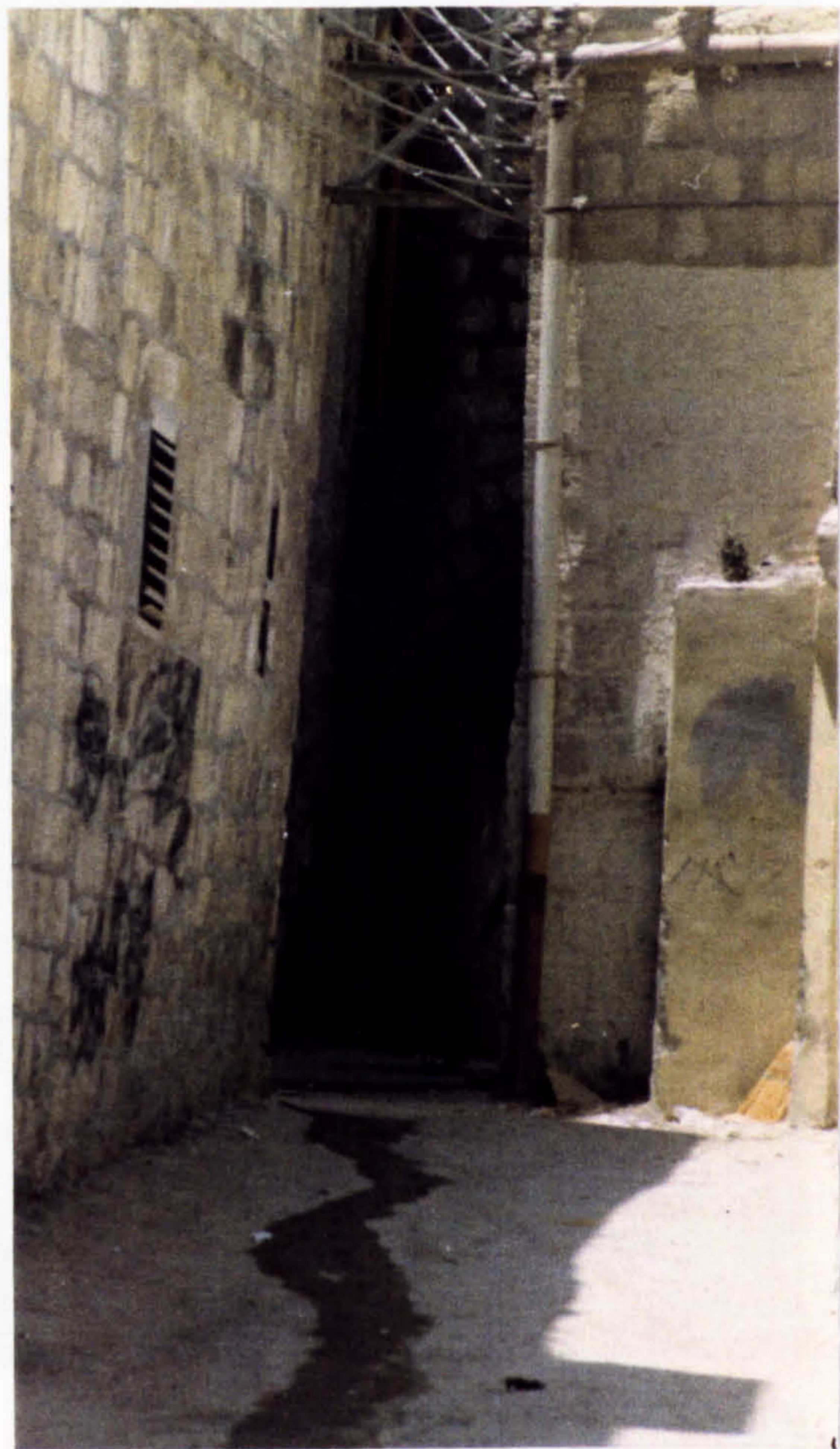
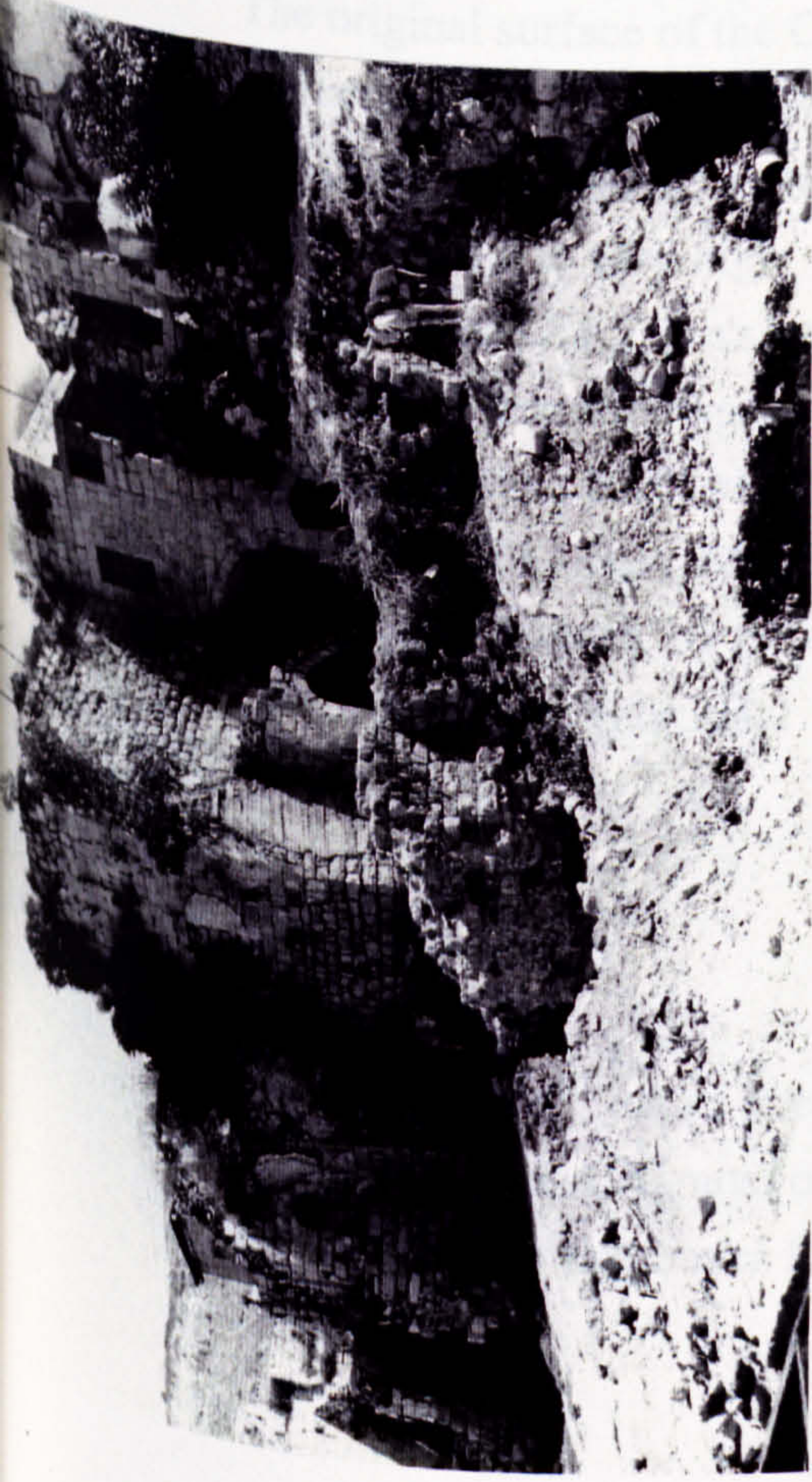


Figure (5.5): An example of the bad environmental effects of the infrastructure of the Old Town on its street-scape. Source: Courtesy of An-Najah University Arch.al Students, 1989.



A & B. Two examples of the 1927 earthquake collapsed buildings, remain in this situation without any attention. Source of A: (Burgoyne, 1987). Source of B: Courtesy of An-Najah University Arch.al Students, 1989.



C. Badly reinforced building within Haret Al-Qaryon. Source: Courtesy of An-Najah University Arch.al Students, 1989.



D

D & E. Poor quality additions within a collapsed traditional building also within Haret Al-Qaryon. Source: Courtesy of An-Najah University Arch.al Students, 1989.



E



F. A new building replaced A totally collapsed building within Haret Al-Habalah. Source: The author, 1989.

Figure (5.6): Examples of afflicted sites within the Old Town.

B. Openings:

I. Windows and Door problems:

1. Closure of all or parts of the window openings, figure (5.7) plate A.
2. Neglect of the traditional opening structures, figure (5.7) plate B.
3. Improper replacements of the deteriorated windows by Aluminium (figure (5.7) plate C) and by steel doors, which change completely the historic character.

II. Shop fronts:

1. Neglect of the traditional wooden or metal door structures.
2. Improper replacements of the deteriorated parts.
3. The usage of different types of shop canopies, with different heights and dimensions.

5.3.1.3. Street Furniture:

A. Street Surface:

The original surface of the Old Town's streets was flag stone, with rough texture, safe and suitable for walking on. But, nowadays, after long service of the flag stones they have become very smooth with a convex shape, which made them unsafe to walk on as the risk of sliding is very high. Because of these disadvantages, most of these traditional pavements of the Old Town's streets have been removed and replaced, mostly, by asphalt, as it is cheaper than the flagstones and more suitable for the motor vehicles. Most of the stepped streets have been converted into sloped slabs for the same reasons. In 1987, the Engineering Department of the Municipality replaced the old flagstone of the main bazaar; *Soq Al-Qumash*, by new ones, but with fixed dimension units (25*50) cm, which totally changed the traditional pattern and degrade the historic value of the place, see figure (5.8).

B. Street Lighting:

Most of the Old Town's streets used to have sufficient lighting units; see figure (5.9), but during the Intifadah, most of the electric lanterns had been destroyed by the residents to provide security and cover for the youth while proceeding with Intifadah actions.

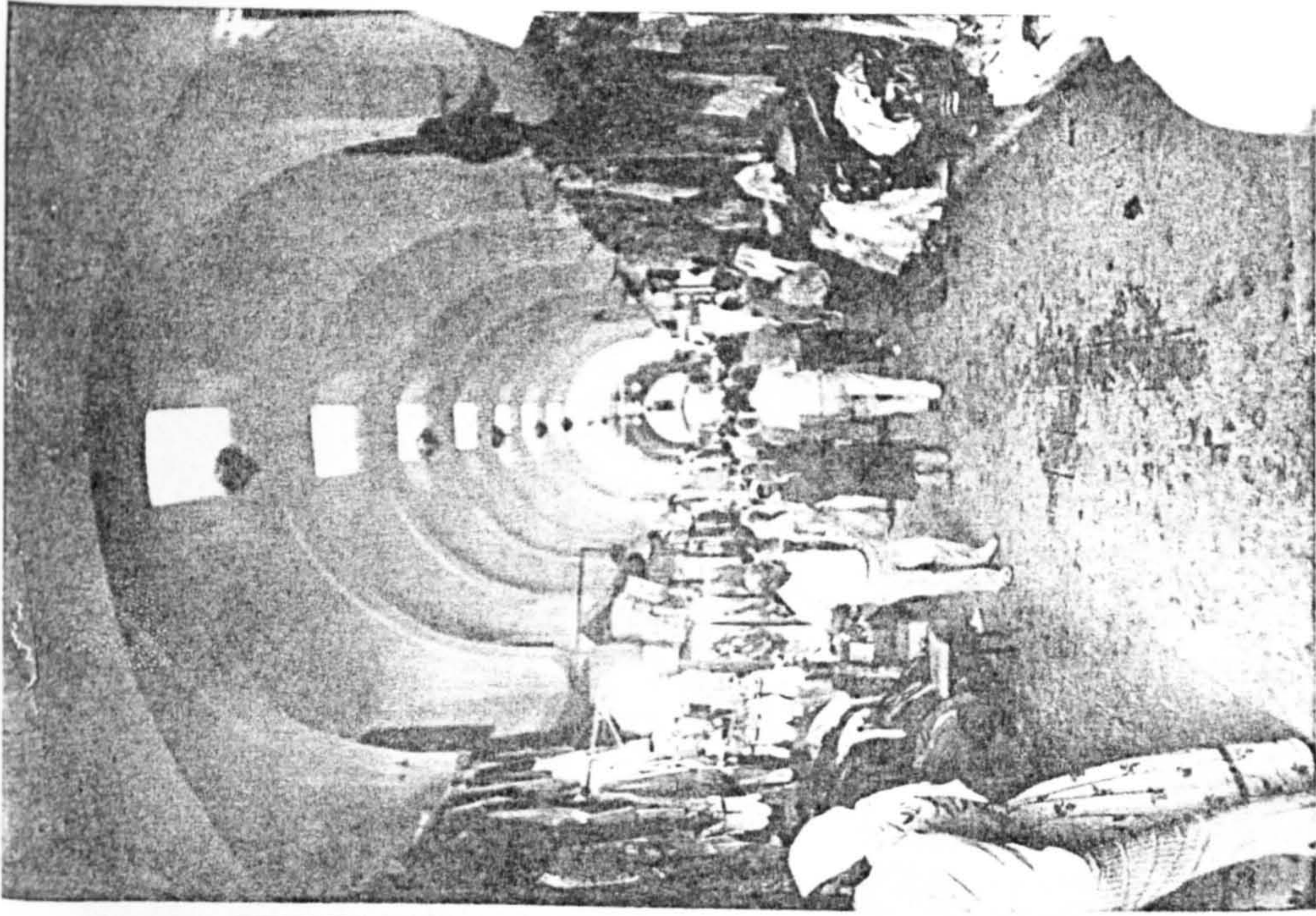


Figure (5.8): An example of unskilful restoration work of the traditional flagstone of the main bazaar; Soq Al-Qumash. Source: (Burgoyne, 1987).

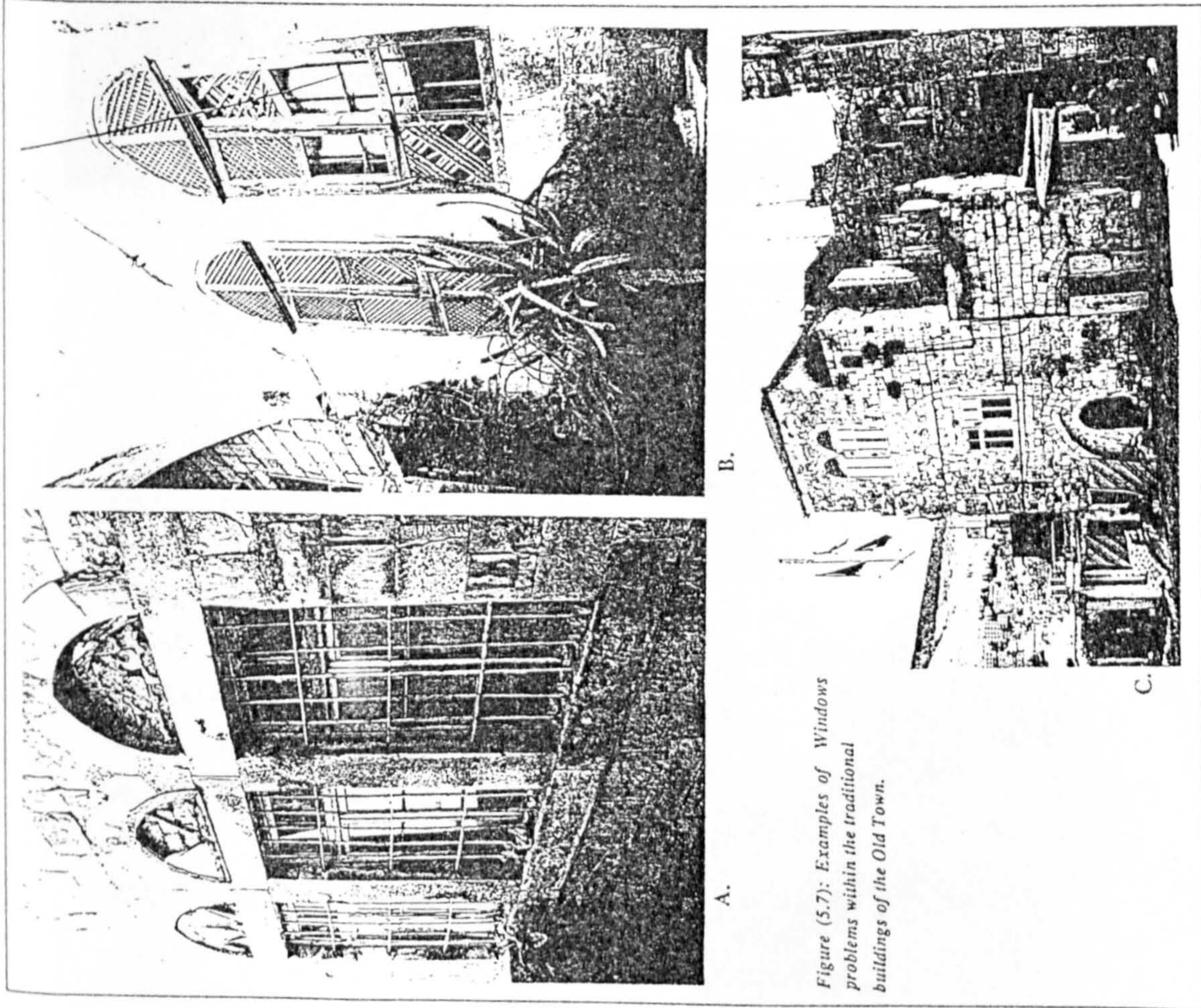


Figure (5.7): Examples of Windows problems within the traditional buildings of the Old Town.

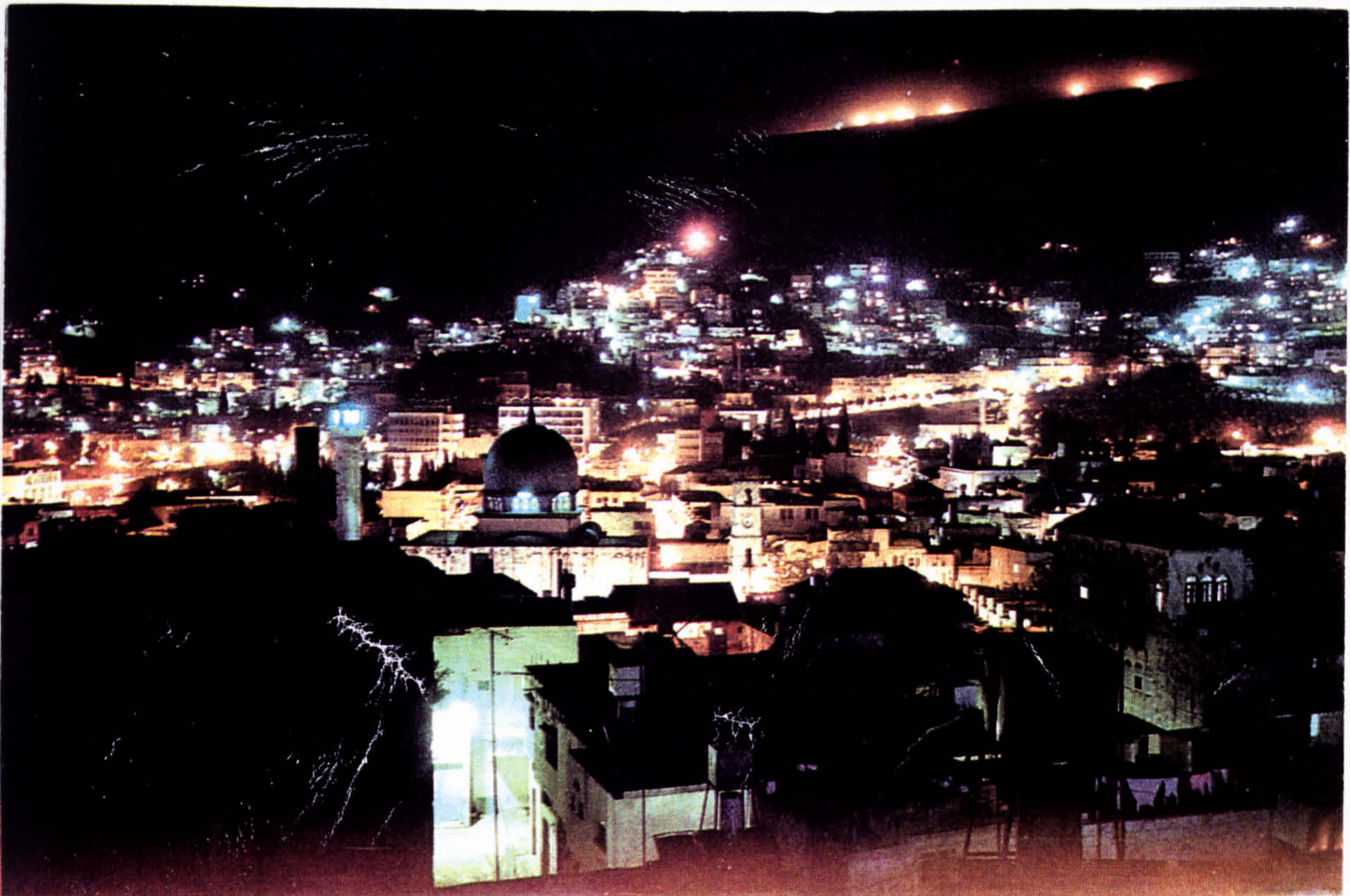


Figure (5.9): The effect of electric lights on the Old Town at night. Source: Nablus Municipality, 1986.

C. Drinking Fountains:

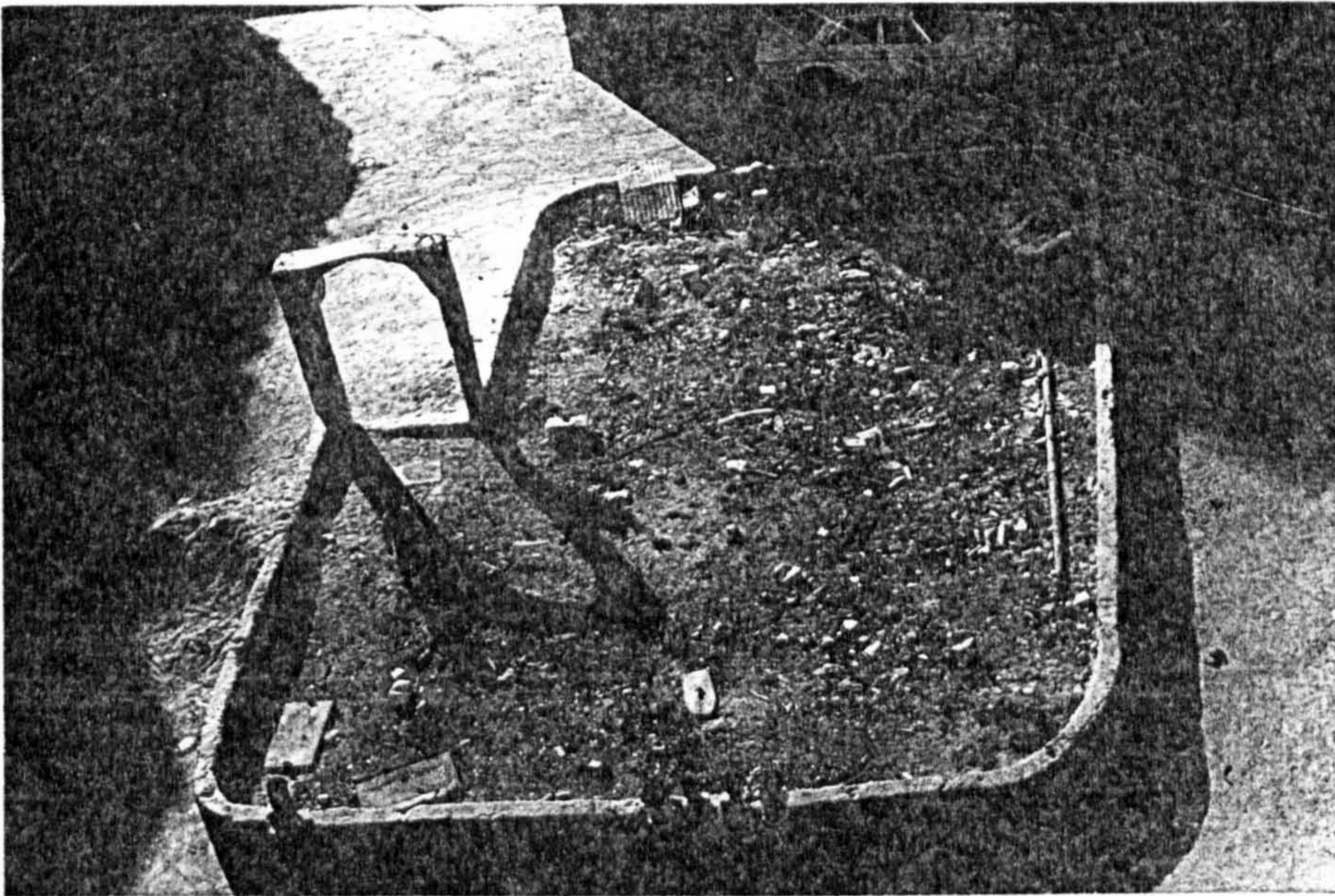
Most of the drinking fountains are in poor conditions. They, usually, have water but the hygienic conditions are poor; with no proper taps or drainage system. In 1987, the Engineering Department of the Municipality tried to restore some of these fountains, see figure (5.10). But the lack of conservation skills and experts, degrade their historic value by using new stone to cover the old ones. Also there was no proper solution to the drainage problem.



Figure (5.10): An example of unskilful restoration for 'Ain Al-Salahi. Source: Courtesy of Dr Burgoyne, 1987.

D. Public Gardens as Recreational Areas:

Originally, there are no outdoor recreational facilities or public gardens within the Old Town, as mentioned in chapter four, section 4.3.3.2. What exist now are the residents' efforts to beautify their neighbourhoods. Lack of continuous care and maintenance causes most of these areas to become ugly and full of garbage and dead plants, see figure (5.11).



*Figure (5.11): The garden of Sahet Al-Qaryon in a poor condition.
Source: Courtesy of An-Najah University Arch.al Students, 1989.*

5.3.2. Traffic Problems:

"The outstanding characteristic of the motor vehicle is its ability to provide a door-to-door service. It can in fact provide more than this - provided that buildings are appropriately designed, the motor vehicle can penetrate inside buildings to various floor levels, with the result (to give an example) that goods can be transported almost literally from the factory bench to sales counter. Similarly, a person can get into a car literally in his own house and get out inside his office building many miles a way, having passed the intervening journey in reasonable warmth, comfort and privacy" (Buchanan, 1968.b, pp.38-9).

This situation changed the peoples' view towards living in the Old Town, and encouraged many of them to move out, and this in turn lead to building desertion, neglect and continuous decay.

5.3.2.1. Environmental Capacity:

Traffic environmental capacity depends on three elements: (1) the transport method (the motor vehicles); (2) the medium; (the street); and (3) the traffic volume, which depends on the importance of the medium or the urban area. The efficiency of such a service depends on the street capacity to hold the required traffic. Traffic environmental capacity is limited to a certain number of vehicles, and which does not differ in principle from the dwelling's capacity for residents; there is some flexibility, but if more people are packed in than it can reasonably contain then it will be a slum.

The low environmental capacity of the Old Town's streets was resulted by two factors; (1) the small dimensions of most of the Old Town's streets; and (2) the presence of steps in some of them, as these historic streets were originally designed to suit the needs of the people and their transport method; horses, camels, donkeys and mules. The vehicular capacity of the Old Town's streets was decreased by two more factors:

1. The increased demand on the motor vehicle for its new advantage, which can provide in a very literal sense a door-to-door movement service for people and goods.
2. The simultaneous use of these streets by both pedestrians and the motor vehicles which causes long delays for both of them, especially within the two main streets of the Old Town which are the main commercial core and which are very crowded with pedestrians.

5.3.2.2. Vehicular Accessibility:

Servicing the Old Town's buildings occurred, mainly, from the main streets, and very few of them could be served from the rear. This matter increases the load on the two main streets that consequently decreases the service efficiency. The standards of Western countries mark out a maximum distance of 100 m. between the building's entrance and the last point where a proper vehicular access could be found (Schafnitzel, 1981).

The vehicular accessibility depends on the presence of vehicular streets, and the efficiency of the network they form. The existing vehicular street network within the Old Town, firstly, does not cover the whole area of the Old Town; second it is not efficient as vehicles using it are, usually trapped there because of the low environmental capacity, discussed in the previous section, see figure (4.46). Notice that the two main streets within the Old Town are the most suitable streets for both vehicular traffic and

pedestrians as they are wide enough, but not in all places.

Considering the existing network, it has been estimated that about 40% of the Old Towns' buildings have inadequate vehicular accessibility as they are located out of the accepted walking distance; 100 metres from the last point where vehicles could freely serve them, as shown in figure (5.12).

5.3.2.2. Parking Problem:

The concentrated fabric of the traditional buildings in the Old Town, made it difficult to find within enough parking spaces. Nowadays, most of the vehicles are being parked on streets, which will handicap the commercial life and degrade the historic value of the Old Town by spoiling its charming traditional character, see figure (5.13). Collapsed buildings areas are now being used for parking, which could partially solve the problem.

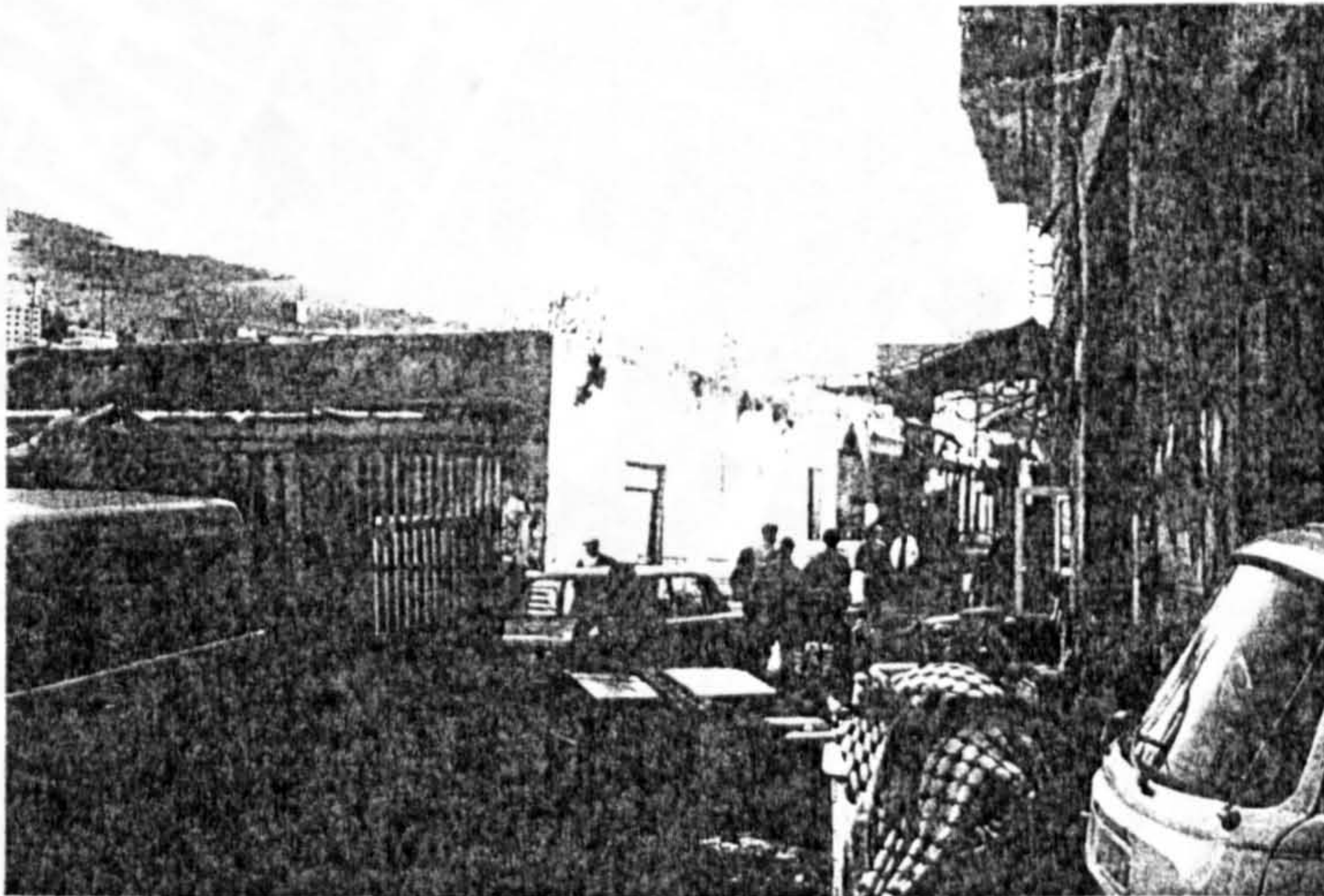


Figure (5.13): The visual intrusion of the parking vehicles within Shari'c Al-Nasr, one of the two main streets of the Old Town.

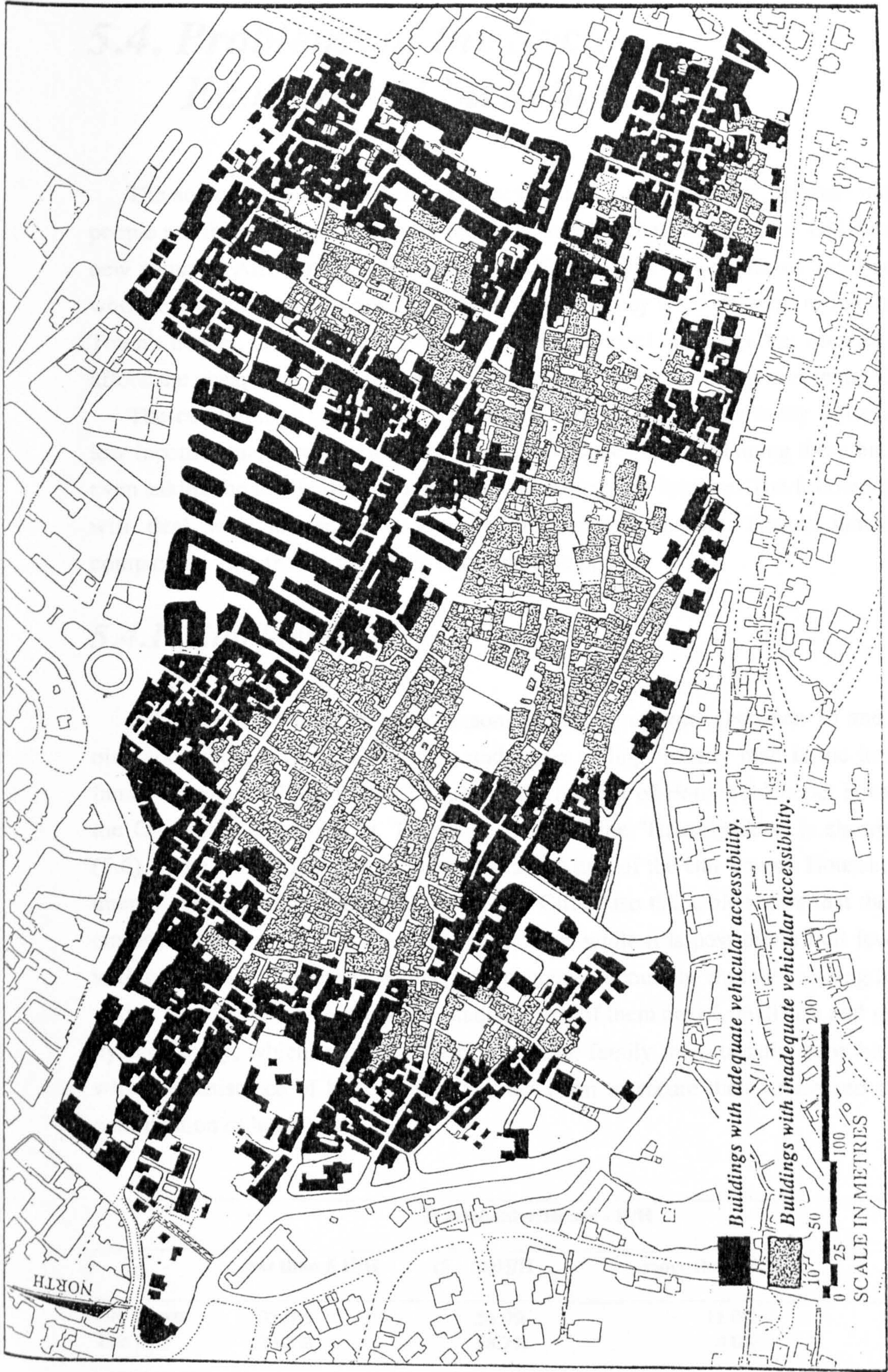


Figure (5.12): Vehicular Accessibility of the Old Town's Buildings.

5.4. Problems of the Socio-Economical Structure:

The socio-economical structure of the Old Town is unbalanced, because most of the people are from the low income as most of the rich people deserted the Old Town to the new suburbs. Also large percentages of the Old Town's inhabitants are rural emigrants, who were attracted to the town searching for jobs. They were attracted to live in the Old Town's houses, not because they admired the traditional buildings, but because they can afford the cheap rent of its old houses, in comparison to the other houses in the City.

The condition of the Old Town's historic buildings had been badly influenced. The low income tenants were not able to spend any money on maintaining these buildings or even asking the landlords for such repairs, avoiding rent increase. The following sections will deal with the socio-economical situation of the Old Town's inhabitants in comparison with that of the whole City's inhabitants.

5.4.1. Employment:

The "Householders" are those persons in the age of work (between 15 and 64 years old) and who are living and eating under one ceiling. Family man is the head of the family (Za^cnon, 1989). Table (5.5) shows the number of Householders per house in both the Old Town and the City. The work status of the "Householders" is shown in table (5.6). From this table it is concluded that about half of the Old Town's Householders are unemployed, while it is less than this in the City. Also this table shows that there are no employers among the Old Town's Householders while it is possible to find few of them within the City. The reason behind this phenomena could be that the existing businesses within Nablus need no external assistant as most of them are of small size and mostly run by the family, which is popular in Nablus. The family man, usually, runs his business with the assistance of his children, to train them to secure their future and assure the continuation of his job.

Householder/House - H/H			
	less than 5 H/H	(5 - 10)H/H	more than 10 H/H
Old Town	33.0%	56.0%	11.0%
The City	33.3%	58.7%	8.0%

Table (5.5). Source: basic data from (Za^cnon, 1989).

General Work Status of the TOTAL residents						
	Unemployed	Salaried	Self employed	Employer	Retired	Student
Old Town	49.3%	25.4%	13.6%	0.0%	0.3%	11.4%
The City	43.0%	24.2%	13.3%	2.7%	0.6%	16.2%

Table (5.6). Source: basic data from (Za^cnon, 1989).

Table (5.7) shows the work status of the family man. It is noted that trade - the Nablusian's traditional career - is still desirable among the family men in both the Old Town and the City, but the Old Town's figure (18%) is less than that of the City (26.7%). Industry is the second popular job among the family men. Agricultural situation is deteriorating and becoming worse with time. No one is working in agriculture in the Old Town, and just 2% in the City, for more detail on the City's economy, see chapter two.

Unemployment among the family men in the Old Town is (17%), which is higher than the City's figures (13%). It is noticed that (54%) of the family men in the Old Town are working in services, education, construction, while it is less (42.3%) in the City. This means that more than half of the family men in the Old Town do not have permanent jobs and a stable income, and they are under a continuous threat of becoming unemployed. Also this means that their income level depends on every day work, which under the present Intifadah situation becoming worse.

Work status of the "Family Man"					
	Unemployed	Agriculture.	Industry.	Trade	Others
Old Town	17.0%	0.0%	11.0%	18.0%	54.0%
The City	13.0%	2.0%	13.0%	26.7%	42.3%

Table (5.7). Source: basic data from (Za^cnon, 1989).

5.4.2. Income Level:

Table (5.8) shows the Householder monthly income, from which it is concluded that the maximum income in the Old Town did not exceed £500/month, while it could reach much more double of this amount in the City. The average income of the Old Town Householder is about £200/month, while about 90% of the average income of the City's Householder is £348.45/month. And 9.8% of the City's Householder earned at least £1000/month.

From this information it is concluded that most of the Old Town's population are

from the low income class. Because of this low income level the physical fabric of the historic buildings in the Old Town is suffering and its condition will be worse if the present socio-economical structure continues.

Householder Monthly Income in Sterling Pounds											
%	less than 99	100- 199	200- 299	300- 399	400- 499	500- 599	600- 699	700- 799	800- 899	900- 999	more than 1000
Old Town	6.0	51.0	32.0	8.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
The City	2.3	16.8	20.0	17.3	10.3	7.0	6.8	4.3	2.0	3.5	9.8

Table (5.8). Source: basic data from (Zanon, 1989).

5.4.3. Family Properties:

5.4.3.1. House Modern Accessories:

Table (5.9) shows the availability of the house modern accessories among the Old Town and the City families, from which it is concluded that in the case of necessary items - refrigerator and washing machines - there are no big difference among the Old Town and the City's families. But for the other luxurious accessories - coloured televisions, videos, and private cars - the difference is clearly noticed, as shown in the table.

In case of the private car, 7% of the Old Town families owned a private car, against 42% in the City. This very low figure in the Old Town could be resulted by the following main factors:

1. The traditional street pattern of the Old Town. Most of the streets are narrow, winding and un-derivable-able.
2. The fact that the Old Town is very close to the City centre, made it unnecessary to own a private car, unless it is needed for work.
3. The fact that the Old Town's inhabitants are of low income, which was previously dealt with.

Modern House Accessories							
Property	Private Car	b&w TV.	Coloured TV.	Video	Refrigerator	Washing Machine	Telephone
Old Town	7.0%	67.0%	28.0%	00.0%	98.0%	89.0%	15.0%
The City	42.0%	40.3%	57.7%	34.7%	99.1%	94.5%	45.4%

Table (5.9). Source: basic data from (Zanon, 1989).

5.4.3.2. House Ownership and Monthly Rent:

Table (5.10) shows house ownership status. From this table it is concluded that about 60% of the Old Town houses are rented, which might give an indication that more than half of the original inhabitants deserted the Old Town to the City new suburbs. From table (5.11) it is concluded that the average rent value in the Old Town is about £30.5/month, and its maximum value is less than £150/month, while in the City as a whole it is much more than £150/month. But the average rent is £61.6, which is more than double of the Old Town's rent value.

House Ownership		
	Owned	Rented
Old Town	41.0%	59.0%
The City	65.7%	34.3%

Table (5.10). Source: basic data from (Zanon, 1989).

Monthly Rent				
	less than £50	£50-99	£100-149	more than £149
Old Town	71.0%	27.0%	2.0%	0.0%
The City	46.0%	34.0%	19.7%	0.3%

Table (5.11). Source: basic data from (Zanon, 1989).

5.4.3.3. Financial Difficulties:

Table (5.12) shows the possible range of families that face financial difficulties in both the Old Town and the City. From this table it is concluded that about a quarter of the Old Town Families are in permanent financial difficulties, while it is just 8% of those in the City. On the other hand 29% of the Old Town families and 67.67% of the City's families never face a financial difficulty, which emphasises that the economical stability in the City is far more than it is in the Old Town, and this could mean that employment redundancy is more expected among the Old Town workers than it is in the City.

Family Financial Difficulties				
	Always	Sometimes	Special Occasions	Not at all
Old Town	24.0%	45.00%	2.00%	29.00%
The City	8.0%	23.67%	0.67%	67.67%

Table (5.12). Source: basic data from (Zanon, 1989).

5.5. Factors behind the Old Town's Deterioration:

5.5.1. Causes of Physical Decay:

The deterioration of the Old Town building materials is caused by two basic factors; natural causes of decay and man-made factors. The natural causes of decay are the environmental, botanical, biological, and earthquakes. Through understanding the mechanisms of decay and deterioration we can increase conservation skills for prolonging the life of cultural properties for future generations, but we must admit that decay is a law of Nature and we can only slow the process down (Feilden, 1982).

5.5.1.1. Natural causes of decay:

A. Climatic causes of decay:

Climate as the external environment of the buildings is one of the fundamental causes of their decay, through failure of their materials which in turn affects the structure. The resistance of building materials to climatic agents of decay decreases with their exposure and age. Even in temperate zones, solar radiation is found to be more destructive than frost. Water, in all its forms, is the agent that promotes chemical actions and gradual deterioration of building materials and actively damages building when heavy rainfall overflows gutters and rivers rise in flood. The active components of macro climate that affect a building particularly are radiation from the sun, seasonal temperature changes, rainfall, particularly storms which may cause flooding on a micro or macro scale, wind and the transportation of ground moisture (Feilden, 1982).

The Old Town climate, as described in chapter two, is moderate and its effects on the buildings increase because the people neglect their regular maintenance, as earlier mentioned. Lime stone, the most popular material in the historic buildings of the Old Town, after the long exposure to these climatic factors, became softer and weaker. The mortar is falling which influenced the building strength and stability. The roofs' water proofing is ineffective as most of its layers have been removed, too old and full of cracks because of the sun radiation and neglect. Because of this rainwater gone, in large quantities, through the defected roofs and structural cracks of the massive traditional structures and many historic buildings become unpleasant, even unhealthy.

B. Internal Environment:

"The internal environment of a building is a complicated interacting system, comprising the movement of air and water vapour, and the transfer of heat. Thus we have to deal with two main factors - relative humidity and temperature - and the ways in which a building modifies the external conditions to create an internal environment" (Feilden, 1982, p.169).

Because of the concentrated fabric of the Old Town and its special location on the northern foot of Mount Gerizim, the exposure period of most of its buildings to the sun is too short. These facts cause the rising in the dampness of such buildings. The high differences of the relative humidity and temperature between the external and the internal environment, could cause the failure of the structural joints of the internal works. So these elements will be shrunken, warped, cracked and the organic parts will be rotten and they will release bad smells which is a normal thing in the unventilated rooms, especially those in ground floors.

C. Earthquakes:

Although earthquakes are seldom in the area, but previous ones caused immense damages to both people and buildings. A major earthquake in 597/1201, which badly affected all the town's buildings, except those in the Samaritans' part, and about thirty thousands of its inhabitants was killed. In 1239/1823-4 and in 1246/1831 two small earthquakes occurred without any damages, but in 24th *Ramadan* 1252/1836 a big earthquake about 48 persons were killed, and *Haret Al-Habalah*. was the most affected part of the city. The last major earthquake was in 1346/1927. Nablus was badly affected, and about six hundred houses were demolished and about 50 persons were killed, and thousands of people became homeless (Nimir, 1975), see plates (A), (B) and (C) of figure (5.6).

D. Botanical causes of decay:

Soil is an essential building material of the Old Town's traditional buildings, as earlier mentioned. Neglect of maintenance of these buildings helps providing a fertile ground to grow creeping plant's life, see figure (5.14). These plants can cause structural damage if allowed to grow freely. They drive a bullet headed root into crumbling masonry and cause disintegration. The roots of trees and bushes can cause blockages and local ground dampness by finding their way into rainwater drains. In extreme cases,

when rainwater drains are broken by roots, the leaking water can cause sandy types of soil to wash away from below foundation (Feilden, 1982).



*Figure (5.14): Neglect effect on growing creeping plants within the historic buildings of the Old Town.
Source: Courtesy of Mr Tibawi, 1989.*

E. Insects and other pests as causes of decay:

Organic materials are all vulnerable to insect attacks, which cause a great amount of damage by weakening the timber structures. Some of the transitional and the modern buildings in both the Old Town and the City have pitched roofs, the timber of which is the most likely to be exposed to such attacks, beside the unprotected wooden parts of doors and windows, especially in the high dampness rooms in such buildings.

5.5.1.2. Man-made causes of decay:

A. Maintenance Neglect:

All Historic buildings should be maintained regularly, in order to control the natural causes of decay and minimise their influence. The influences of the socio-economical structure of the Old Town, which was dealt with in section 5.5 of this chapter - and the political situation of the country represented by the presence of the Israeli occupation,

both share the responsibility of the continuous neglect and bad maintenance, the bulk of the historic buildings are suffering from. Also they share with the attraction of the new city the responsibility of the high percentage of deserted buildings (about 40%) and about 40% of them are rented, mostly to the poor rural emigrants. For economic reasons some of the traditional buildings have been demolished by their owners in order to collect high rents from the new buildings. If this situation continues, the historic structures will severely deteriorate and the City could lose them.

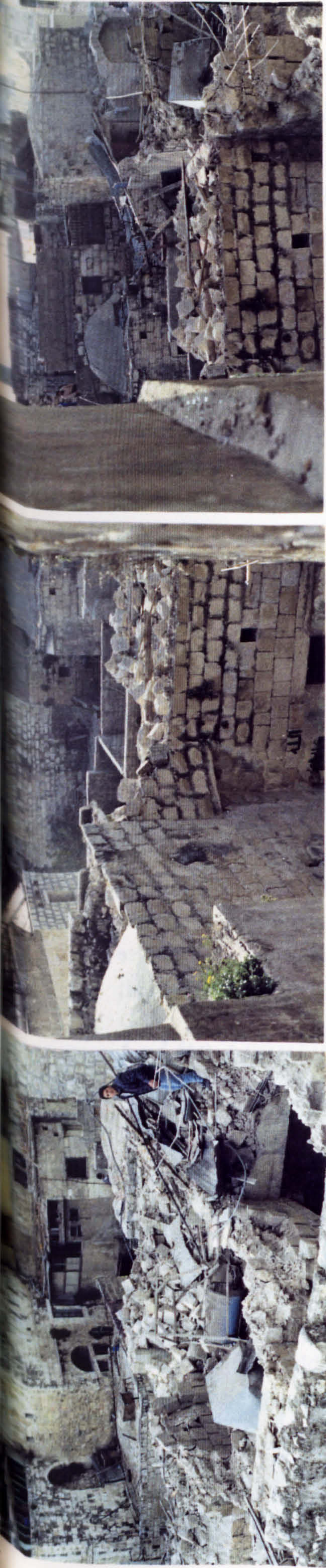
B. The Political Situation:

Many traditional buildings in the Old Town suffered from the intended destruction of the historic buildings for political reasons, mainly by foreign governors and occupations, the last of which is the Israeli occupation and before it the British occupation. The Israelis had demolished more than 1500 buildings between 1988 and 1989 in the West Bank (Ammar, 1991). In 1409/1989, they also demolished three historic houses within the Old Town, see figure (5.15) and (5.16), one of these buildings was a part of a very important building; Al-Bayk Palace. As a result of using high explosives, sixty one neighbouring houses were influenced, six of them were badly damaged which forced their occupiers to leave their buildings.



Figure (5.15): Smoke columns caused by the demolishing one of the three traditional buildings within the Old Town by using explosives in 1989.

Source: Al-Quds newspaper, 9/3/1989.

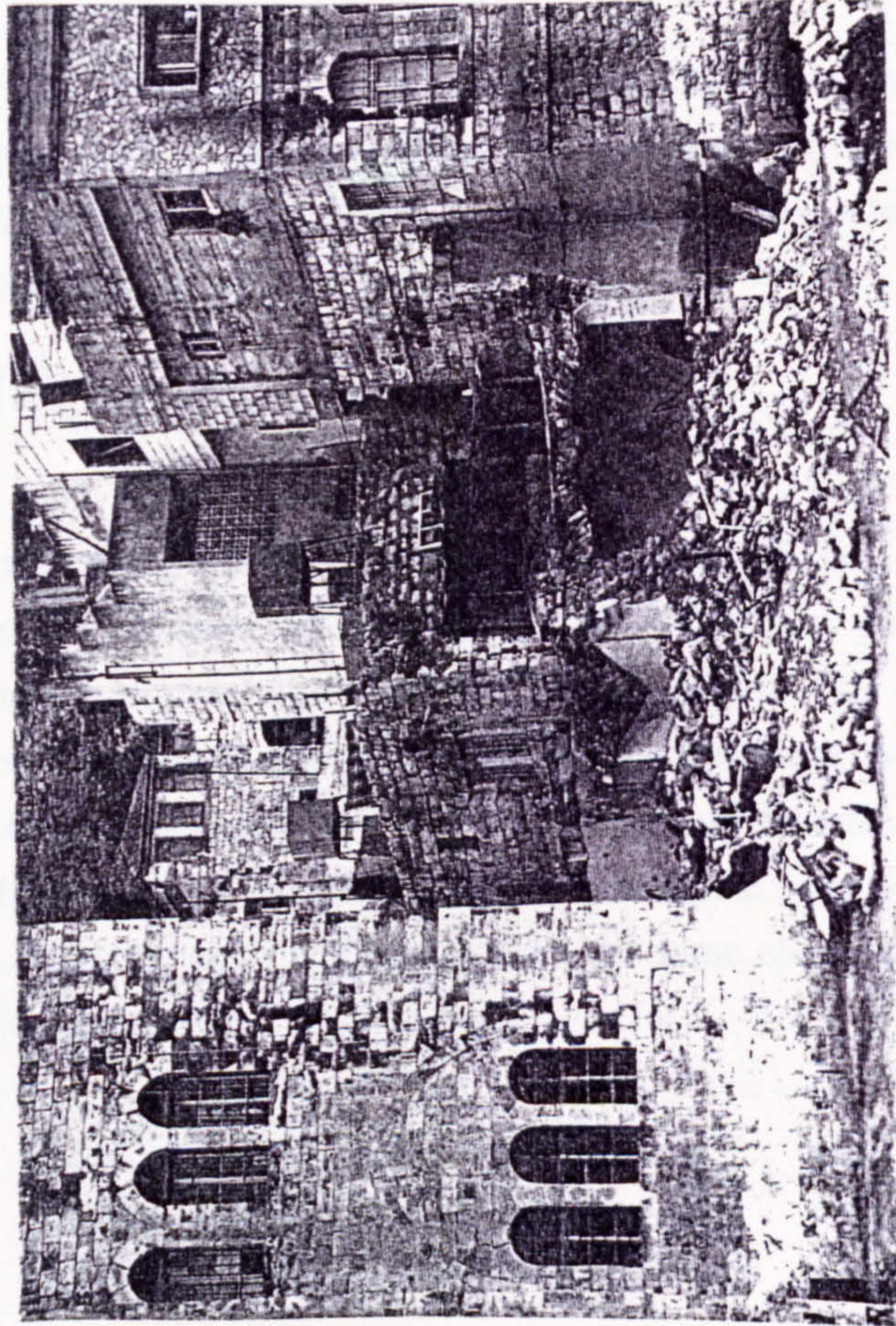


A

B

C

A, B & C: One of the three buildings demolished in 1989.



D. A demolished traditional building within Haret Al-Qaysariyyah. Source: Mr F. Yaq'ish, 1991, especially for this study.



E



F

E & F. The effect of using explosives on neighbouring buildings to demolish one housing unit among the highly concentrated built environments of the Old Town. Source: Courtesy of Mr Tibawi, 1989.

Figure (5.16): Politically demolished buildings within the Old Town.

5.5.2. Causes of the Social Changes:

5.5.2.1. The Difficult Living Conditions within the Old Town:

The Old Town's residents are living under very difficult conditions resulted from the physical fabric poor conditions and its unsuitability for today's standards and requirements as described earlier in the previous sections. Another and an important factor in making life in the Old Town even more difficult is the presence of the Israeli occupation. The nature of the Old Town as a defensive town made it a suitable place for the resistance activities against the occupation, especially during the popular Intifadah situation. All these factors beside the attraction of the new parts of the City and their new characteristics and advantages, which will be discussed in the coming section, made the Old Town's residents, especially the rich, to move out to the new City. While the poor left within the Old Town, are struggling to achieve daily food for their families.

5.6.2.2. The Attraction of the New City:

A. The New Houses:

The traditional houses of the Old Town are now facing new challenges from those new houses built within the new areas of the City. These new houses are of two building styles; the transitional and the modern styles. The main features and characteristics of these houses will be discussed in the following paragraphs.

I. The Transitional Style Houses:

This building style includes most of those buildings built between 1310s/1890s and 1387/1967. During this period the European influence increased in Palestine, particularly at the last days of the Ottoman Empire and during the British occupation. This influence had been reflected in the buildings, and the town expansion's buildings were built according to this style. The following paragraphs deal with the main features of these transitional houses (see building no. 9 of the case study as a complete example of this style within the Old Town - chapter eight - and which have the same characteristics of those buildings outside the Old Town).

1. Layout and Interior Arrangement:

- A.** The transitional house, usually consisted of a central hall and many specialised rooms gathered on both sides of the hall.
- B.** The traditional separation into *Al-Salamlek* and *Al-Haramlek* is relatively less than the traditional houses.
- C.** The main hall has a mixed usage, one half is used as the guest room, and the other as occasional dining room and the family living room. These two parts are separated by a glassed colonnaded partition. The guest part usually has its own entrance.
- D.** The rooms are still large as the extended family, to some extent, still has its power, and still the room is the nuclear family house, with shared facilities. Ceiling height average is about 4.5 metres.
- E.** This style is more economic than the traditional style as it required fewer quantities building materials, because its structural elements are relatively thin, which save more interior spaces than the traditional building style can offer on the same piece of land.

2. Structural Elements:

- A.** The traditional building materials are mostly the same as those of the traditional materials. Stone is still essential and used in the same traditional way. Concrete was the new structural element in this type. Steel was used in the reinforcement of concrete slabs, in two main forms: I-beams, placed under the concrete slab, and steel bars grids, placed in the lower section of the concrete slab. The dimensions and the cross-sections of the I-beams and the steel bars were varied according to the span and the loading capacity required.
- B.** New roof types were used, such as the flat roofs, built by concrete, and the tiled pitched roofs of the European style, see figure (5.17). The main problem of these pitched roofs was the scarcity of wood. Vaulted roofs were still in use, but in lighter dimensions.
- C.** The structural elements were lighter and smaller than those of the traditional buildings. This resulted from the use of reinforced concrete in most of the building parts; foundations, walls, ceilings and roofs.
- D.** Stone is used for both structural and aesthetically reasons. The central hall of the building, usually, has stone interior walls.
- E.** In later stages of this transitional style, the separate foundation system with columns was introduced, replacing the bearing wall system. Exterior walls were still built as bearing walls.

3. *External Environment:*

- A. Generally these houses are outwards looking, and they have large openings.
- B. Windows have vertical proportions with arches. The windows average width is 1.25 metres and 2.5 metres in height.
- C. There are no differences between ground floor windows or those of upper floors, and usually, they are guarded with strong metal screens.
- D. There are more decorations in these buildings than the traditional buildings, especially stone work in the building main facade and entrance.
- E. Usually, each transitional building has several housing units for independent families, mostly nuclear type.
- F. Each building located within a garden shared for all the occupiers. The garden is usually surrounded by a stone wall for both privacy and defence reasons.



Figure (5.17): Transitional style buildings within the Old Town, with both pitched and flat roofs. Source: Courtesy of An-Najah University Arch.al students, 1989.

II. *The Modern Style Houses:*

The modern style houses were, generally, those houses built after 1387/1967. The modern building style depends fully on the reinforced concrete as a structural element. Concrete played a great role in providing these houses with the flexible characters of their layout and interior arrangements. The following paragraphs deal with the main features of these modern houses, see figure (5.18).

1. *Layout and Interior Arrangement:*

- A. House size is more suitable for the nuclear families, and the housing units have many different interior arrangements encouraged by the use of the reinforced concrete.
- B. Ceilings height is lower than those previous two styles, which helps in reducing the construction and running costs of such houses. The average ceiling height of the houses of this style is three metres.

- C.** The middle class's buildings consisted from one to four storeys. Each storey has one or more flats, sharing one staircase. While the rich houses, generally, are villas with more luxurious layout and interiors. Normally, each floor is a housing unit, and the villa has a private garden and at least one garage.
- D.** The new building techniques provide the designers with more flexibility in fulfilling both his own creativity and the owners' ambitions.

2. Structural Elements:

- A.** Stone is used in these buildings, mainly, for aesthetically reasons. Stone could have many textures, as mentioned in chapter four, according to the owners desire and ability to pay, as the more rough the texture is the more expensive the stone will be.
- B.** Walls are thinner than those of the traditional and transitional styles, because of the new structural system used in these buildings. The exterior walls' thickness is about 30 cm including 5 cm stone courses in the outer sides, and a concrete inner side. The interior walls are about 10 - 23 cm as a result of using concrete blocks, which varied in thickness from 8 - 20 cm.
- C.** Ceilings are mostly flat reinforced concrete slabs, with average thickness of 30 cm. Although these flat roofs are more economical and save space, the older method is more artistic and durable.
- D.** Arched and vaulted openings were used, mostly, for decoration rather than structural elements.

3. External Environment:

- A.** Generally the buildings appearance of this style is similar to that of the transitional style, such as the outwards looking, and the large openings.
- B.** Many of these houses have private gardens, and some have private garages.
- C.** The openings of this style are similar to those of the transitional style, but, generally, here the windows have horizontal proportions. Arched openings are used in the rich buildings, mostly for aesthetic reasons, see figure (5.18).
- D.** Masses, become more important as architectural aesthetic elements rather than the expensive decoration elements used in both previous styles. Stone and concrete both used in the buildings' facades.

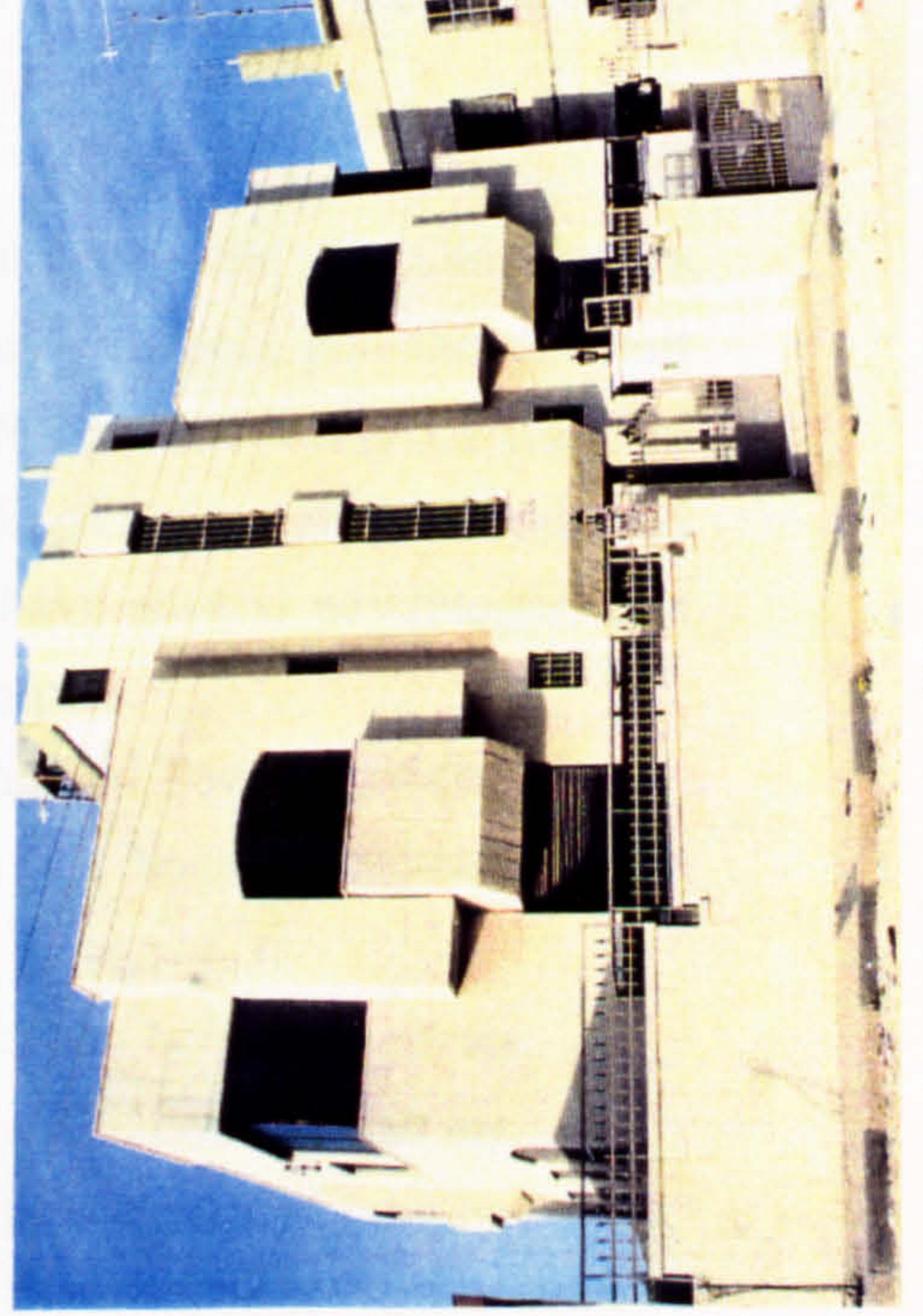


Figure (5.18): Modern Style buildings within the City.

B. The New Neighbourhood:

The Old Town is facing new challenges as its residents start comparing between its urban characters and those of the new suburbs. The new suburbs have several characteristics, which are not found within the Old Town, see figure (5.19), such as:

1. These suburbs have more landscape and public parks, beside the private gardens of each building.
2. The streets there are wider, so the motor vehicle has no difficulties in such areas.
3. The houses of these areas easily and quickly could have the emergency services.
4. The wider distances between the buildings reduce the spread of fire or any other danger among these buildings, especially in the industrial areas.
5. These areas have large pieces of land that any building size could be easily built, especially for the commercial and industrial uses.
6. The free use of the motor vehicles made the commercial and industrial business easier and more comfortable.

These characteristics of the new houses and neighbourhoods and the Old Town's problems caused by both the physical nature of its built environment and the difficult living conditions there, resulted from the Israeli occupation, made many of the Old Town's residents, mainly the rich, desert their historic buildings and neighbourhoods and move out to these new suburbs. Although these suburbs have several advantages, one should not forget that they also have disadvantages, for example:

1. They do not correspond to the climatic conditions that the Old Town provides.
2. They impose new social and cultural changes, which had been influenced by the Western life style. Dr Khatib (1985) wrote:

"This type of housing has moved relationships from being based on physical approximately to familial or occupational affiliations. Mates are scattered all over the City, so meetings are more occasional and take on semiformal atmosphere" (Khatib, 1985, p.50).

3. The nature of these areas made it very essential to use the motor vehicles, which made travelling between these areas the City Centre very expensive, especially for the low and middle class people.
4. The wide streets and longer distances increase traffic dangers, mainly accidents, noise and pollution by increasing both the number of cars and their speed within these open areas.



*Figure (5.19): A new neighbourhood within the new suburbs of the City.
Source: (Nablus Municipality, 1986).*

Part Three

*The Old Town's
Conservation and
Implementation
Programmes*

Chapter Six

*The Old Town's
Conservation Programme*

6.0. Introduction:

Because of the present situation the Old Town and the whole country are suffering from, mainly the difficulties caused by the political situation under the Israeli military occupation, discussed earlier in chapter five of this document, this proposed conservation programme for the Old Town of Nablus is considered as a programme of PERFECTION. Though this programme is prepared as an ideal study that will list the long term aims or what should be done for a complete conservation job to the Old Town in an ideal world. It does not concern itself with when is it to be done or even if it is possible.

6.1. Conservation Goals and Objectives:

1. Conserving the Physical Fabric:

- A. Classifying and Listing Work.
- B. Inspection and Recording the existing conditions.
- C. Maintenance Strategy.

2. Urban Development.

- A. Restoring the traditional street scape.
- C. Improving the infra Structure.
- D. Developing afflicted and gap sites.
- E. Restoring the traditional town edge.
- F. Planning Control.
- G. Control and Improve Traffic Services:
 - I. Controlling traffic within the Old Town.
 - II. Minimise traffic anti-environmental effects.

3. Rehabilitate Existing Buildings:

- A. Housing.
- B. Industry and Commerce.
- C. Education.
- D. Leisure, Recreation and Tourism.

6.2. General Conservation Policy:

The Old Town Conservation is to preserve and enhance the architectural and historic character of the Old Town, in order to maintain its life and assist in securing its economic buoyancy. It is not a question of preserving buildings for the sake of preservation. It is cherishing all the features, from buildings to atmosphere, which gives the historic Old Town its value, whilst ensuring at the same time that the town is to be reconciled with the twentieth century without actually demolishing it. The alternative of it becoming simply a dead museum piece is rejected as unsuitable.

"The way to preserve old customs, said Walter Bagehot, is to enjoy old customs. And to preserve old buildings is to make them a living, useful, enjoyable part of the cities in which we live" (Youngson, 1968. p.10).

The conservation policy should emphasise the combined development of cultural, social and economic structures of the Old Town. The importance of comprehensive planning for the revitalisation of the old quarters and their integration into the modern urban fabric cannot be over stressed. Mosques, bath-houses, cafe shops, fountains, etc. need to remain not only physically integrated into a site, but maintained in symbiotic relationship to each other and the population.

"Conservation is the careful management of a limited resource (such as historic areas, or buildings), in order to ensure efficiency and continuity of use. Conservation is seen as safeguarding the setting of important historic buildings, as well as improving the environment of whole urban areas. Thus, the policy of conservation cannot be separated from the policy of changing and redevelopment" (Antoniuo, 1982, p.235).

The conservation policy should not be isolated from the need for change in order to improve and preserve the town's physical structure as well as improving the users conditions inside the buildings, by developing a strategy for the relief of overcrowding, upgrading sanitary facilities and giving encouragement and advice to carry out repair and improvement works to make a building safe and fit to live in. New uses should be found for valuable and disused lands and buildings, and to make them economically viable. The main challenge that might face the rehabilitation programme of the Old Town's buildings is how to keep their new uses economically sound and occupied by people who can continue looking after them to keep them sympathetically maintained.

The conservation policy should overcome the traffic problem facing the Old Town. This stems from the fact that the existing street pattern cannot easily be adapted to

modern traffic requirements and so cannot be expected to be fully efficient. The conservation policy should emphasise the arrangement of existing streets to produce an appropriate layout that separates streets according to needs and activities, without the resultant enervation of the urban fabric that creates enormous gaps in the built-up areas of Western cities (Antoniou, 1981).

Also the conservation policy should not concentrate only on the built-up structures, but also on the people who are living there, in order to keep them in touch with their history by strengthening the bonds between them and the historic buildings and areas. A.J. Youngson (1968) said:

"I was surprised in New England a couple of years ago to find how many very attractive eighteen century wooden buildings remain, how well they are looked after, and how much the Americans know about them. Of course the classic case of restoration - not merely conservation - in Williamsburg, the capital of Virginia in colonial days, and there you have not only the buildings restored but the inhabitants restored as well, down to the shoe maker and the candle maker and the wig-maker" (Youngson, 1968. p.4).

6.3. Conserving the Physical Fabric:

6.3.1. Classifying and Listing:

Buildings within the conservation area; the Old Town, should be inspected individually in order to classify them according to their importance and value. The values assigned to cultural properties according to Feilden (1982) came under three major headings:

- 1. Emotional values: A. Wonder; B. Identity; C. Continuity; D. Spiritual and symbolic.**
- 2. Cultural values: A. Documentary; B. Historic; C. Archaeological, age and scarcity; D. Aesthetic and symbolic; E. Architectural; F. Townscape, landscape and ecological; G. Scientific.**
- 3. Use values: A. Functional; B. Economic; C. Social; D. Political.**

The Old Town is one of the important traditional and cultural centre in the area, thus it must be placed on the Unesco World Heritage List. The architectural quality of the Old Town lies in the excellence of the special and typical building masses and facades that

produce its urban townscape.

Since the value of the area arises from a subtle blend of purely architectural and human values, this means that its quality is very vulnerable to damage by ill-considered change, as well as natural catastrophes. Legislation, listing and scheduling of cultural property gives the framework and structure of conservation. Buildings of the highest importance should be listed. Listing of important buildings provides them with special protection from the planning authorities. Buildings within the conservation area, whether they are listed or not, should be protected by law and may not be demolished or altered unless the Conservation Committee consented. Trees also should be protected by law, and the written consent of the planning authority must be obtained before lopping, pruning, felling or uprooting any tree. The followed classifications of the "Listed Buildings" in Scotland are of three main categories*:

- Category A:** Buildings of National or more than local importance Architecturally or Historically.
- Category B:** Buildings of local importance or good examples of some periods or styles which may have been altered.
- Category C:** Buildings of any type or style which may have been considerably altered yet retain elements of interest.

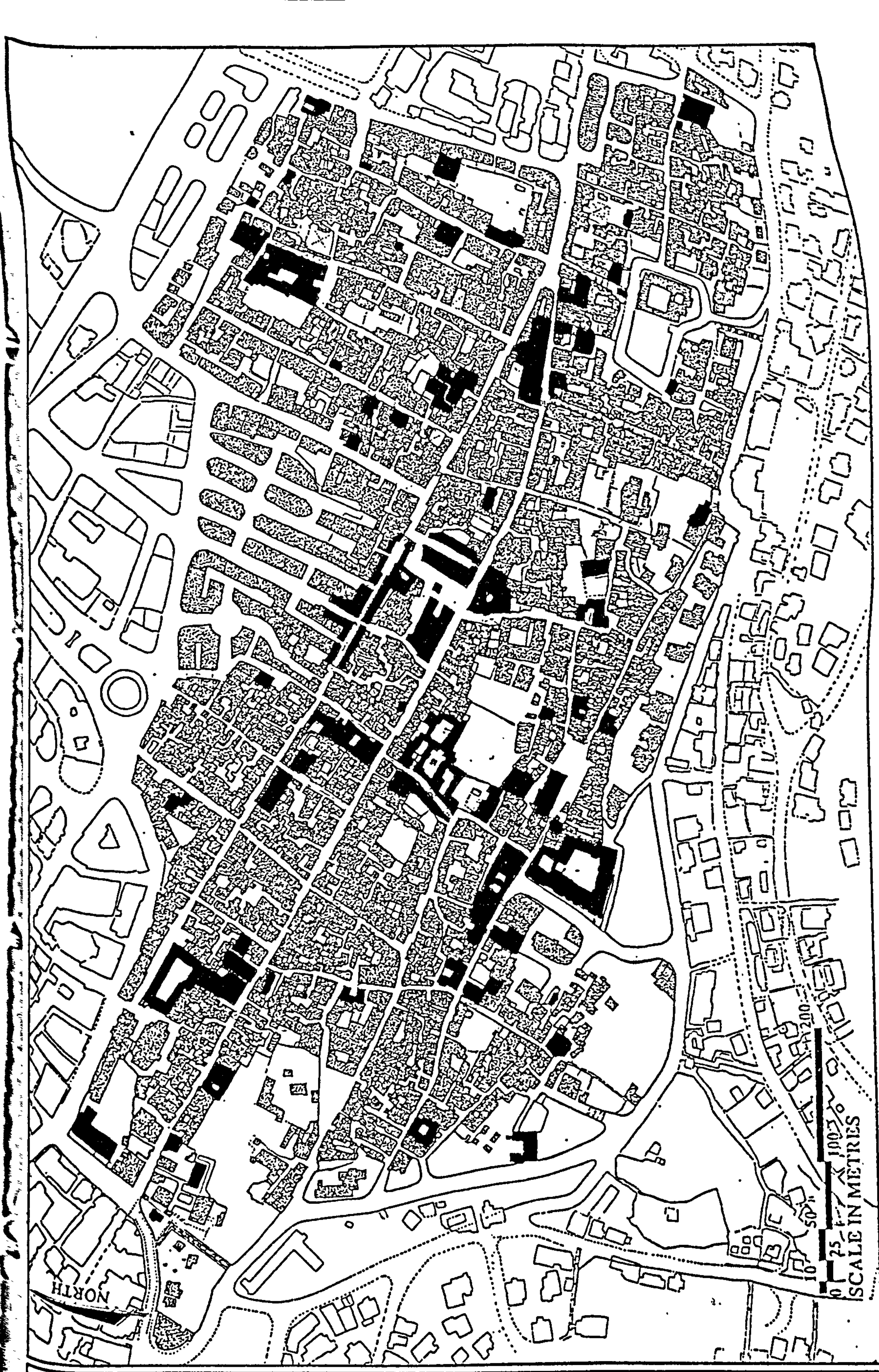
A similar system is required for the Old Town' building. Figure (6.1) shows a general survey of the Old Town's Buildings of the highest importance that should be listed. The conservation policy towards different cultural properties, both listed or non listed varies in accordance with their importance:

1. Buildings of high importance must be kept but can not be significantly changed.
2. Buildings of considerable importance should be kept and can not be significantly changed.
3. Buildings of some importance, whether they are kept or not depends on other factors such as location and condition.
4. Buildings of little or no importance, and the new buildings should accept any required change.

The following standard of ethics must be rigorously observed in any conservation works:

1. The condition of the building before any intervention and all methods and materials used during treatment must be fully documented.
2. Historic evidence must not be destroyed, falsified or covered.

*: According to Dr. Del Priore (1991).



■ Buildings to be listed.
 ■ Other buildings.

Figure (6.1): Buildings should be listed within the Old Town.

3. Any intervention must be the minimum necessary in order to keep the building identity and character.
4. Any intervention must be governed by un-swerving respect for the aesthetic, historical and physical integrity of cultural property.
5. Any proposed interventions should
 - a. be reversible, if technically possible; or
 - b. at least not prejudice a future intervention whenever this may become necessary;
 - c. not hinder the possibility of later access to all evidence incorporated in the object;
 - d. allow the maximum amount of existing material to be retained.
6. The utilisation of traditional skills and materials is of essential importance. Modern techniques could be used where the traditional methods are inadequate.
7. Complete recording is essential before, during and after intervention on any building using photographs.
8. The valid contribution of all periods to the building must be respected, since unity of style is not the aim of a restoration. When a building includes the super-imposed work of different periods, the revealing of the underlying state can only be justified in exceptional circumstances and when what is removed is of little interest and the material that is brought to light is of great historical, archaeological or aesthetic value, and its state of preservation good enough to justify the action (Venice Charter, 1964).
9. Archaeological ruins must be maintained and measures necessary for the permanent conservation and protection of architectural features and of objects discovered must be taken to facilitate the understanding of the monument and to reveal it without ever distorting its meaning (Venice Charter, 1964).

In any major conservation project, several degrees of intervention could be used, several of them may take place simultaneously in various parts of the whole, but they should be controlled and comply with the ethics standards above mentioned. The different intervention degrees that any building can face are:

1. Prevention of deterioration entails protecting cultural property by controlling its environment, thus preventing agents of decay and damage from becoming active. Neglect must also be prevented by sound maintenance procedures based on regular inspections. Maintenance, cleaning schedules, good house-keeping and proper management are the first steps in preventive maintenance and repair.
2. Preservation of the existing state. Necessary repairs must be carried out to prevent further decay.

3. Consolidation of the fabric, which may have to be carried out, if the structural elements are no longer sufficient to meet future hazards.
4. Restoration that is to revive the original concept or legibility of the historic buildings. Cleaning of the building is a form of restoration.
5. Rehabilitation of an historic building, which means adapting more economical uses for it.
6. Reconstruction of a historic building by using new materials, but must be based upon accurate documentation and evidence.

6.3.2. Inspecting and Recording:

The methodology of all conservation depends upon making an inspection and report at regular intervals on all items of the cultural property. Any historic building presents unique problems, which must be individually assessed. Study of the structure of a building must be considered at three levels:

First, the form of the whole structure;

Secondly, the structural elements, i.e. roofs and walls, foundations and the soil they rest upon; and

Thirdly, the materials of which the component parts are made.

The inspection architect must work in four dimensions: length, breadth, height and time, i.e. the history of the site, of any previous buildings and of how the present building came into being and has and will react to the forces of decay. A full report for every individual building may be worked up by stages, which are, according to Feilden (1982), as follows:

1. Initial report based upon visual inspection, listing all defects and describing and studying the building. Drawings, both freehand and mechanical and photographs should provide a clear and exact picture of the buildings. Photographs could be used for publicity purposes in raising funds for the preservation of cultural property. Photogrammetry is a just and accurate method for recording historic buildings and which could save time and money.
2. A maintenance plan. Approximate itemised estimates of immediate and necessary repairs and other desirable works in order of priority.
3. Historical research and analysis supported by photographic records.
4. Recording of the initial state of the building; soil mechanics, humidity studies and opening up suspect parts.
5. Further studies and structural analysis, which can help to assess the following:
 - A. The present structural safety.

- B. The effects of any observed defects.
 - C. The possible cause of the observed defects.
 - D. The remedial works necessary, if any.
6. Final estimates and proposals with specifications and full report for financial grant covering all the above factors, as they modify each other.

From the previous chapter (Chapter Five), it was noted that the general problems the Old Town's buildings are suffering from were caused by the leaking roofs. The main factors behind this leakage are neglect and bad maintenance of the roofs' water proofing. The deterioration in the roofs' water proofing is a very important element in protecting the underneath structure. The following methods could help preventing further destructive effects on the Old Town's historic buildings:

- A. Regular inspection of roof structures, especially the water proofing coat, water outlets, gutters and down pipes, particularly in winter.
- B. Further research and practical experiments should be done on actual examples from the Old Town's buildings, in order to find the most suitable material or mixture and the most efficient method that provides the most suitable solution for this problem.

6.3.3. Maintenance Strategy:

1. **Regularity:** All historic buildings should be inspected regularly at five-year intervals (Feilden, 1982). This policy will reduce the need for major repairs or renewal projects. As neglect of routine maintenance leading to the structural deterioration, such as leaking roofs, blocked gutters and outlets, broken down pipes that will allow rain penetration.
2. **Continuity:** It is essential to place historic buildings under continuous care in order to stop building neglect, especially the vacant ones.
3. **Preventive Maintenance:** The Old Town's Historic buildings should be protected against natural disasters and nuisances such as earthquakes and botanical nuisances, not only to safeguard the heritage, but also for the security and well being of the local people (Washington Charter, 1974).

The resistance of historic buildings to earthquakes depends upon the form of the structure, the strength and workmanship of its construction, material and dynamic performance. Simple and symmetrical forms are best, not too elongated and with

uniform and continuous distribution of strength. The collapse of buildings is the primary cause of loss of life, so preventive measures to strengthen historic buildings will also save life and limb. The most profitable field of study is in analysis of the case histories of earthquake damage to the typical types of historic buildings in the Old Town. The principles of protection should be to restore and improve the buildings' capacity to resist an earthquake and enabling them to absorb seismic energy without dangerous damages occurring. The strengthening can be carried out economically as part of the maintenance strategy for each building. The Old Town's historic buildings should be identified and fully documented before a possible earthquake, using photogrammetric techniques if available. Much damage can be prevented by:

- A. Prior inspection and simple strengthening of weak points in the construction of historic buildings.
- B. Restoring the mortar bed by re-pointing grouting and replacement of defective mortar are the practical remedies for strengthening the structure.
- C. Weight at the top of buildings should be reduced, especially the water tanks.

Creeping plants should be cut and killed and then left several weeks until it has lost its adhesive strength, as its tendrils can, when forcibly removed, pull off a weak surface of stone or plaster. Treat the plant stem with a strong weed-killer so as to poison the roots and prevent its sprouting again, then dry the structure and restore the stone mortar could prevent the plants growing.

6.4. Urban Development.

6.4.1. Restoring the Traditional street scape.

6.4.1.1. Street pattern:

The conservation policy which followed here is that original street pattern should be preserved totally. As the street pattern is a result of the charming variation of street width and building height, both these two factors should be also preserved. This could be achieved by:

- A. Controlling street width and not allowing any variation from the original pattern, unless for over riding reasons, especially when developing gap sites.

- B. Reducing the anti-environmental elements:**
 - I.** Any new electricity or telephone wiring networks that are required should be placed within underground ducts. The existing networks should be kept as they represent a historic evidence on the originality of the first networks used in the place, unless they cause any obstruction or blocking access to other services.
 - II.** Drinking water pipes should all be removed from streets and be placed underground. Domestic pipes should be installed within the building interiors, if not on the rear facades if possible.
 - III.** Domestic drainage pipes on building's frontages that have no alternative location could be retained in their position, but they should be maintained regularly so as not to help in deteriorating the traditional stone structures.
- C. Rebuilding gap sites where collapsed buildings existed:**
 - I.** The proposed building or structure should comply with traditional building pattern and should be controlled by the planning control section (6.4.5).
 - II.** Any surviving structure which might be found within the site should be kept and enclosed as an obvious remain of the original building and not a new part of the new construction.

6.4.1.2. Street furniture:

As earlier mentioned in chapter four, section 4.3.3.3.F, the Old Town streets and squares, generally were without any furniture except the few drinking water fountains. So any proposed street furniture should be designed in a way that indicated that these elements are new but which should respect the surrounding objects and building materials. Their location and orientation should be selected so as not to degrade the amenity of surrounding buildings or obstructing pedestrian traffic. The conservation policy of the street furniture elements, both old or new is:

- A.** Provide seating facilities - new element - within public gardens and squares as shown in figure (6.2).
- B.** Provide refuse containers - new element - within the public open spaces, see figure (6.3).

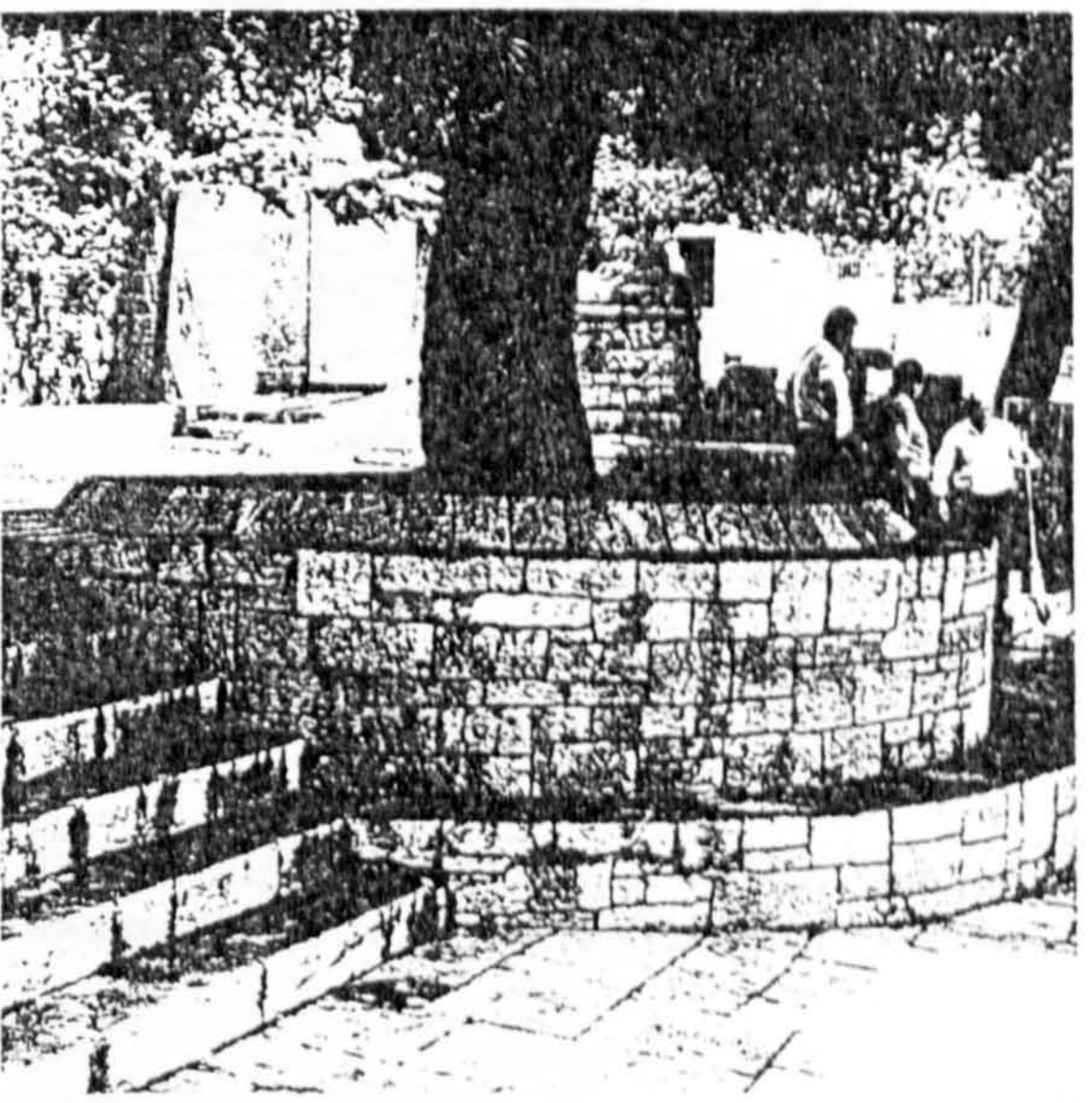
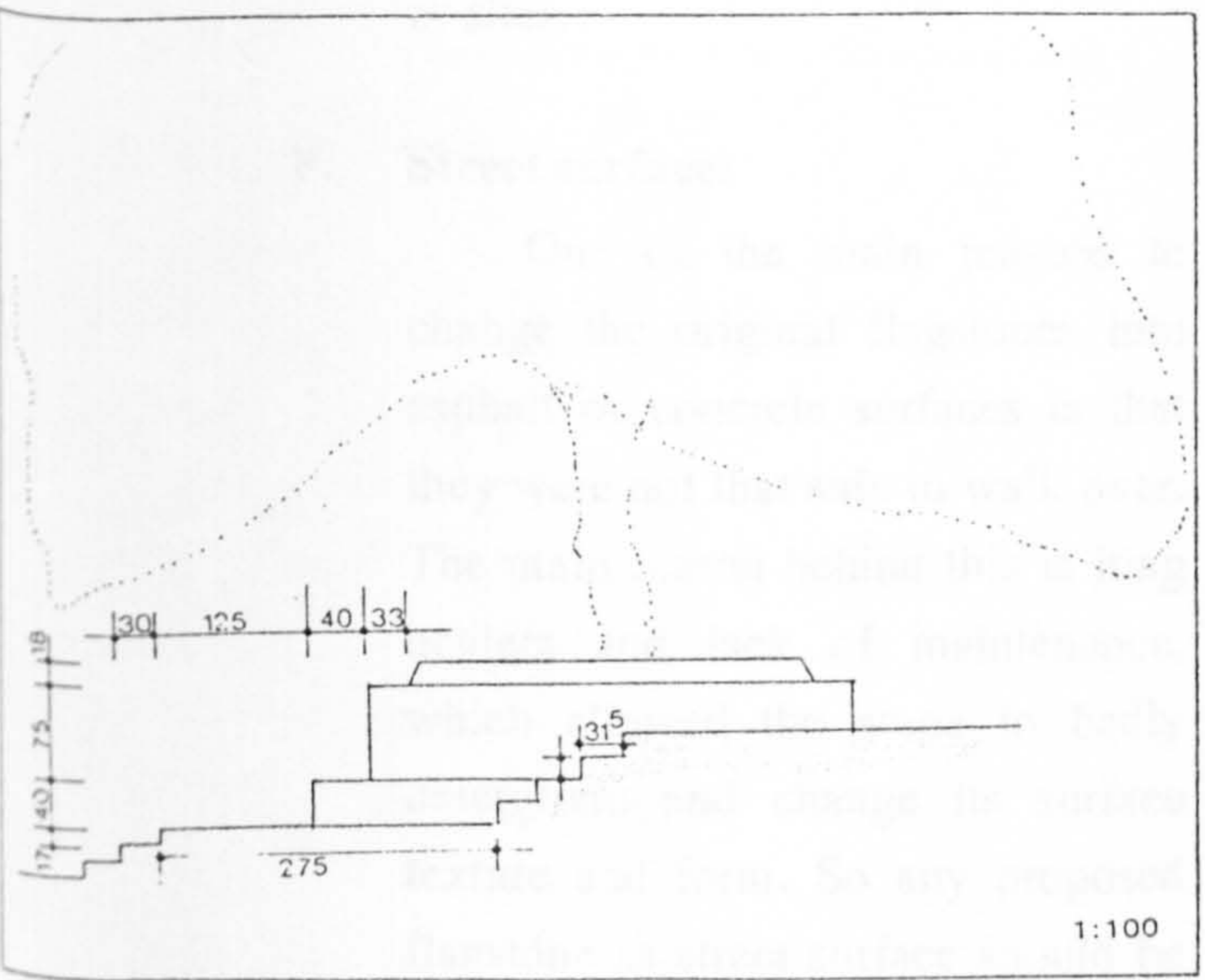
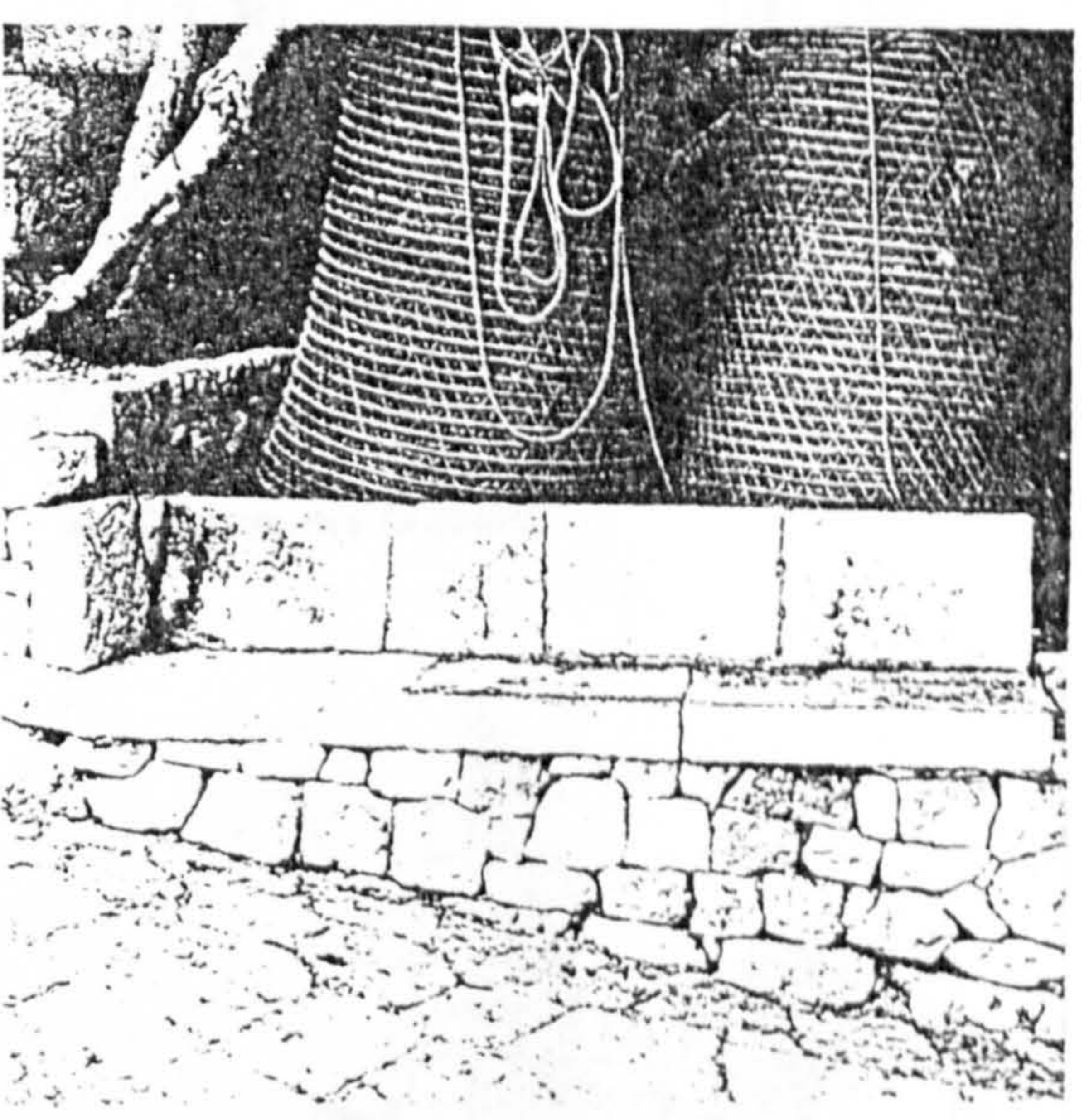
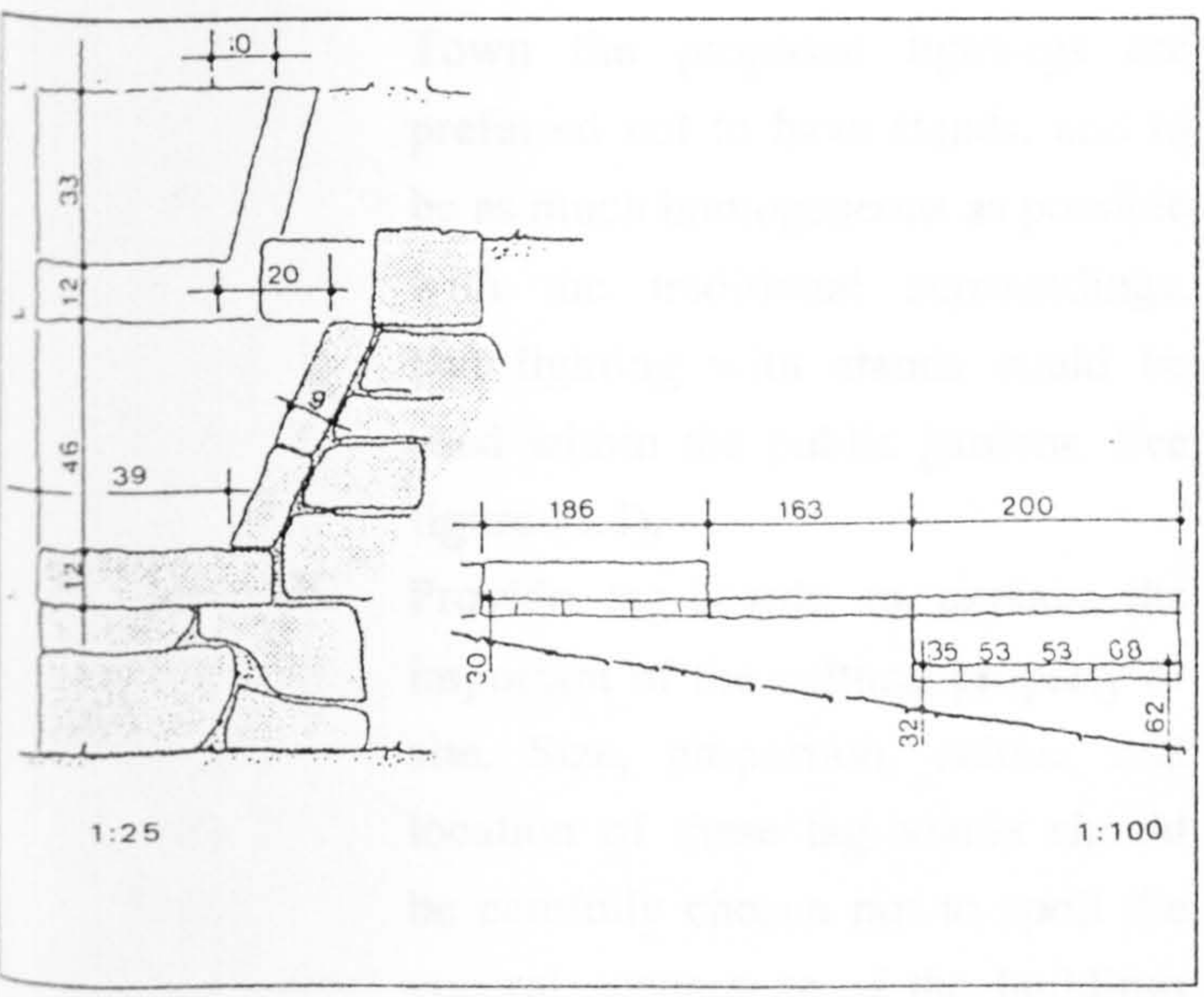
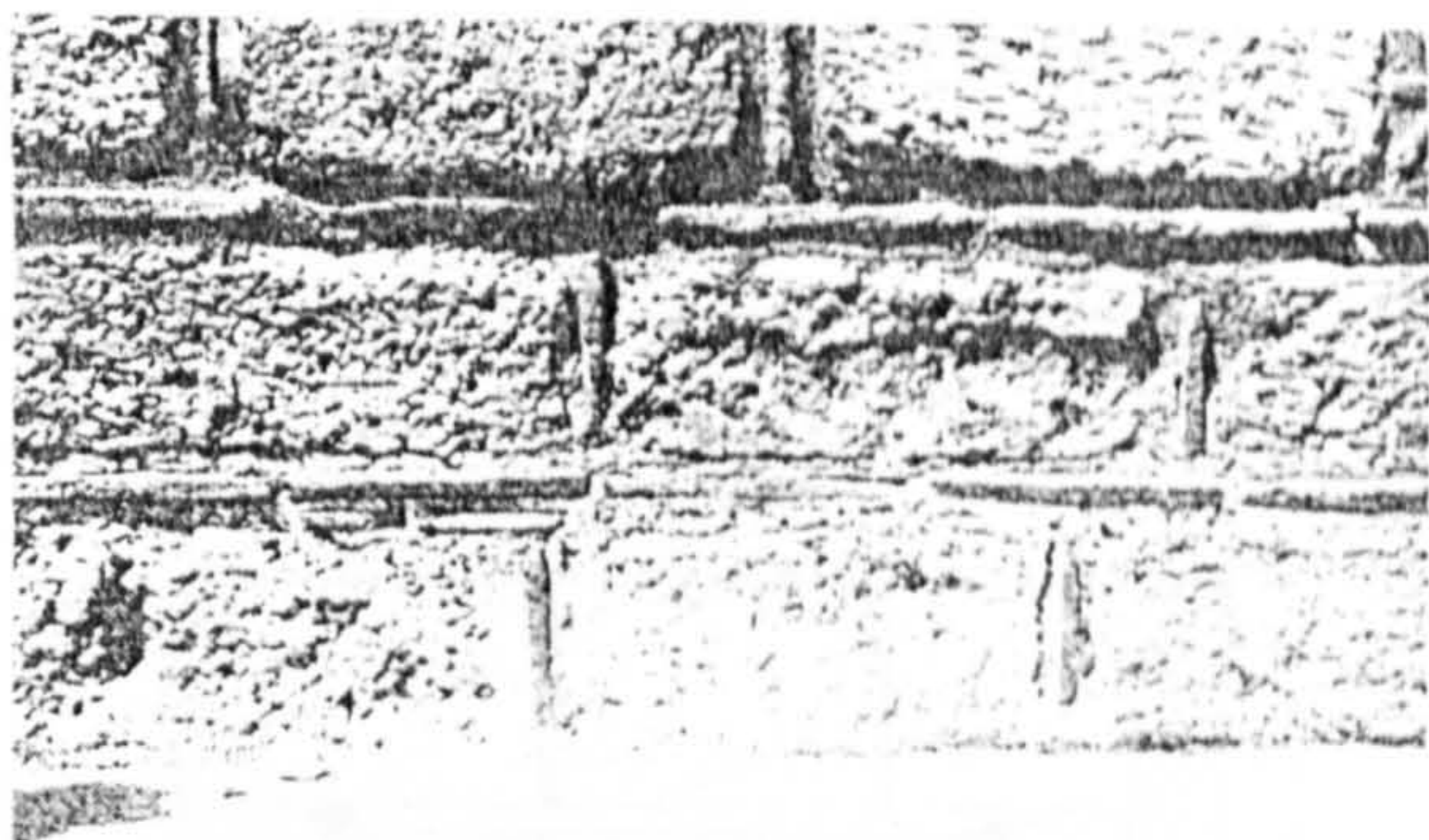
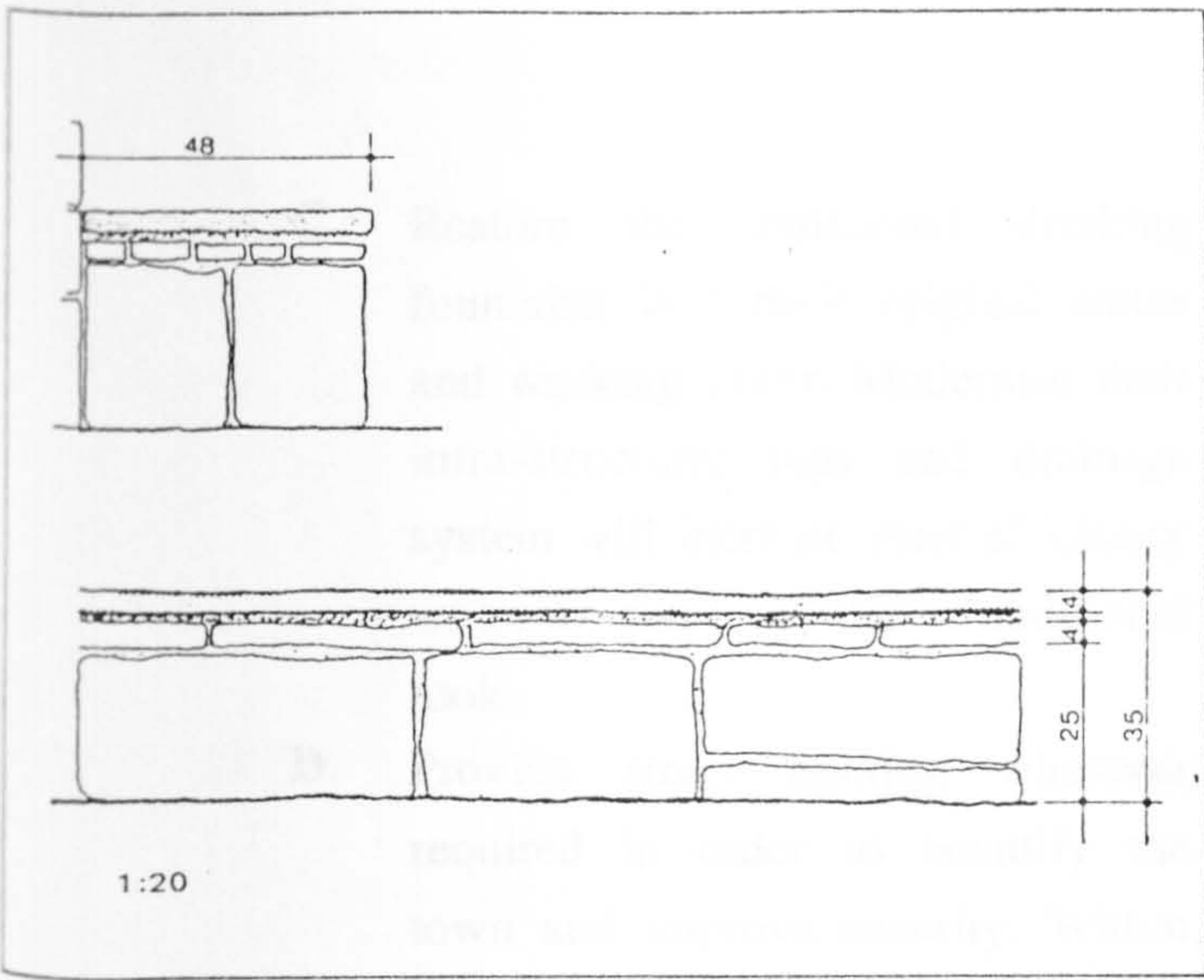
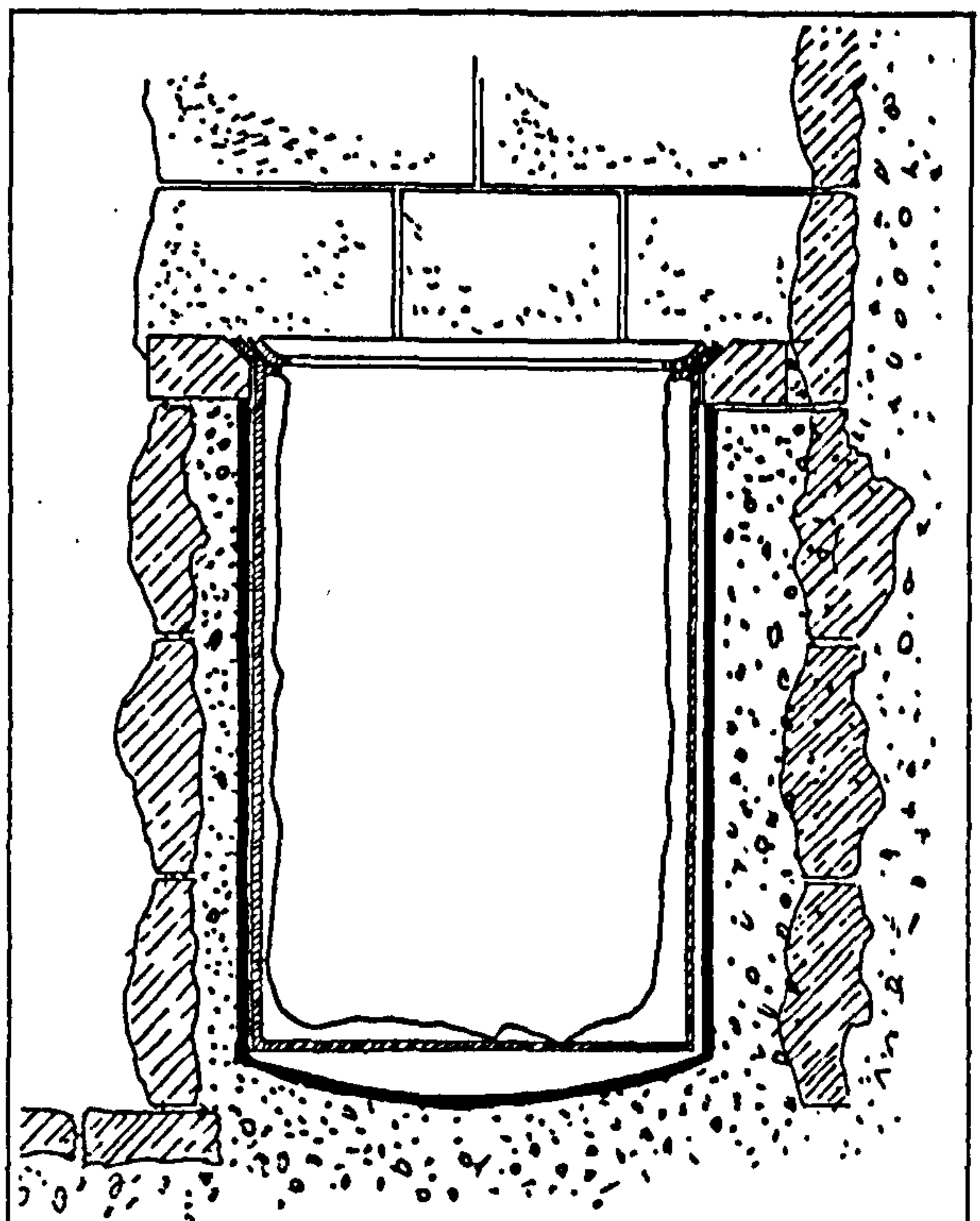


Figure (6.2): Exmples of seating facilities could be used within the Old Town's public open spaces.
Source:(Boeminghaus, 1977).

- C. Restore the traditional drinking fountains into their original status and working order. Modernise their infra-structure; taps and drainage system will increase their efficiency without spoiling their traditional look.
- D. Provide street lighting wherever required in order to beautify the town and improve security. Within narrow streets and lanes of the Old Town the proposed lightings are preferred not to have stands, and to be as much homogeneous as possible with the traditional surroundings. But lighting with stands could be used within the public gardens. See figure (6.4).
- E. Provide tag-boards to explain the important of the cultural property or site. Size, proportion, colour, and location of these tag-boards should be carefully chosen not to spoil the general appearance of the buildings or sites.

F. Street surface:

One of the main reasons to change the original flagstones into asphalt or concrete surfaces is that they were not that safe to walk over. The main reason behind this is long neglect and lack of maintenance, which allowed the stone to badly deteriorate and change its surface texture and form. So any proposed flagstone as street surface should be regularly maintained:

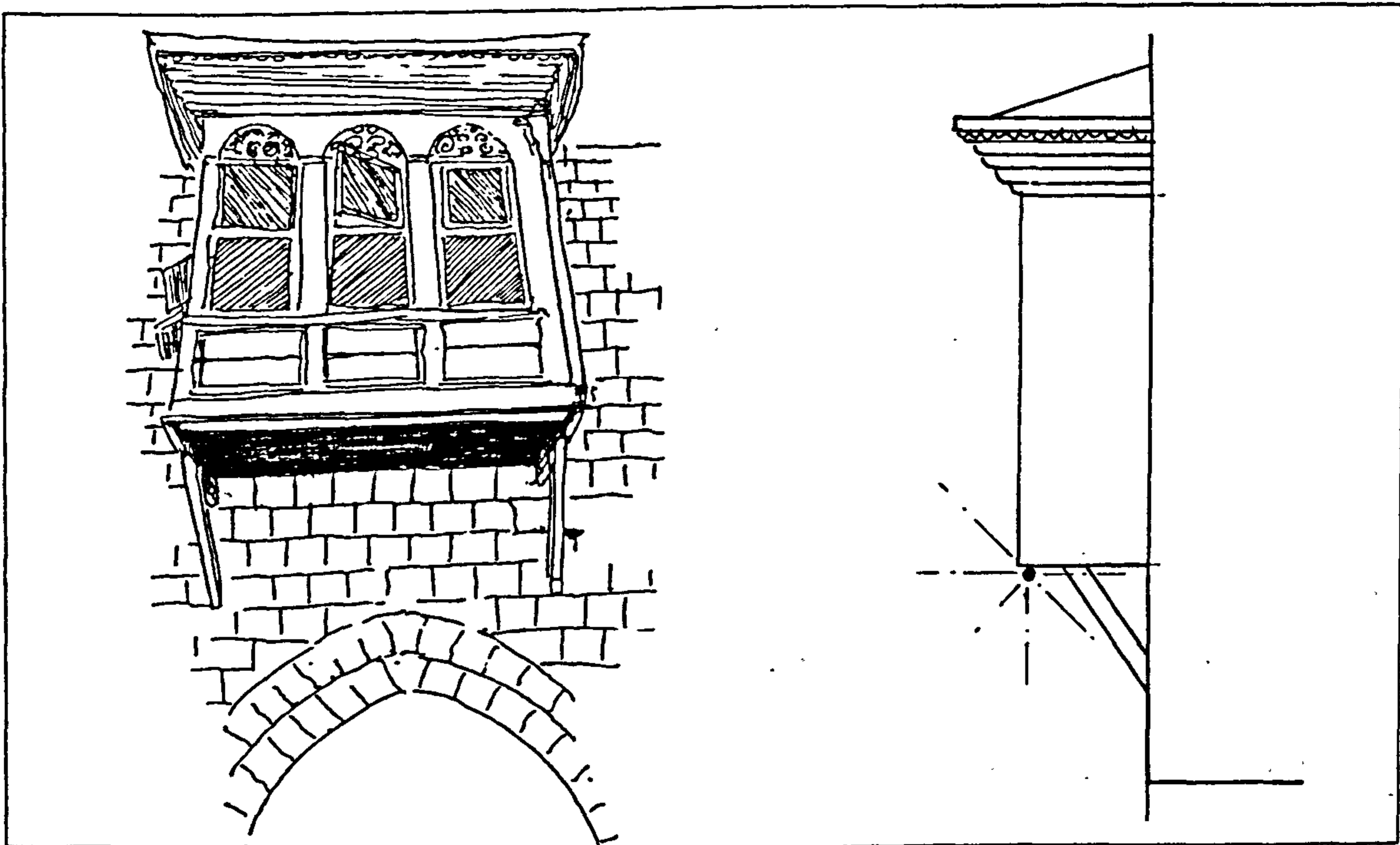


A. Section, not to scale.

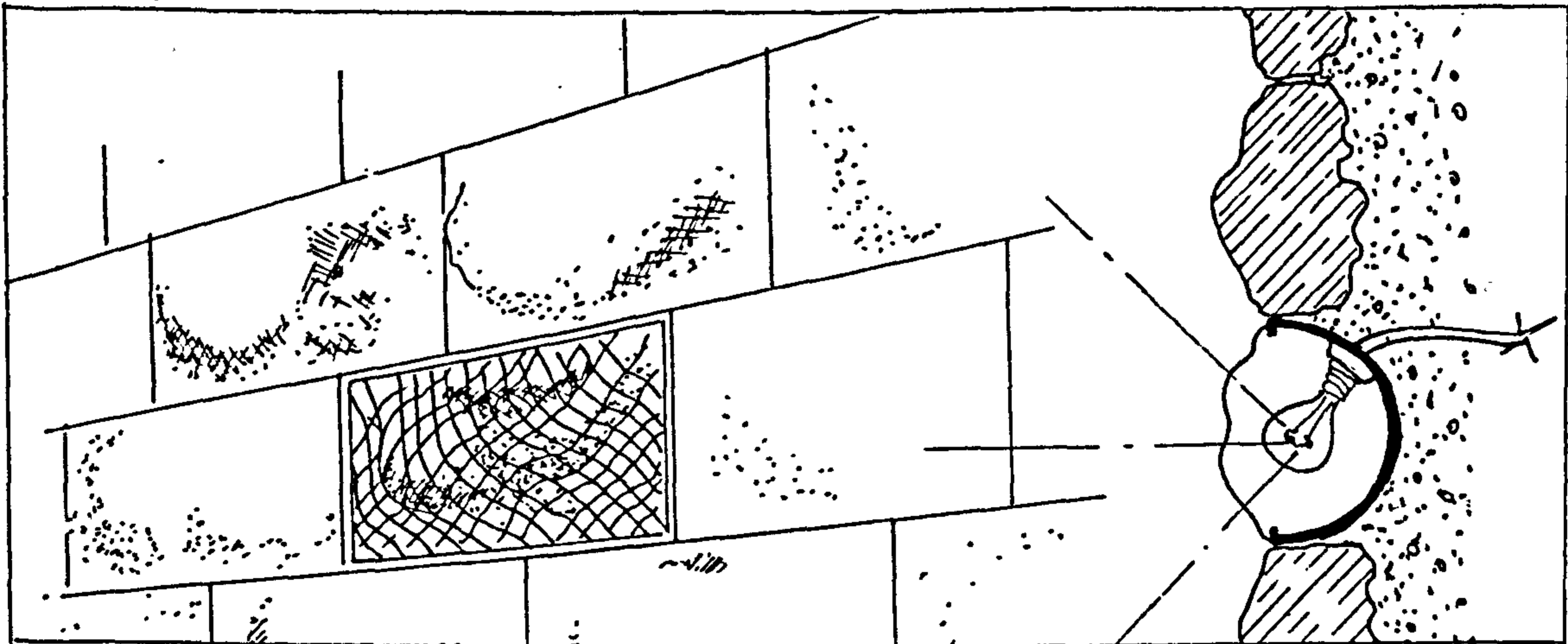


B. Perspective view.

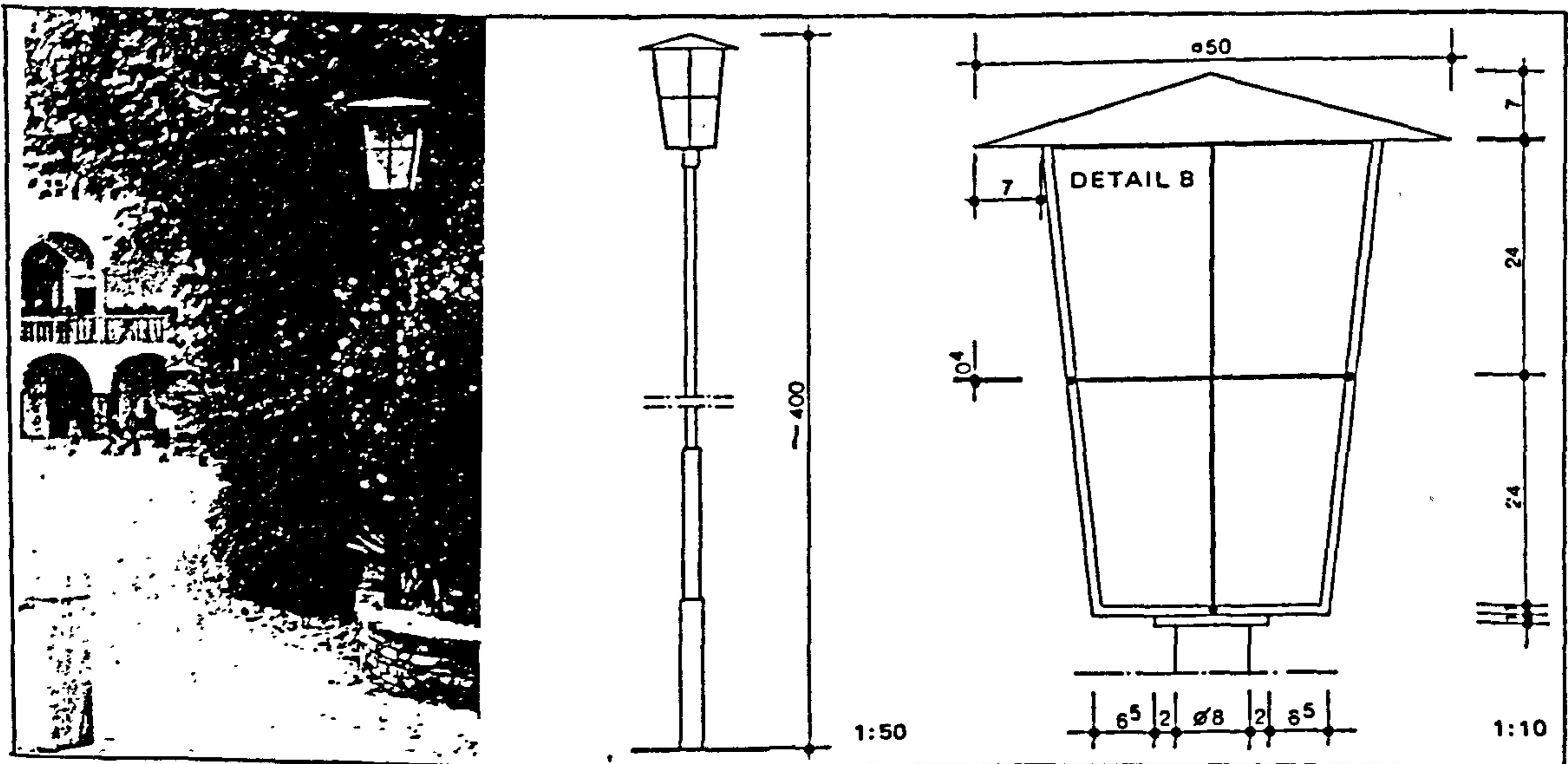
Figure (6.3): An example of refuse container that could be used within the Old Town's streets.



A. Using the traditional Mashrabiyyeh in streets' lighting.



B. Using stone to place the light to lit narrow lanes.



C. Using lighting elements with stands to lit public gardens. Source:(Boeminghaus, 1977).

Figure (6.4): Methods of lighting could be used within the Old Town's public open spaces.

1. Repair original flagstone with as minimum alterations as possible.
2. Use hard stone with rough texture to surface the street
3. Return converted stepped streets to their original design, unless they are to be used for vehicular traffic.

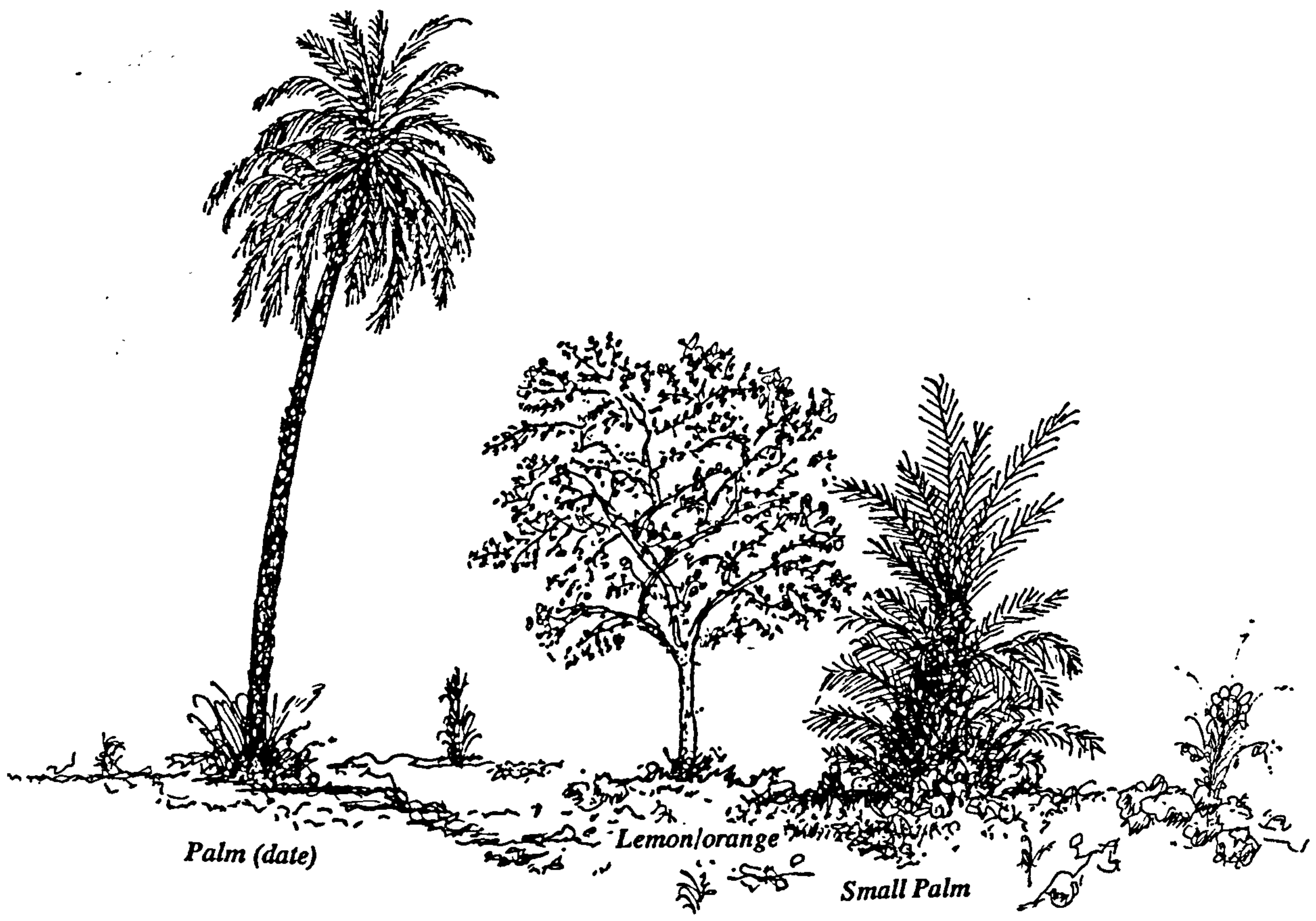
G. Vegetation:

Vegetation within public gardens and squares should be provided in order to beautify the town and landscape and attract rich people to return to the Old Town. Complete set of drawings should be prepared for each open space in the Old Town showing in details what should be done and what kind of vegetation is needed, and so on, see figure (6.5). These gardens should be watched by neighbours and regularly maintained by the City gardener and his Municipal teams.

H. Exterior Stairs:

Generally, the design of such stairs is considered as not safe to users, as some of them do not comply with today's stairs standards:

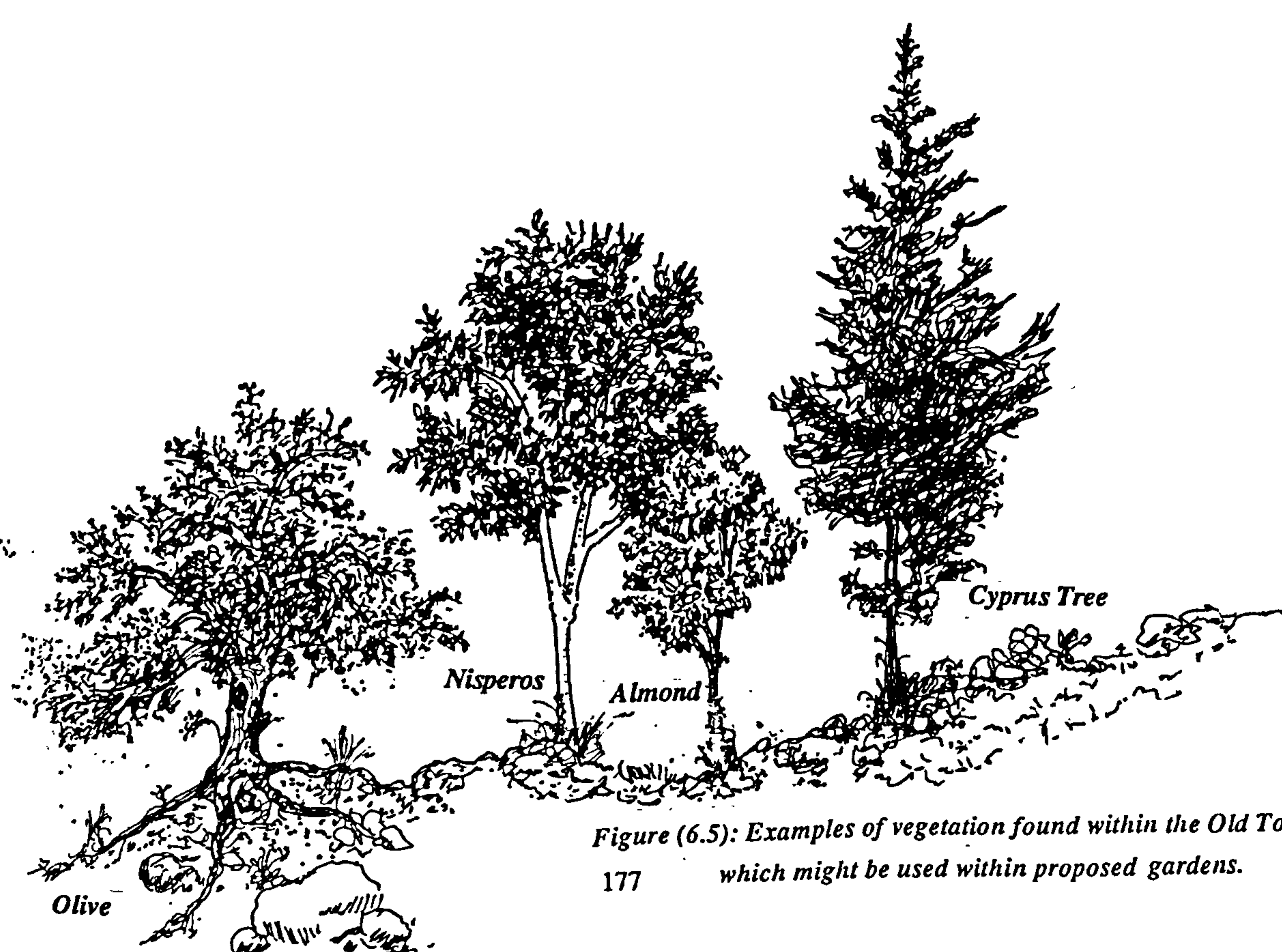
1. Deflection of the step surfaces, as a result of its long life and hard usage. This phenomena is a very important historic evidence which shows the real age of the building and its originality, and should be treated very carefully and preserve the maximum possible of this evidence:
 - i. Any deteriorated step should not be replaced unless nothing else could be done, especially if it is within a cantilever stair, in order to provide structural stability.
 - ii. Any new material used to repair the deflection of the step surface should be clearly noticed that it is not a part of the original structure.
2. High slope stairs and the variation of the step rise are both special characteristics of the Old Town's buildings and should be retained:
 - i. They should totally preserved with minimum alterations for safety reasons.
 - ii. The usage of handrails - which already is used in some houses - could help reducing such danger with minimum changes.



Palm (date)

Lemon/orange

Small Palm



Olive

Nisperos

Almond

Cyprus Tree

Figure (6.5): Examples of vegetation found within the Old Town, 177 which might be used within proposed gardens.

6.4.1.3. Building Appearance:

The traditional appearance of the buildings should be totally preserved, in terms of traditional building pattern; masses, solid and void relation, openings' pattern and proportion and building materials:

A. Windows and External Doors:

- I. Wherever possible traditional windows should be repaired rather than replaced, in order to retain their originality.
- II. When windows are beyond repair and replacements are required, the appearance of the original type should be retained. The replacement windows should be constructed of timber and in accordance with the traditional design and specifications.
- III. In major conservation work or when aluminium louver and other modern window types deteriorate they should be replaced by traditional ones.
- IV. Replacement external doors should match the original pattern, colour and material.
- V. Openings of new constructions should comply with the traditional opening pattern and materials, see figure (6.6).
- VI. New windows required within existing buildings should:
 1. Comply with the traditional opening pattern and materials, as shown in figure (6.6).
 2. Avoid as much as possible being within the building frontage, unless there are no better alternative.
- VII. Garage doors should be exempted from being placed on the building frontages, for their great importance to hide the motor vehicles and keep them away from streets. Such new openings should be easily distinguished from any original ones, for example using flat or segmental arched openings. Also most of the building frontages are facing wide streets that could accommodate vehicular traffic, while the secondary streets are narrower and unsuitable for vehicles. The garages' doors should be derived from the traditional wooden doors used in shops' openings.

B. Shops fronts:

- I. Original shop fronts should be fully restored, unless the required use requires special design, which should be related to their surroundings and to the building of which they form part, and to be agreed upon by the Conservation Committee.

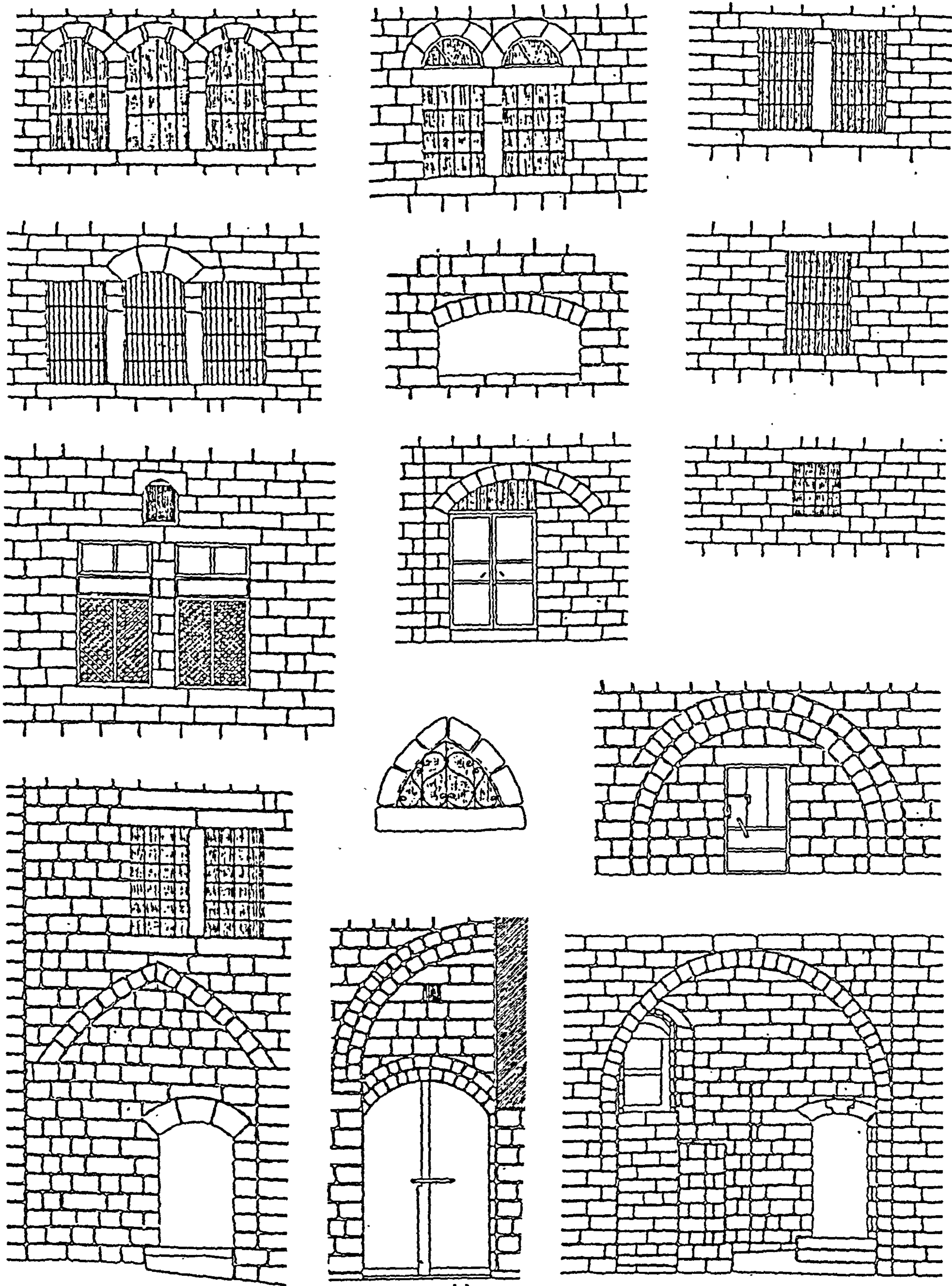


Figure (6.6): Examples of traditional openings found within the Old Town, which might be used in any new construction or addition. Source: Courtesy of An Najah University Arch.al students, 1989.

- 6.4.2.
- II. Shop advertising and signs must not disturb the traditional pattern, by covering major elements, such as the arched top of the shop opening.
 - III. Shops' canopies should be in proportion to the shop-front. Over street canopies are acceptable, but they should be controlled by the Conservation Committee.

6.4.1.4. Boundary Walls:

- A. The original boundary walls of sound condition constructed from loose and coarse stone should be retained.
- B. Deteriorated stone and concrete walls should be reconstructed in their original form, unless there are other needs to locate other indoor services, see figure (6.7).

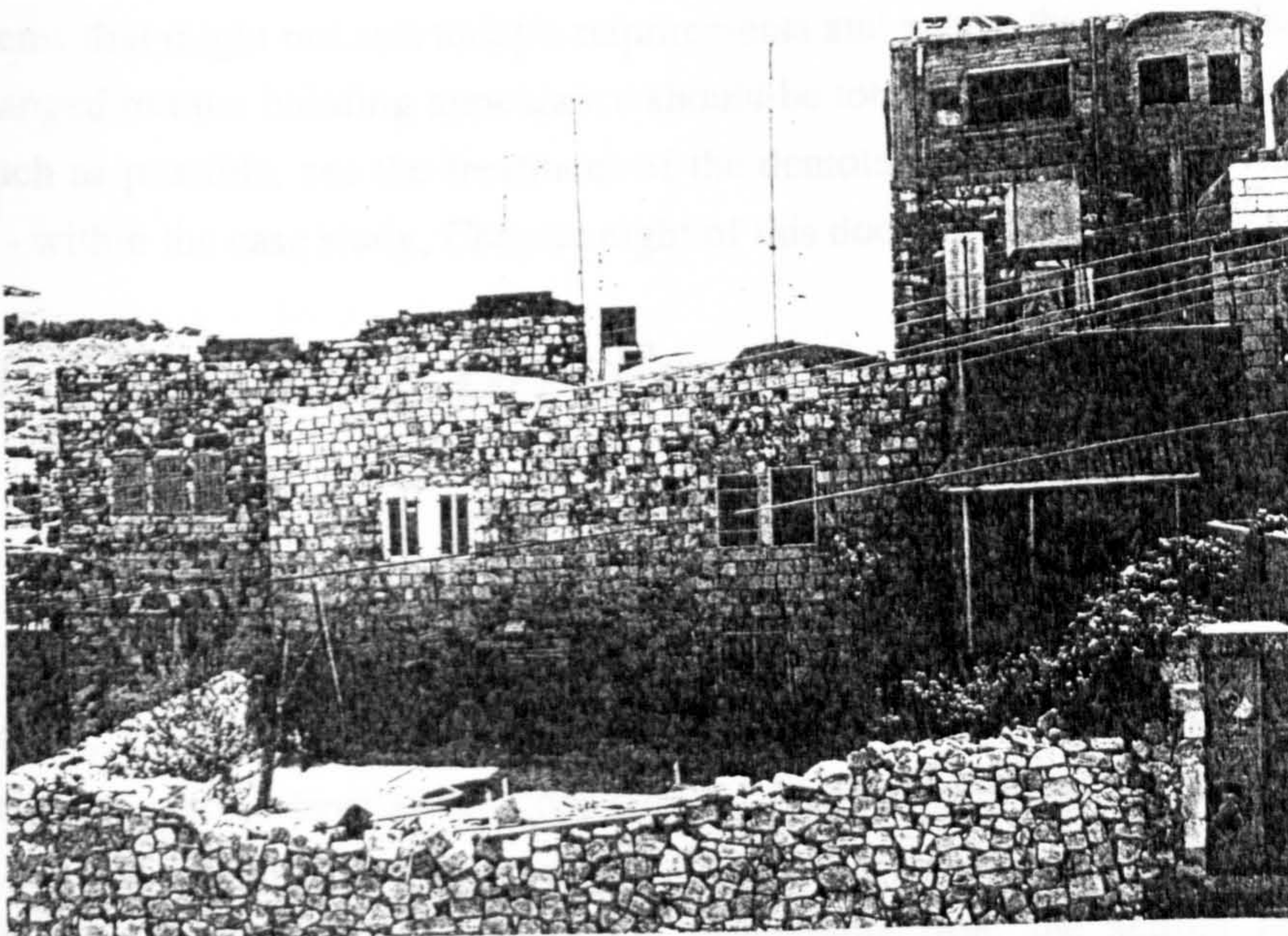


Figure (6.7): A loose stone wall parts of which might be replaced by indoor garage.

6.4.2. Improving the Infrastructure:

Full plans and required drawings should be prepared for the following large scale improvements within the Old Town:

1. Modernise electricity and telephone services, which should be installed within underground ducts, as earlier mentioned.
2. Pipework or wiring for electricity, TV cables, etc., should run up rear elevations wherever practicable, and not on the front.
2. Improve the sewage, rain drainage and the drinking water systems.
3. Improve the public services: street cleaning, refuse disposal.

6.4.3. Developing Afflicted and Gap Sites:

Development of afflicted and gap sites should follow the planning control guide line - section 6.4.5 - in terms of building use, building materials and street pattern and streetscape. The conservation policy of the politically demolished buildings is that these buildings should be rebuilt with their original design and building materials - if they still exist. But if there are difficulties to trace the original design or it has problems that might not suit today's requirements and needs, the interior design could be changed but the building appearance should be totally preserved and reconstructed as much as possible, see the treatment of the demolished building - part of building no. 5 - within the case study, Chapter eight of this document.

6.4.4. Restoring the Traditional Town Edge:

As described earlier, in the historical development of the City, and before its expansion, the Old Town used to be surrounded by a beautiful landscape of fruit gardens and used to have a wall consisting of fortified buildings, some of which still exist in their original state with but few changes, see figure (6.8). According to the Venice Charter (1964) monuments are inseparable from the setting in which it occurred. So the original surrounding gardens should be restored and as much as possible from the town wall. This could be achieved by the followings:

1. Restore the historic fortified houses into their original shapes.
2. Restore the largest possible area of the surrounding lands for landscaping and recreational purposes, by the gradual removal of the new buildings in these

areas, see figure (6.8).

3. Develop the slums areas on the old town edge, particularly the temporary metal buildings, according to the following 'Planning Control' section 6.4.5.

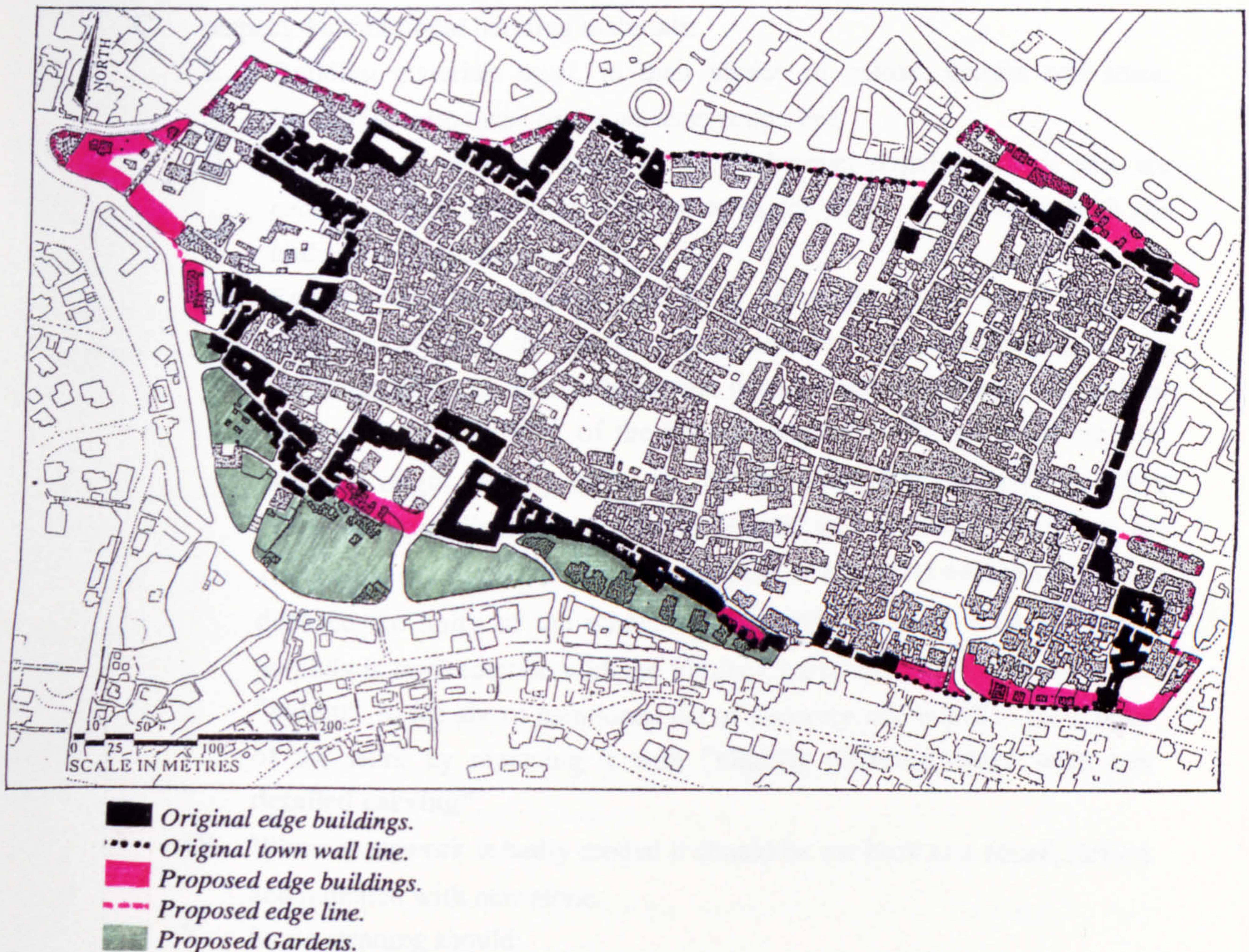


Figure (6.8): Restoring the edge of the Old Town.

6.4.5. Planning Control:

This guide-line controls any alterations, or repairs to any building or construction of new building within the Old Town; the conservation area. Any such action should have the consent of the Old Town Conservation Committee and the planning authority. Contemporary elements in harmony with the surroundings should not be discouraged and such features could contribute to the enrichment of the area (Washington Charter, 1974).

1. When applying for planning consent, photographs and full drawings should be submitted showing the relationship between the new buildings, alterations or

extensions and the adjacent properties.

2. Any development of old or new property should:

A. respect street pattern in terms of building height and original street line.

B. as much preserved as possible the original frontages.

C. respect the traditional building materials:

I. Building materials must, in their choice of colour, texture and scale, harmonise with those of the adjacent properties.

II. Second-hand materials could be used wherever possible; where new are necessary they should be selected to match or be in character with the traditional structure.

III. Replacement of missing pieces or decayed parts must integrate harmoniously with the whole in tone, texture, form and scale, even the minor detailed should also be copied in order not, in the long run, reduce the beauty and **quality** of the historic property. The colour of the new material might slightly differ so that the intelligent observer on close inspection can distinguish between original and the added work, so the restoration does not falsify archaeological or historical evidence, but at a distance the unity of the whole work is not disrupted. This attitude is partially in contradiction with the Venice Charter of 1964 which added the "colour" to the above mentioned list of harmony and sacrifice the quality of the work by replacing it with "slightly different stone with less detailed carving".

IV. Where stonework is badly eroded it should be cut back to a sound surface and indented with new stone.

V. Stone cleaning should:

1. only be carried out in conjunction with other works such as stone repairs and repointing.

2. be carried out with great care, both in the selection of the cleaning technique and in the execution of the works. Carefully controlled low pressure wet method may be used but chemical cleaning and dry sandblasting is not approved*.

VI. Stone should not be painted. If it has been painted before and the paint cannot be removed, it would be acceptable to be re-painted using colours agreeing with the adjacent colours.

*: According to Dr. Del Priore (1991).

6.4.6. Control and Improve Traffic Services:

6.4.6.1. Controlling Traffic:

Someone might suggest a comprehensive development to enable the Old Town to reap the advantages of the motor vehicle. This would attract the motor vehicles to penetrate the traditional built environment and will require widening streets and cutting of corners. Such alterations will damage the architectural and historical character of the area and are in contradiction with the Washington Charter (1974) for preserving historic towns and cities. So to preserve the traditional character of the Old Town it should:

- A.** Accept the low vehicular accessibility of the Old Town and the lower level of motorisation than what could be achieved in the City, where much greater physical changes could be easily accepted, and declare the main commercial core of the Old Town as a controlled traffic free zone.
- C.** Prevent wide Motor ways from penetrating the Old Town.
- D.** Control vehicular traffic within the Old Town:

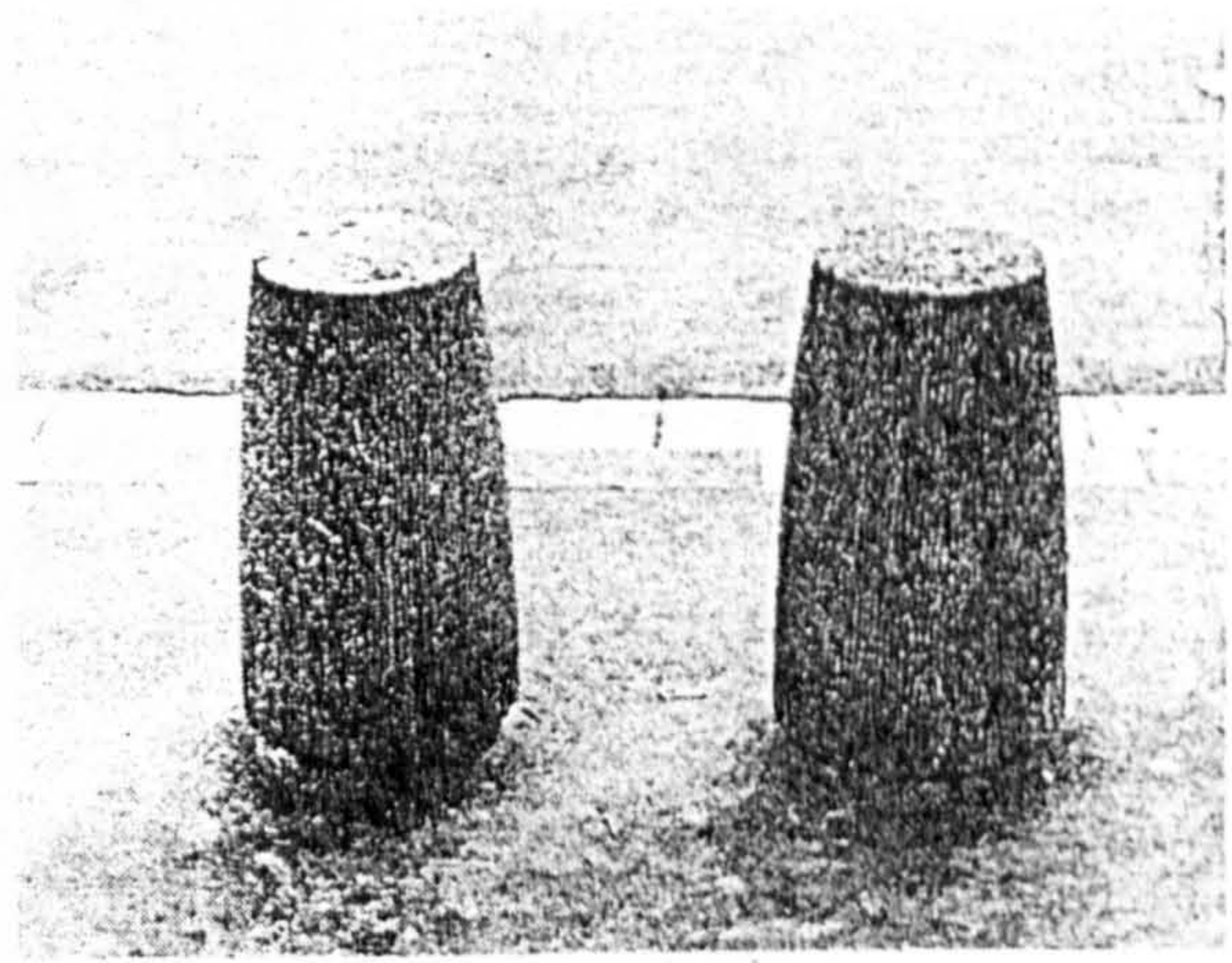
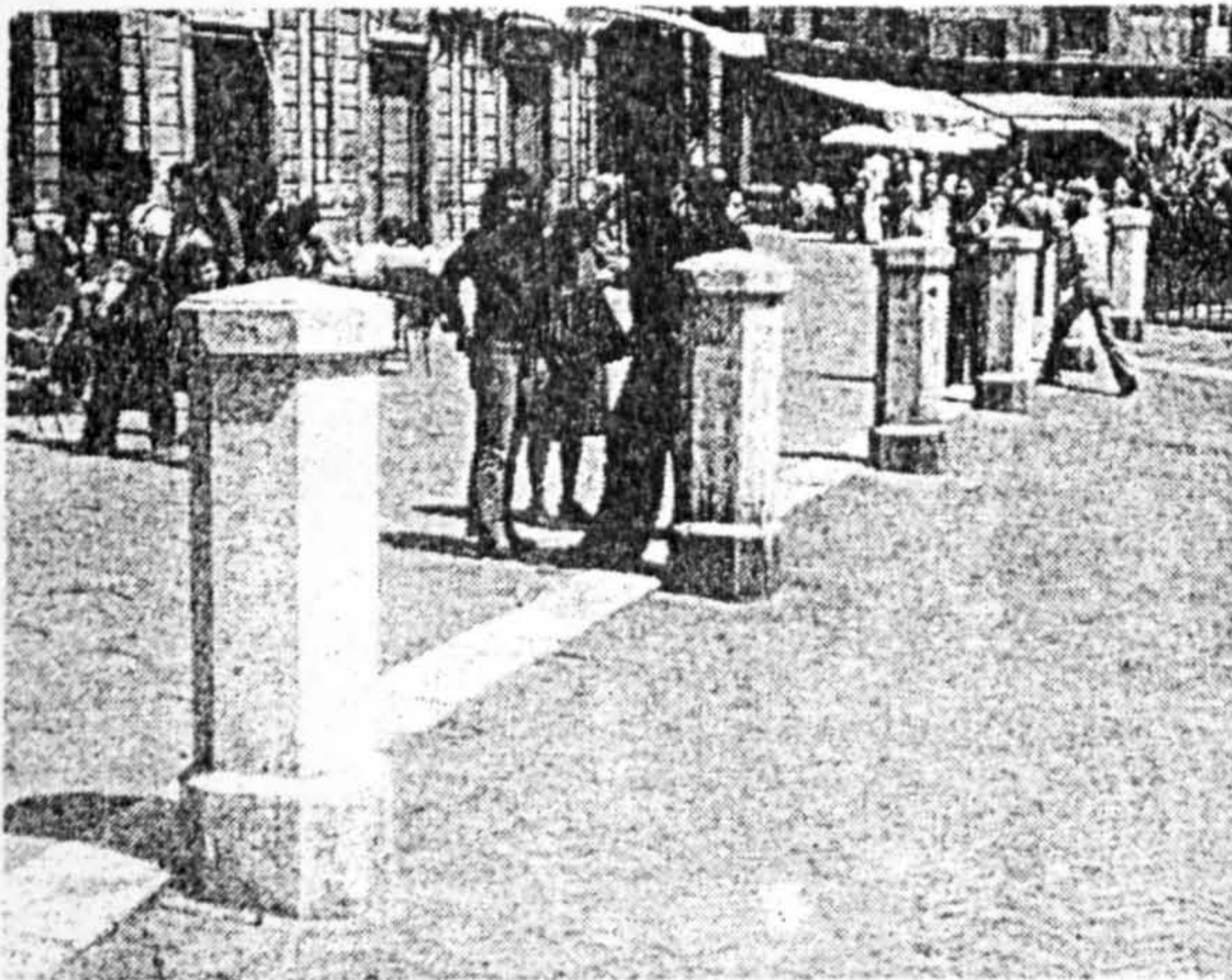
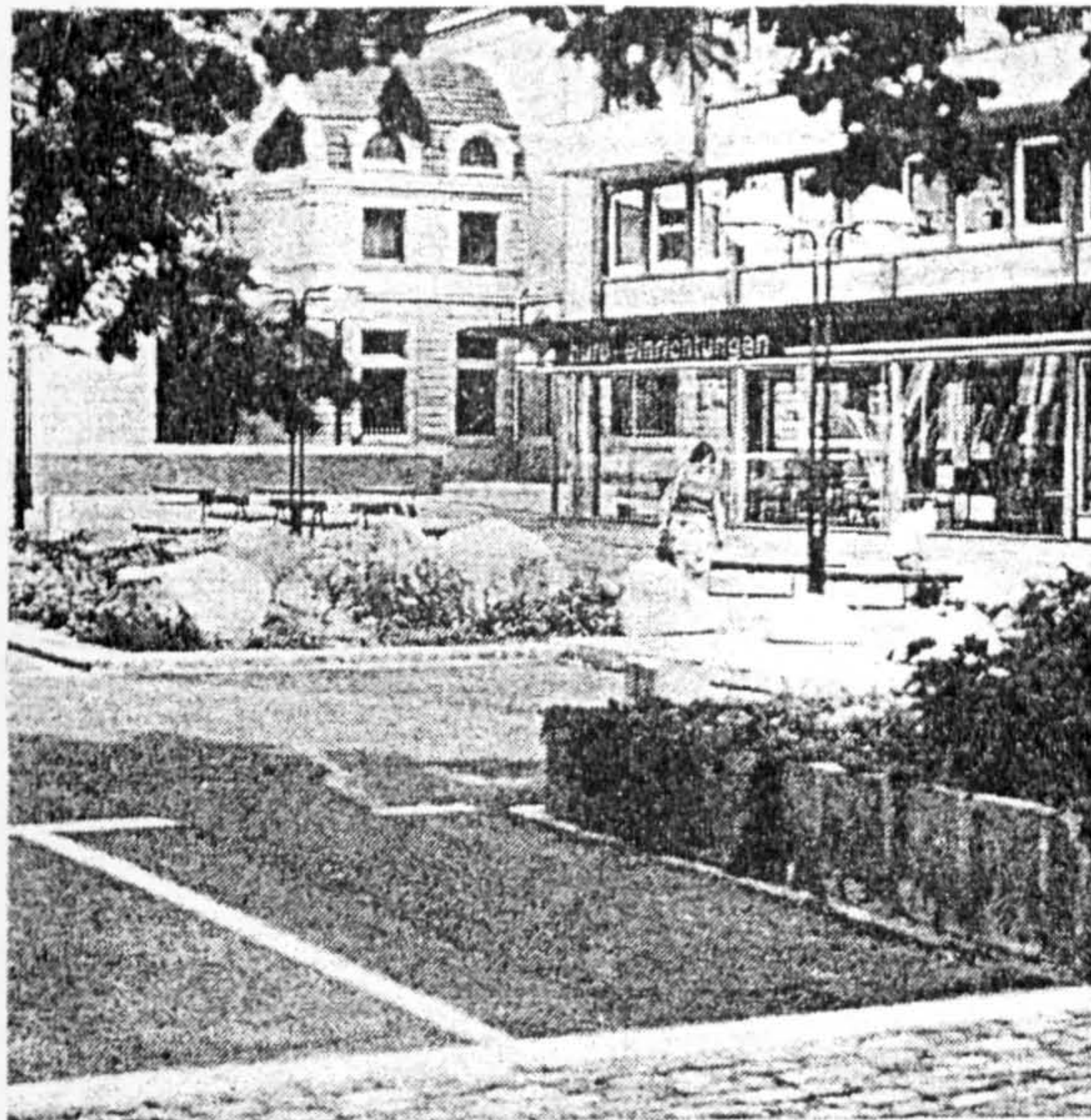
I. Control Entry:

prevent uncontrolled penetration of vehicular traffic and limited number of licensed vehicles should be allowed to enter the Old Town during the day time. Several control methods could be used to achieve this purpose:

- 1.** Limited entry permissions with clear signs hung on the front windscreens of the vehicles. These to be given to the residents and the commercial servicing vehicles.
- 2.** Automatically controlled metal blocks, which allow whoever has a magnetic permission card.
- 3.** Permanent stone or specially carved concrete blocks placed on the entrance of the street or any pedestrian zone, by using special blocking units, see figure (6.9).

II. Control Direction:

Follow the one-way loop system within both existing or proposed streets, and accept the minimum vehicular street width of 3.5 metres and the minimum height of 2.5 metres, which are sufficient for small truck one-way access.



*Figure (6.9): Examples of permanent blocks that could be used to prevent vehicular entries.
Source:(Boeminghaus, 1977).*

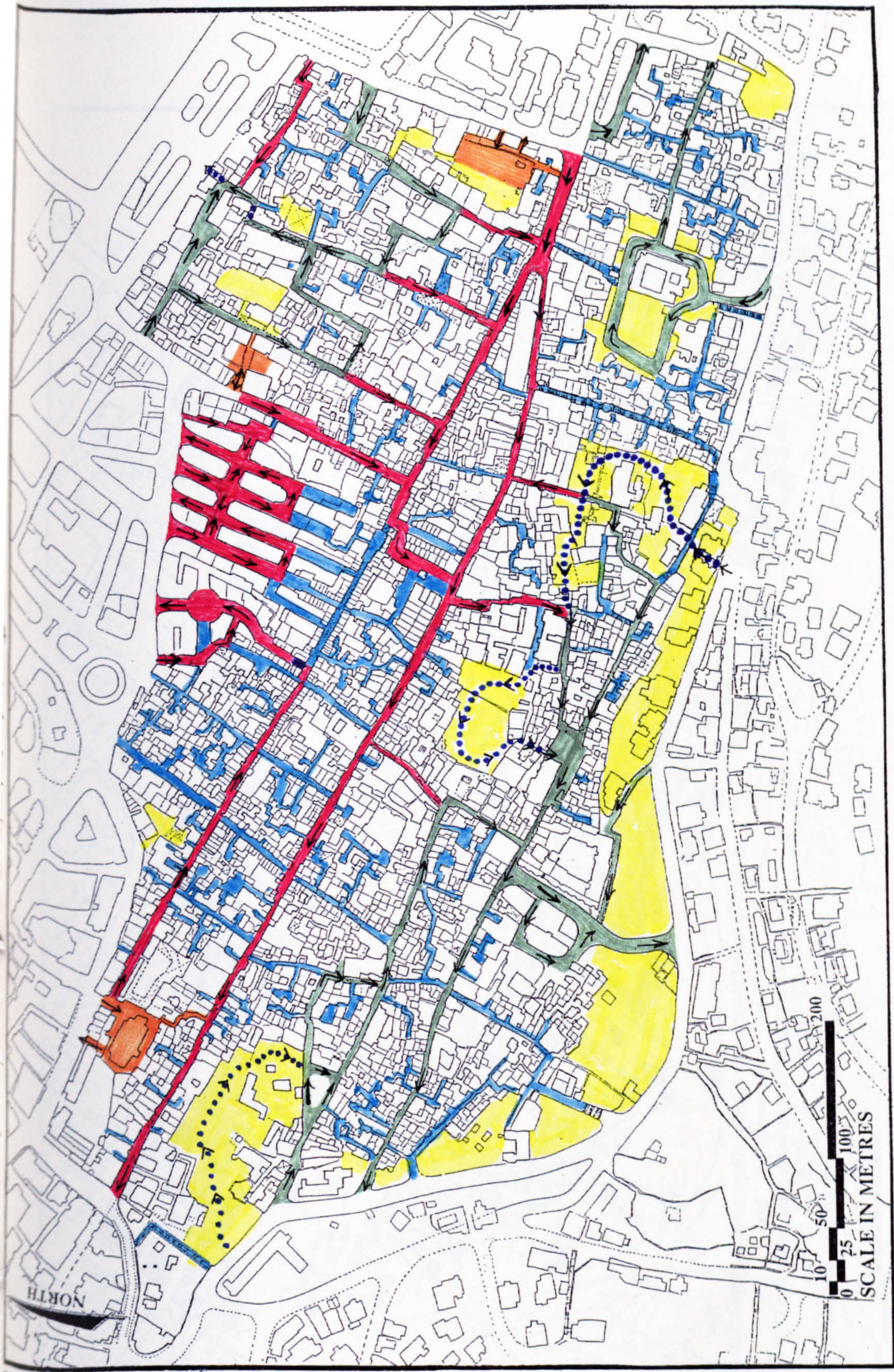
III. Control Speed:

Limited speed should be observed within the Old Town streets. The vehicular speed should not exceed 20 Km/hour for pedestrian safety. The use of traditional flagstone will force vehicles to reduce speed within the defined speed limit.

IV. Control Services:

1. Service Place:

- a. Provide new servicing routs, see figure (6.10). These new servicing routs provide more than 90% of the Old Town's building with adequate vehicular accessibility, see figure (6.11).
- b. Three servicing depots are proposed in the eastern, western, and the northern sides of the commercial area, see figure (6.10). These depots are served by motor vehicles and then



- █ Pedestrian streets.
- █ Outwith working hours Servicing streets.
- █ Existing - Controlled daytime Servicing streets.
- ⋯ Proposed - Controlled daytime Servicing routes.
- █ Commercial servicing Depots.
- █ Controlled Parking places within Gardens.
- ↑ Traffic Direction.

Figure (6.10): Traffic Control within the Old Town.



Figure (6.11): The effects of the proposed servicing routs on the vehicular accessibility.

the distribution to individual shops, offices etc., will be by hand-puled carts or small electric trolleys.

2. Service Time:

Vehicular servicing should be carried outside the hours when the public are in "occupation" of the street. This is now practised extensively on the European Continent and appears to be a very effective way of reserving shopping streets for pedestrians only during shopping hours (Buchanan, 1968.b). Figure (6.10) shows the streets' types according to their servicing time in the Old Town.

V. Control Parking:

According to the Washington Charter (1974), parking areas should not disturb the historic fabric or degrade the environment.

Nablus local authorities should control parking; where and how much parking spaces are to be provided and what charges are levied. Parking control should be firmly enforced:

1. Indoor garages should be encouraged within the Old Town.
2. Limited number of on-street parking should be allowed within the Old Town's streets. Permit holder licences should be issued for this purpose:
 - i. Residences Parkings should be as near as possible to their houses.
 - ii. Shopkeepers and businessmen with disability could be permitted to park their vehicles within the Old Town, others should park their vehicles outside the Old Town.
 - iii. Limited number of metered parkings should be provided for shoppers and town visitors within special places of the new commercial streets and for limited period of time.
3. Controlled parking facilities within the southern gardens on the edge of the Old Town, see figure (6.10) and (6.12) should be:
 - i. Provided to serve the Old Town's residents, shopkeepers, shoppers and visitors.
 - ii. screened by the garden's vegetation.
 - iii. Multi-storey parking buildings could be needed around the Old Town edge and within the City Centre to hold the parking spaces for future number of vehicles.

6.4.6.2. Minimise Traffic Anti-environmental Effects.

The main feature that, from the point of view of traffic problems, makes the old buildings different from any ordinary ones is that these buildings are inviolable, so the changes required to develop and to make them fit the new requirements should be restricted so as not to spoil the historic character and values of such areas. The high value and importance of the Old Town's historic buildings and structures made the low environmental capacity an acceptable matter. This low traffic capacity will reduce the volume of vehicular traffic which will reduce the anti-environmental effects; accidents' danger, congestion, noise, fumes, vibration and visual blight. This policy will provide a healthy environment, free pedestrian traffic, safe streets for children and, the most important of all, will help restoring the traditional social and commercial life of the Old Town.



Figure (6.12): The Southern gardens where controlled parking spaces should be located. Source: Courtesy of Rema' Studios, Nablus, 1989.

6.5. Buildings Rehabilitation:

The Old Town presents an interesting variety of land uses and functions, residential, religious, commercial, industrial and leisure related activities. In order to reconcile the unique historical qualities of the Old Town with its continuance day-to-day role as a living urban centre, the occasional need for renewal should be accepted. The rehabilitation policy of these buildings requires the following two major actions:

- A. Improve the efficiency of functioned buildings with satisfactory uses;
- B. Adapt alternative uses for un-functioned buildings or functioned buildings with unsatisfactory uses:

6.5.1. Improve the Efficiency of Functioned Buildings with Satisfactory Uses:

6.5.1.1. Introduce Satisfactory Safety Standards:

As a result of the social changes and technological improvements most of the historic buildings of the Old Town are below today's standards. For the sake of the occupiers' safety and welfare, certain standards should be introduced and become a significant part in building legislation:

- A. Structural stability as the collapse of buildings is the primary cause of loss of life, so strengthening historic buildings will save life and limb.
- B. Suitability of interior design elements:
 - I. Proper preparations for emergencies and fire escape arrangement.
 - II. Suitability of indoor steps and staircases, as some of them do not comply with today's standards. Such danger could be lifted by applying the same steps followed in restoring the steps of exterior stairs dealt with section 6.4.1.II.4.
 - III. Suitability of the buildings' interior environment:
 - A. Lightening and ventilation: new opens could be added or the existing ones could be widened if the room's light and ventilation conditions are very poor, but this operation should comply with the planning control conditions, so as not to spoil the building pattern by increase the openings' area in relation to the remaining solid

masses, especially on main elevations.

- B. In major environmental problems, the internal environment conditions of one or more building, as a sample, should be measured and recorded over a year, after repairing the problem causes. For example, dampness is a general problem in the traditional buildings in the Old Town, so moisture content of the structure and relative humidity should be measured after treating the roofs.

6.5.1.2. Improve Buildings' Services:

- A. Provide proper drainage and cold-hot water systems. The existing network should be inspected during the conservation works and if necessary should be renewed. As the leakage of water pipes could increase the natural decay process reflected by plaster and paint falling and deteriorate the internal environmental conditions reflected by rising dampness and interior humidity. Efficient rain water disposal is necessary.
- B. Electricity services: the existing electric installations, which may have been altered and extended by either professionals or amateurs. The existing wiring is likely to be defective insulation and impossible to alter safety. So it should be regularly inspected and modernise if possible. The new services design should consider their eventual renewal and replacement as well as accessibility for maintenance. Ducts should consider future services.
- C. Access must be given for regular and emergency services, i.e. refuse collection, fuel deliveries and fire fighting:
 - I. Provide small size and fully equipped vehicles, such as ambulances and firemen's carriers, should be used within the Old Town's streets.
 - II. Improve the existing high-pressure water network. It should be inspected and maintained regularly and increased in number to cover the whole areas of the Old Town.

6.5.2. Adapt Alternative Uses for Unfunctioned Buildings or Functioned Buildings with Unsatisfactory Uses:

The selection of new uses is not an easy task to be achieved. Measured drawings and full investigation of the buildings are necessary for preparing proper designs. Adapted uses should attract the town developers and the private sector particularly the owners of the studied building. Selected new uses should be:

1. Economically valuable.
2. Preserve the building values by:
 - A. involving the minimum physical alterations;
 - B. avoiding unnecessary and damaging alterations.
3. To reduce the rehabilitation costs, by:
 - A. avoiding the costly strengthening of the structure;
 - B. not requiring costly internal improvements;
 - C. not severely changing the lay-out or decoration of the building.
4. Involve least amount of vehicular traffic.

6.5.2.1. Housing:

A. Improve the Interior Arrangement:

The interior arrangement of the traditional houses should be improved to suit today's amenity standards. Big houses could be re-arranged to produce more suitable smaller units. Beside the improvement of the building efficiency's general factors - mentioned earlier in section 6.5.1 - the following factors should be observed when developing new housing units:

- a. **Full privacy:** housing layout should show the house different floor plans, the locations and size of windows and the rooms they serve, to allow proper assessment of day lighting in relation to the adjacent dwellings and the effect of any alteration on privacy.
- b. **Health requirements:** Although the court played an important role in calming the weather in summer hot and dry days, most of the inhabitants of traditional court houses are complaining about its bad effect on their health in winter cold and rainy days, particularly when moving between warm rooms through this cold court. Because of this when developing the old houses, access to the different rooms via the courtyard should be avoided, or covering the court if

there is no other alternative.

- c. **Introduce modern domestic facilities:** Provide the houses with the basic indoor facilities: cooking, bathing and toileting.

B. Protect and Enhance the Amenity of the Residential Areas:

I. Within residential quarters:

1. Changes of use from residential into non residential uses should be restricted, as such action can alter the character of the building and adversely affect neighbouring houses; e.g. by altering the vicinity.
2. Residential buildings where non-residential uses already predominate will be allowed to continue as so, but not to expand.
3. Cafes, restaurants, hotels and hostels are considered likely to cause nuisance problems and to have an adverse effect on the enjoyment of residential amenity by virtue of frequent coming and going at all hours. So their location should be carefully chosen to have accesses with minimum possible disruption to housing areas.

II. Within the commercial areas:

1. Residential use in commercial areas should be encouraged in order to keep these areas alive after the business working hours. So no further changes of use from residential into non residential use will normally be permitted beyond the second floors.
2. Buildings where non-residential uses already predominate will be allowed to continue as so, provide that it is harmless to the adjacent houses.

6.5.2.2. Industry and Commerce:

A. Revive the Traditional Commercial Life:

Revive the traditional commercial life, and the lively character of the Old Town bazaars and streets means not to allow the traditional crafts and skills be vanished. These old crafts are our culture and heritage and could be a good tourist attraction. Few examples from the traditional blacksmith, coppersmith, goldsmith, carpenter workshops and old bakeries - figure (6.13) - should be kept, if not all of them. The food and drink travelling sellers should be encouraged to operate in their old ways, but they should be controlled so as not to cause congestion.

B. Maintain and improve job opportunities in the Old Town:

The Old Town has a great role to play in employment for its important location near the City Centre and for its attractive traditional bazaars. But because of the physical decay of its buildings and structures many improvements and development are needed to maintain this important role:

- I.** Rehabilitate the existing shops in order to suit today's economic needs.
- II.** Convert vacant or disused non residential ground floor spaces into commercial shops.
- III.** Encourage more productive projects which will help rising employment as well as the income level of the Old Town inhabitants.
- IV.** Invest in the traditional built environment to encourage the tourist industry.



figure (6.13): A traditional bakery in operation.

C. Encourage a Satisfactory Business Environment:

- I.** The best possible range of shopping provision, conveniently located for the public use.
- II.** Any activity within the conservation area should be environmentally controlled so as not to cause any harm. Hot food fumes and industrial smokes are considered harmful to the neighbouring houses so as proper ventilation standards should be adopted.
- III.** Revive the traditional character of the bazaars and commercial streets and control the new shopping pattern of display windows and lighted signs which should not to be allowed everywhere, unless agreed upon individually by the conservation committee.
- IV.** Uses which might result in excessive noise or disturbance to adjacent residential units will not be permitted, and the planning authority will help with the relocation of such uses operating in the area.
- V.** Traditional crafts and industries should be encouraged to keep as much as possible of their traditional operating systems.
- VI.** Un-used industrial buildings should be converted into proper and more economical socially uses, such as sports centres and community halls, mainly from the soap factories because of their interior arrangement and wide span structures.
- VII.** Provide sufficient number of car parking on the edges of the Old Town, for shoppers from outside the Old Town. Multi-storey parkings are preferable in the City Centre.

6.5.2.3. Education:

A. Provide the Required Educational Needs:

- I.** According to the recommendations of Nablus City Comprehensive Plan (1989) there should be four Pre-school/Nurseries should be available, at least one of these exists - °Abd Al-Hadi Nursery, so three extra ones are needed. Beside Al-Hashemiyyah elementary and Hawwash elementary and primary schools three other elementary schools are needed. Also two extra secondary schools are wanted beside Al-Fatemiyyah secondary school. The Under construction Zafer Al-Masri school could be one of the two wanted secondary schools.
- II.** School facilities are the responsibility of both the Nablus Municipality and the

education authorities. These required schools could be provided by converting un-used commercial, industrial or in very special cases big houses, mainly from the transitional building style as they are usually suitable for such activity.

- III. An -Najah National University in the City could take the opportunity and convert ^cAbd Al-Hadi Palace into one of its departments; for example to locate the Department of Palestinians studies, history, art or architecture. Also this palace has the potential to be a national library.

B. Develop Joint-use of Educational Facilities

Encourage the use of school buildings out-with school hours by members of the public and community groups for social activities. This will positively help in investing these buildings and get the most use of them without spending more money on special buildings.

6.5.2.4. Leisure, Recreation and Tourism:

The Old Town is full of historic places. Therefore it will be a great national and international tourist attraction. The Old Town is in an extremely good position to be developed as a cultural and tourist centre, for the following main reasons:

1. The presence of so much of the national, architectural and historic heritage that will attract tourists, if properly advertised and well prepared for such activities.
2. The Old Town as one of the few pure remains of Islamic towns in the area, which was not spoil by the modernisation of European colonialism.

A. Encourage a Satisfactory Leisure, Recreation and Tourism Environment:

- I. It should be the objective of Nablus City Comprehensive Plan to encourage the development of the Old Town as a tourist destination, increase their length of stay and level of expenditure and encourage return visits. This could be achieved by:
 1. Improve the general appearance of the area by more attention to matters of "good house-keeping". This would include street sweeping, maintenance of landscaping and good street lighting.
 2. Provide adequate public services and transport and adequate cars and buses parking facilities.

3. Provide a Heritage trail map and indicate all the historic and important buildings; the traditional crafts, bazaars, bath-houses, soap factories, beside the ancient remains within the Old Town; such as the Roman houses in *Haret Al-Gharb*, the remains of the Crusaders tower.
 4. Provide indoor recreation and leisure facilities; sport and cultural centres, swimming pools, public baths, etc. as well as out door facilities within the open spaces in the northern side of the Conservation area.
- II. The maximum public participation should be encouraged through a general information programme about the great importance of the Old Town and its historical buildings as well as the importance of tourism which helps the Old Town's general economic development.

B. Maintain and Improve Job Opportunities in the City:

Improve leisure, recreation and tourism related facilities, will of course provide efficient and economical uses for many historical buildings in the Old Town, as well as providing many job opportunities by providing more work places, such as:

- I. Traditional and cultural museums: Nablus city does not have a proper museum. The only one it has is Ihasn Al-Nimir museum, the city famous historian who converted a part of his house into a small museum. The City needs a larger museum, which could easily place within one of the Old Town disused palaces. Al-Nimir palace is one of the most suitable candidate to accommodate such activity, beside it will be a continuation for the existing museum.
- II. Hotels and guest houses: The historical hotels; *Al-Khanat* and *Al-Wakalah* Buildings could be easily restored into their original functions. *Khan Al-Tujjar* could be a high quality tourist hotel, but not for merchants, as today's merchants no longer require to travel overnight with their goods. *Al-Wakalah Al-Gharbiyyah* that was simultaneously used to accommodate goods, animals and people. A few craft's workshops are found within which today. This *Wakalah* could be converted into a hotel, or a Traditional Craft Centre and within its main court a recreational landscape restaurant or cafe could be provided.

Beside these original public accommodation buildings, deserted big houses within the Old Town could be divided into special guest houses within areas chosen in accordance with the protection and enhancing of the amenity of the residential areas (section 6.5.2.1.B). For example Al-Bayk palace has a

great potential with its strategic location in the heart of the Old Town to be a high quality hotel with restaurants.

III. Student housing: Big traditional houses if they have a suitable location and do not disturb the amenity of the residential areas could be successfully converted into student hostels, mainly for the students of An Najah National University and the other higher education institutions in the City. Recently the Old Town was one of the favourite places for student housing because of the low rent value of its buildings and its special location near the City Centre. The use of historic buildings for student housing, if properly supervised and carefully controlled, has a number of advantages, some of which are:

1. Students may well be content with and enjoy a different provision of private open space and internal accommodation from a traditional housing layout.
2. The normal arrangement of the academic year, which leaves housing empty during the height of the tourist season, may allow a double use of the accommodation for tourists during the summer season, provided it is in the right locality.
3. This could have double advantages of providing a suitable use for the buildings as well as helping An Najah University

IV. Bath-houses: There are eight bath-houses in the Old Town, none of them is working, as discussed earlier in Chapter five, section 5.2.2. Hammam Al-Jadidah could be restored and re-opened as it was the last bath-house to close. The traditional operating systems should be preserved as much as possible. Hidden mechanical and working facilities could be modernised, in order to be a living museum, and a good tourist attraction. Other bath-houses could later reopen if this one has proved to be successful. If not or the predicted needs showed no more bath-houses are required alternative uses, these bath-houses should adopt more economical uses, for example, they could be restaurants, or indoor recreational activities: swimming pools with sauna and other modern water recreation facilities. but to keep most of their special structures to reflect the traditional style and character.

Chapter Seven

*The Old Town's
Implementation Programme*

7.1. Forces Against the Old Town Conservation?

7.1.1. The Political Situation:

The great challenge the Palestinians are facing nowadays is the hostility between them (Muslims and Christians) and the Israeli Military Occupation (Jews), which has increased during the last four years of the Uprising; Intifadah, this puts more difficulties in the way of improving and developing the Old Town, and increases its problems. The difficulties mainly resulted from the defensive character of its urban fabric which made it a suitable place for the Intifadah activities, which in turn made the Israelis gather big patrol forces and fixed several guarding points on the roofs of the historic buildings. This situation made the living conditions there unbearable which encourage the rich to move out of the Old Town to the suburbs which usually have less troubles.

The presence of the Israeli Military Occupation reduces the effective role of the national authority which, if effective would attract funds to implement the Conservation Programme of the Old Town. Most of the occupation high taxes are spent on the expenses of the occupation rather than development of the territories. In addition to this the Israelis demolished hundreds of buildings during their occupation, as a punishment for resisting the occupation, some of these buildings were very important in the Old Town. Also the Israelis have blocked many roads in the Old Town with massive concrete and metal walls, in order to stop the resistance activities there.

7.1.2. The Tenancy legislation:

The existing tenancy legislation determines that from the moment the building is rented the lessor cannot do any changes or force the tenant to leave the building unless the building is to be demolished. Although the tenancy agreement is valid just for one year, and according to the common law it is automatically renewed every year at the same rental rate, as long as the tenant pays his rent. Most of the Old Town's buildings' rents are very low, which in many case it is less than the annual taxes on the building itself. The landlord cannot rise the value or cancel the agreement even when he asks for some improvement or extension work to be done unless the tenant

agrees. So the owners are not benefiting from renting their buildings, and they are not ready to spend any thing on them.

This explains the continuous decay of these buildings. In order to avoid rent increase tenants, themselves, are obliged to do the urgent repairs, but naturally in the cheapest possible way. This system will cause the tenants to stand against the implementation of this programme, and they will make difficulties to stop it, unless they were assured that rent will never be increased, or they are offered better alternative accommodation also at a low rent.

7.1.3. The Enormous number of Buildings' Owners:

The Old Town's housing used to be the family residence. Nowadays most of these houses are owned by many inheritors. This phenomena encourages the neglect of the historic buildings:

- I. by putting these buildings under ineffective administration, which gave the building occupier, whoever he is (a tenant or a partner) to do what he likes in the building without control;
- II. it makes taking any decision for repairing such buildings very difficult because every partner should agree on the repairs principle first, then pay his share of the expected costs, which under the existing economical situation is unlikely to happen, as he will have no direct benefit from such repairs.

7.1.4. The Old Town's image:

Rising standards of living, caused by technological improvements and economical changes means that as a society grows its views of what constitutes tolerable housing changes as radically as any-thing else, now everyone insists on sanitation, light and air to be available in his house, and described earlier in sections 5.1 and 5.2, many of the traditional houses in the Old Town suffer from the lack the essential domestic facilities which makes such houses classified as sub-standard or un-efficient. In order to substitute these facilities and because of the existing socio-economical structure of the Old Town's residents, also dealt with in section 5.4, these people have made many radical additions, which have in many cases spoilt the Old Town's image and discouraged the rich from returning back or even repairing their old buildings. This situation, if continues, will increase the problems and will result in loss of more historic buildings.

7.1.5. The Technological Changes:

The valuation of time and place is effected by modern technology. New spaces are wanted to maintain the urban life in the Old Town, for example, wider streets are needed for the motor vehicle traffic and also enough parking places for them.

"Transport and communications are in many ways the foundation of the social and spatial changes in modern life. .. Old buildings and old streets often stand in the way of using new transport or new technology generally, or the pursuit of new social aims" (Ward, 1968. p.5).

7.2. The Municipal Conservation Committee - MCC:

The conservation programme should be administered by a committee including representatives of the professional conservation and planning experts (appointed mainly from the staff of Nablus Municipality), and a reasonable number of elected and influential people as representatives for the residents (both landlords and tenants), local businessmen and political groups. As conservation is a team work and not a one man's responsibility. So the MCC should use a wide range of skills, including those of the town planner, landscape architect, valuation surveyor, urban designer, conservation architect, engineers of several specialisations, quantity surveyor, building contractor, craftsman related to each material, archaeologist, art historian and antiquary, supported by the biologist, chemist, physicist geologist and seismologist (Fielden, 1982, p.3).

This Municipal Conservation Committee is to be a sub committee of the Municipality, which is the only public body with executive authority in the City. This committee should possess the followings:

1. Legal cover enough to deal with any of the propositions of the Conservation Programme.
2. Define conservation areas and to pay regard to the relevant provisions of the planning acts. This work is essential to preserve the historic buildings and structures and protect them from any further destruction. This work is one of the main duties of the planning department in the Municipality. The planning control guidance - section 6.4.5 - should be followed to achieve this aim.
3. In very special cases, it should have the power to acquire highly important buildings compulsorily from their owners who cannot or will not maintain them and sell them to persons who will, or may carry out the required repairs and may seek to recover

- costs from the owners. The rights of individual and of the local authority to pay must both be safe guarded under political control on compulsory purchase powers.
4. The right to provide adequate deterrents to anyone contemplating alterations to these places without the approval of the conservation authority in Nablus, and to include stiff penalties to any person who ignores building preservation orders.

7.3. Conservation Funds:

The Old Town will never rehabilitate itself if left in its present situation, as explained in section 7.1, so there must be a public intervention to start the conservation process. Conservation projects could be divided into private and public works. Private works represented in repairing and developing private buildings and spaces. Public works represented by developing public buildings and other urban elements and features.

In order to achieve the required amount of money for individual private buildings, the buildings owners must take a big share in such actions. If the property is not so important and can be made fit at reasonable cost then the owner might do the work or at least pay for it. But if the property is listed and a very important one, at the same time it is under loss threat, then the local authorities might provide the owner with special grants for the required conservation work if enough funds are available or the costs of such works could be subjected to the tax relief scheme, of course, when the political situation permits. If these buildings are rented, the rent value must be enough to cover a significant part of the repair costs. But because of the existing rental rate and the nature of the tenancy legislation which have been dealt with in section 7.1.B. Thus a rent control scheme should be proposed to over come this problem, which will be discussed in section 7.5.1.

The costs of the public projects should be covered by public money which might be obtained from one or more of the following sources:

1. Governmental Organizations and Countries:

- A. The wealthy Islamic and Arabic countries, such as, Saudi Arabia, the Gulf states, which could be controlled through The Development Bank of Islamic Countries in Jeddah, Saudi Arabia .
- B. The other Rich countries, such as U.S.A., U.K., Australia, France, Germany, Japan and others which could be controlled through The World Bank. Also the "United Nations", through the Unesco has an important programme for such developing purposes through the governmental channels; the UNDP.

2. Non-Governmental Organizations; NGOs:

- A.** The Islamic and Arabic international foundations for development of the Islamic towns and cities, such as The Aga Khan Programme, The Arab Towns Organization / The Arab Urban Development Institute" in Saudi Arabia and others.
- B.** The international foundations for preserving the traditional and cultural heritage all over the world, such as the different organizations and bodies of the Unesco, such as the International conference of Museums and Sites; ICOMOS, and the International conference of Museums; ICCROM, and others.

3. National Authorities:

- A.** Governmental grants (assuming the political situation is changed and settled) to the local authorities as a part of their programmes for developing the towns.
- B.** From the local authorities in Nablus represented by Nablus Municipality Corporation, as a part of its annual budget for conserving the old town.

4. The Residents:

Donations of the rich residents, especially the Nablusians who are living in or out the country. These donations could be encouraged by the 'tax relief' scheme for the local sponsors and by providing investment opportunities by considering the amount of donations as shares in the properties ownership which gave the donors the opportunity to gain profit in economical projects. A special 'Building Society' for the Old Town could be proposed to supervise a such process.

7.4. Public Participation:

The participation and the involvement of the town's people of every age, also being in the MCC, is essential for the success of the Conservation Programme and should be encouraged. The more the Old Town's Conservation Programme is supported by the residents the more successful it will be, especially during the very difficult living conditions in the country nowadays. So the Old Town implementation policy, the MCC should follow is to engage the public, particularly local residents as much as possible with the conservation process, but under its active control and supervision, as earlier stated. This could be achieved by using persuasive methods rather than enforced orders, for example:

1. If a person wishing to build is prepared to build in stone and according to the traditional style, then his building application will go rapidly through the planning

authorities, but if he wants to build in concrete or glass or in different architectural style, then his application will take longer time as it should be considered specially and differently by more specialized bodies. This will give people an incentive to build in the traditional materials and style.

2. If a person carries out repairs on his historic structure which are approved, then again he could be given a part of the expenses or his work could qualify for tax-relief.
3. If a person provides an indoor parking place for his car on his own land, then he could be given the tax-relief scheme on that, because he is not putting pressure on the community to provide that.

Nowadays and in some parts of the Old Town, local youth neighbourhood committees are trying to beautify their neighbourhoods by planting, painting, and cleaning it. Such local committees should be encouraged as they can offer great help in executing important parts of the Conservation Programme.

7.5. Implementation Methodology:

The responsibility of the implementation of the Conservation Programme is shared between three groups;

1. The private sector, who should be responsible for conserving the different residential buildings and small scale shops;
2. The public sector, represented by the Municipality as the local authority and the MCC, and whom are responsible for wider range of public buildings and the urban elements and townscape features.
3. The National government, which has the big responsibility for the Urban and Rural Development, and which is not available at the moment because of the presence of the Israeli Military Occupation. This situation will impose delay in implementing the different conservation operations, but will never be allowed to stop it.

One day, sooner or later, the Israeli Military Occupation will come into an end. Then the political changes will facilitate the development of the whole region, particularly, the Old Town Conservation. Nablus city is predicted to play an important role in the new political situation, and the Old Town will be an important national symbol, and the conservation of which will be a national duty.

But until this happens or some political changes takes place, the Old Town conservation process should not be delayed or stopped. The earlier the conservation programme starts the more beneficial results will be gained and the more historic

properties will survive and be saved. Both the owners of the Old Town's buildings and the Municipality should hold their full responsibility. The Municipal powers should be directed by the MCC to start the whole conservation process and enthuse the private sector by doing one or more examples for the conservation work, if there is enough money to cover the expenses, which is doubted.

The following sections will discuss an implementation methodology for the Old Town according to the proposed Conservation Programme dealt with in chapter six. Each proposed issue will be classified according to its implementation possibly. Is it right now or are there difficulties opposed to it or does it require large amounts of money that is not available right now? And once money becomes available, but it is little, so a priority list of jobs will be proposed in accordance with the importance and logical sequence, so as not to repeat the work several times and lose money and efforts.

7.5.1. Possible Works Right Now!

During the present difficult situation it is possible to do many important steps. The Municipality should start the work by forming the MCC. It is preferable that a proper election will be held to select the public representatives from different candidates if the occupation authorities permit, if not appointing one or two influential persons will solve the problem. The professional staff should be selected from the Municipal staff; Architects and Planners or any other qualified persons might be needed, see section 7.2. After this the MCC should start the Implementation Programme by the following steps, It is worth to notice that one or more steps might take place simultaneously:

7.5.1.1. Advertisement and Publicity:

The situation at present is that the Old Town is a poor district unable to rise itself. Fundamentally these buildings are unsuitable for the poor being large and difficult to maintain. But if one could upgrade all the buildings and open spaces immediately then its present image would disappear and the present buildings would become very valuable, the whole district would rise in value much more than the money put in because the place would be desirable then its property and local values change. The old law of supply and demand operates and the City Centre should by normal economics be the most valuable area, originally all the palaces were situated there. Why does this not happen of its own accord? This is because the first people to put money in to rehabilitate are taking a big risk. Will others follow and the district go up? in which case those acting first make a fortune or will no one follow? in which

case the money invested will be lost.

So the first step the MCC should make to encourage the other rich people to invest in the Old Town's buildings is to launch a successful publicity and advertisement programme which will provide a powerful start and continuation for the Conservation Programme. This programme should be directed to three sides;

A. Residents:

convincing residents with the great value the Old Town and its historic buildings is a very important step in executing the Conservation Programme of the Old Town, particularly the owners. This could be achieved by:

1. Publishing in the local magazines, newspapers and public leaflets.
2. A general information programme about the great importance of the Old Town and its historic buildings beginning at school age would be very useful for future generations.

B. National institutions and investors:

In order to encourage rich people and big institutions in the country to invest in the Old Town and donate for its conservation programme, it is essential to publish some practical projects from the Old Town and the importance of them for the City and the country as a whole, which will benefit both the historical buildings and the investors.

C. International organizations:

Publishing guidebooks in several languages and writing letters to the international institutions and organizations, which concern conserving and developing historical buildings and sites, such as the different organizations of the United Nation; the UNESCO, ICCROM, ICOMOS and UNDP. The goal here is to get benefit from their long experience in this field and also to gain their financial and moral support.

7.5.1.2. Tenancy Legislation and Rent Control Scheme:

The initiative to start commonly comes from the local authority making the legal and financial situation suitable for private investment and development. The rental rate in Nablus as in any just and fair society should be subjected to the 'market prices' as the case of any merchandise. This up-dating of rental rate is a very basic and essential requirement to encourage people to invest more money in the housing market, and also it is one of the main conditions which attract the international organisations to sponsor development projects.

The MCC should work on the rent control scheme, which after agreement of the different parts of its equation - the owners and tenants - should be imposed to adjust the tenancy legislation. This step is a very important as it is in favour of the historical buildings, including not just restoring historic bits and pieces, but the kind of repair, improvement, and maintenance of buildings that will keep them suitable for living, according to the conservation policy. This might cause some problems to the poor population, as the conserved building's rent will be increased, which might be unacceptable and probably impractical, but on the long range even the poor will gain because when values go up the poor will be paid large sum of money to leave. The following steps could help in reducing, to some extent, the amount of the rent increase:

- A. The local authorities should offer the owners special grants, mainly for restoring buildings' exteriors and facades, as a part and not all of the expected costs.
- B. The national government (in case of political changes in the region) can offer tax relief on any expenses spent on private preservation projects such as home improvements and maintenance, including both materials and craftsmanship costs.
- C. A popular lending capability should extend facilities for long term non-profit loans, through the Islamic banking system for the buildings' owners. This type of lending could be more acceptable than the western mortgage lending system, which is considered unlawful, from the view point of the Islamic law; *Shari'ah*.
- D. The social security authorities could help each individual case of those who cannot afford the rent or its increase and whom in a great need to help them with the rent.

7.5.1.3. Training and Research Work:

The MCC should work on reviving the traditional skills and good experience in site management for builders with the necessary flexible organization in order not to inflate the conservation cost. It is possible to have the assistance of the national and international experts and institutions specialized in this field to give the essential training for:

- A. **Professionals, especially Architects and Engineers** whom can be trained by international institutions such as the International Centre for Cultural Property (ICCROM), which had been established by the Unesco in 1959, as an autonomous scientific intergovernmental organization, and it is very well known in training architects (Erder,1983).
- B. **Builders and Craftsmen:** require to be given special practical training to tackle conservation work which is different from other work - usually some builders

specialise in this field - obviously this is not so at the moment so they require help. It is possible to get assistance, in this concern, from national and international experts, such as the Restoration Teams of the Antiquity and Endowment Departments in Jerusalem, who worked for long time in restoring and preserving the Islamic quarter in the Old City of Jerusalem, and experts from other Islamic cities, Cairo, Damascus, Aleppo, and others.

- C. Technical solutions need to be practically traced out as controlling experiments for trouble areas such as roof waterproofing, stone cleaning, anti-earthquake reinforcement systems for masonry buildings, mentioned in section 6.3.3.

7.5.1.4. The Conservation Plans:

The MCC should start preparing the detailed conservation plans of action according to the general outline stated in the Conservation Programme of Chapter Six in this document. These detailed plans should be completed in full and then be agreed upon by the planning authorities, so that if public or private finance becomes available, there will be a state of readiness to immediate implementation. The preparation of the conservation plans of action should be started by:

A. Classifying and listing work:

Classifying and listing work is the first important job which should be done before any practical action on the site. As classifying work lists the existing buildings within the Old Town according to their importance. The most important buildings should be given the priority for inspection and recording work, starting from the highly important down to the less important ones. Architectural drawings, photographs and photogrammetry could be used for this purpose. Buildings' owners might be asked to share the costs of these surveys.

B. Maintenance Plan and Cost Analysis:

The structural analysis and the maintenance plan should be carried out as described earlier in section 6.3.2. Once the will to conserve has been achieved, the cost of such work will be very relevant. The real conservation cost depends on the structural condition of the building, the proposed use, the skill of the architects in devising plans and the most suitable contract procedures, and the skill and organization of the builders. W.F.J. Fussel (1968) mentioned the "rule of thumb" as a method of establishing a cost limit for building conversion and improvement of

existing buildings in comparison with similar projects or new building with the same function, here are its different steps:

- Step 1:** Decide the function of the building, e.g. offices, domestic, shop, etc.
- Step 2:** Decide the cost per square foot that this type of accommodation would cost if built as new.
- Step 3:** Decide the total floor area required if this accommodation were built as new.
- Step 4:** Calculate the total cost of the new equivalent building from step 2 and 3 above, and allow about (10%) for external and ancillary works.
- Step 5:** Take (2/3) of the total arrived at in step 4 and this will be the cost limit for conservation in most circumstances" (Fussel,1968, p.28).

The factors (10%) and (2/3) are varied from one country to another as they depend on the building materials and techniques, but can be accurately calculated by experts from practical examples.

After calculating the cost limit, a cost plan should be drawn, by allocating the available cash to the various sections of the work. Conversions, improvements, and new structures as major works, which could be divided into more detailed subdivisions. Also the recurring maintenance cost should be included and the quantity surveyor should consider and produce comparative costs of available alternative schemes for consideration by the property owner. This general layout of the cost plan will assist the architect while his detailed plans are developed. Then the quantity surveyor will cost-check these detailed plans before he starts measuring for the bill of quantities.

To estimate the conservation cost of whole the Old Town the "Cost Sample" method could be used. This method requires the calculation of the conservation cost of an actual sample from the town, which could be used as a mean for other similar areas within the conservation area (Fussel, 1968). This is one of the main cost areas of the Old Town's restoration. It can only be contemplated one piece at a time and over a long period.

7.5.1.5. Environmental Control:

The MCC in this stage could control the Old Town's environment where the residents might intend to build or make alterations within the Old Town. This could be achieved by following the issues stated in the Urban development section 6.4, particularly the Planning control - section 6.4.5 - and the Traffic control 6.4.6 in order to improve accessibility and the level of servicing indicated in section 6.4.6.1.IV. These will

positively improve the Old Town's image and the living conditions which in turn will encourage its inhabitants to stay there.

The public could be encouraged to execute important parts of the conservation operations by themselves, but under the MCC supervision and approval. Nowadays and in some parts of the Old Town, local youth neighbourhood committees has been established in order to beautify the Old Town by planting, painting, and cleaning its streets. But they lack the experience and the skill. The MCC should supervise the works of these local committees, and other private initiatives, and also the Municipality normal jobs and direct all their efforts to reach the same goals of the proposed Conservation Programme.

A. Planning Control:

I. Street pattern:

Street pattern should be controlled. Any new construction or addition action should be supervised by the MCC, and should not allow to change the traditional street pattern; in terms of building height, line and building materials.

II. Street furniture:

1. Street Lighting:

Individual private efforts should be supervised and comply with the policy, section 6.4.1.1. Any street lights might be replaced by the normal available stock in the Municipal stores, unless the Municipality needs to buy. Then these new lights should be as specified in section 6.4.1.2.D.

2. Street surface:

Preserve the existing flagstone cover as much as possible and not allow it to be replaced, but repaired with less possible changes. Any new floor covering in the Old Town streets should use the traditional patterns and materials. Flagstone should be used unless the work is badly needed and the required money is not available. Such works should be in semi permanent materials, to facilitate their eventual replacement by flagstone.

3. Vegetation:

Preserve the existing vegetation and if any new one required should comply as much as possible with the general policy explained in

the introduction of section 6.4.1.2.

4. Exterior stairs:

Any repair required for these stairs by any individual person should follow the conservation policy explained in section 6.4.1.2.H.

III. Building Appearance:

Preserve and maintain the existing elements; windows, doors, shopfronts and canopies, each by their owner as much as they can afford. and if any replacement is needed it should comply with the conservation policy dealt with in section 6.4.1.3.

IV. Boundary Walls:

The same approach followed in dealing with the building appearance could be applied with boundary walls, section 6.4.1.4. In special cases it is possible to place indoor garages to help solving the parking problem within the Old Town.

V. Infrastructure and Public Services:

The Municipality should carry out its normal responsibilities towards the Old Town, which should be providing in any case:

1. Regular street cleaning and rubbish collection.
2. Healthy drinking water supply.
3. Continuous electricity services.
4. Effective drainage and sewage systems.

The present infrastructure systems should be kept as long as there is not money for large scale development, but if any urgent or small scale work is needed it should be carried out according to the new plans prepared by the MCC as mentioned earlier in section 6.4.2.

VI. Gap Sites:

During the Israeli Military Occupation rebuilding the afflicted and gap sites is unlikely unless the private sector has the required money to cover required expenses. Until more funds are available these sites might be converted into

public gardens and children playgrounds after maintaining their structural stability and public safety, but without losing any historical evidence. Politically demolished buildings are unlikely to be rebuilt during the Military Occupation. The following aspects could reduce the danger of creating more gap sites within the Old Town during the present political situation:

1. Take all the possible means to stop the physical fabric deterioration of the traditional buildings and structures:
 - a. Encouraging regular maintenance to the physical fabric of the historic buildings.
 - b. Supporting the weak structures at least temporarily by using wooden frames, until enough grant is available and the comprehensive conservation scheme takes place.
 - c. Repairing roof leakage so as to allow the structures to dry properly.
 - d. Reducing the loads on top of the weak structures, mainly heavy water tanks.
2. Stop by all available means any further demolishing of the traditional buildings and structures, by either the inhabitants or the occupation authorities, Under the present situation it is possible to initiate a publicity programme on the international level to put sufficient pressure on the Israeli Military authorities to stop any further demolitions of the Old Town's historic buildings, the United Nations organizations, particularly Unesco can help in this matter.
3. Encourage the residents to maintain regularly their traditional buildings, under supervision of the MCC.

B. Traffic Control:

It is possible during the present situations to control traffic without much spending on improving services. The main important point in traffic control is not to forbid the residents from doing anything until the proposed substitute is ready, for example not to forbid vehicles using the main streets unless the servicing depots are ready. It is possible during the present situation to control traffic:

- A. Direction to increase its efficiency;
- B. Speed, introduce twenty Kilometre per hour as the maximum speed within the Old Town's streets.
- C. Time, as described in section 6.4.6.1.IV.2 Forbidding vehicles from entering the two main streets of the Old Town, unless there is an emergency outside the

prescribed times.

- D. Parking:** by forbidding on-street parking, encourage indoor garages and providing enough parking places within the open spaces outside the Old Town.

7.5.1.6. Rehabilitation of Private Buildings:

The private sector should be encouraged to rehabilitate their own buildings at any time, and in accordance to the general guidance of section 6.5 of the Conservation Programme and on their own expenses, unless they individually arranged for special grant for this purpose.

7.5.2. Priority Jobs Once Money Becomes Available?

It has to be stressed that public funds are limited and that it will, therefore; be impossible to conserve all that one would like in a short time. So once money becomes available even if it is only a little the first step the MCC should take is the selection of priorities and the division of the whole project into stages according to the importance of every action and the available funds.

7.5.2.1. Urban Development:

Urban development is the responsibility of the MCC in co-operation with the Municipality. Restoration of areas should be given the priority rather than single buildings, so that results could be clearly seen and the complete environment raised. So it is preferable to divide the conservation area; the Old Town into smaller zones. Each zone has a number of buildings contain among them a piece of public open space, see figure (7.1). The priority should be given to the zones within the commercial core of the Old Town, and starting with those zones where the most important buildings or structures are located. Also the priority should be given to preserve buildings rather than rebuilding or new construction projects within the conservation area. Conservation work in each zone should have the following priority order:

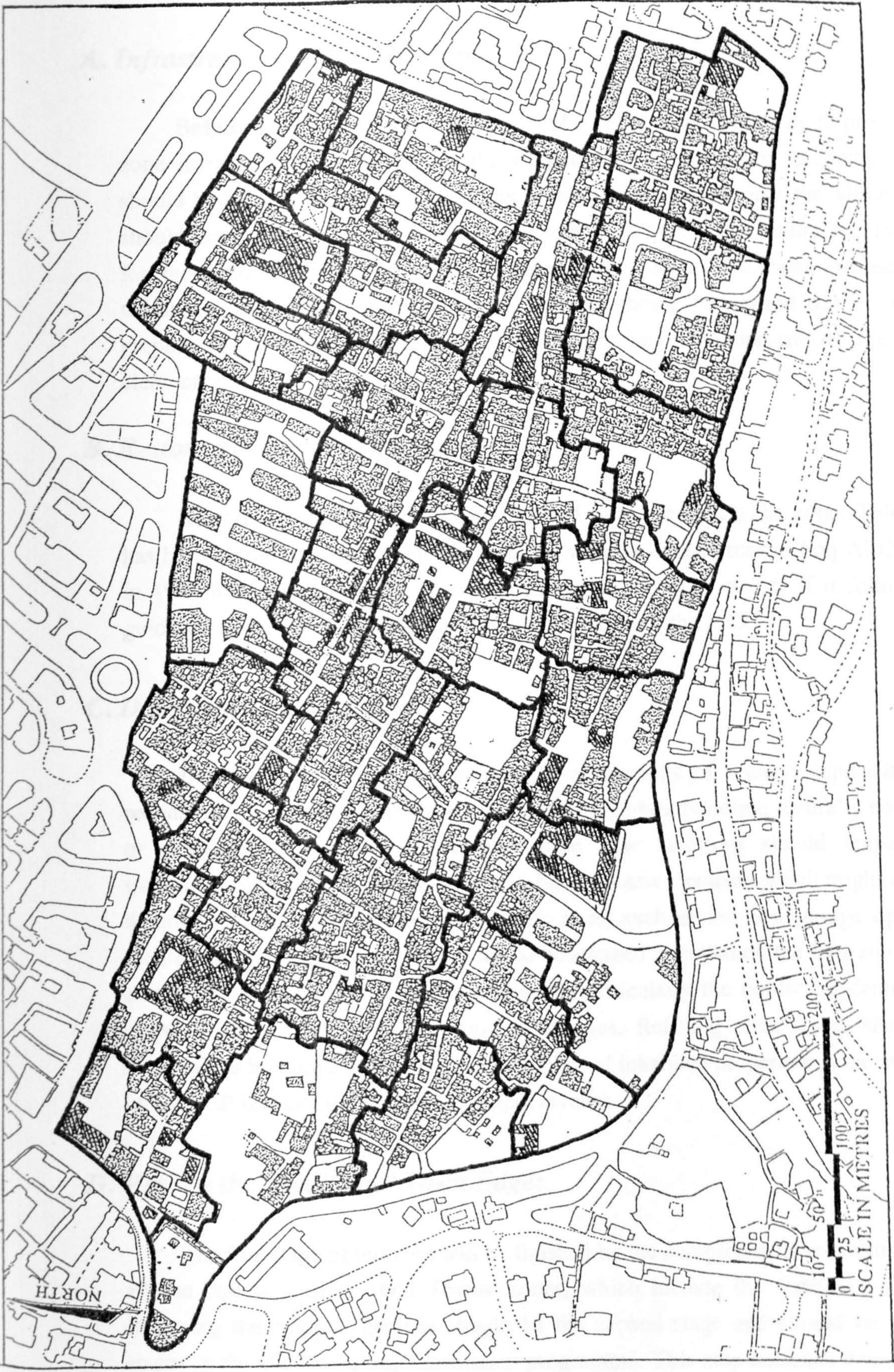


Figure (7.1): The Old Town's Implementation Zones.

A. Infrastructure and Public Services:

Before starting any Urban Development it is essential to start by improving the zone infrastructure, according to the Conservation Plans earlier prepared, which should be designed to hold future needs. Beside the normal services the Municipality should provide, which were mentioned in section 7.5.1.5 - A.5, future requirements for modernization or replacement of un-effective part of the existing electricity, telephone, water, sewage and drainage systems should be carried out or at least prepare the required underground ducts before any development of the urban elements.

B. Restore Traditional Street-scape:

Restore the traditional street pattern and furniture within the zone. This work has been already started by the Municipality when it tried to restore Soq Al-Qumash in 1987-8. But the required work here should be of better quality if it follows the guidance of section 6.4.1, with the direct supervision of the MCC.

C. Development of Gap Sites:

Development of gap sites require large amounts of money, especially if a reconstruction should be carried out for a very important building; naturally collapsed or politically demolished. Especially these new buildings should respect the traditional pattern and building materials, but with new elements which might exist to distinguish between them and the historic ones, such as the new garage openings mentioned in section 6.4.1.3-1.g. It has to be stressed here that on the long run all the collapsed buildings should be reconstructed, particularly the politically demolished ones, as soon as the political situation changes. Refilling present gap sites with harmonious buildings will increase the number of inhabited properties in the area and in turn will increase the annual Municipal revenue.

D. Restore the Traditional Town Edge:

The first stage of this step will be finished by the completion of rehabilitation of all the buildings of the Old Towns' zones, which include the fortified buildings. Restoring the external gardens should be the second stage and should be the last stages in the Old Town implementation programme. This step demands demolishing the un-important buildings at present along the traditional edge of the Old Town,

shown in figure (6.8). It is predicted that these demolitions will face a lot of un-acceptance by their owners, and because of the existing political situation it will be very difficult to implement. Though it should be considered as a long term aim that must be kept in mind and implemented when ever the opportunity arises.

While waiting the right moment to arrive it is possible to start restoring the existing open spaces as the traditional gardens, within which parking spaces could be placed as mentioned in section 6.4.6.1-D.V. 3-iii. Also it is possible to replace the temporary buildings on the northern parts of Haret Al-Habalah with new homogeneous buildings which comply with the Planning Control guidance; section 6.4.5.

Before the right moment arrives the buildings to be demolished should be notified in order that their occupiers have time to find other accommodations. When the situation allows, the families remaining in these buildings should be offered alternative accommodations and the market value of these buildings should be paid to their owners unless they accepted alternative accommodation within the Old Town which the MCC owns.

E. Traffic Improvement:

Once money is available, it is possible to improve the complete new servicing system within the Old Town, and which have been proposed in section 6.4.6.1.IV and V, which are:

- I. Build the proposed servicing routs, shown in figure (6.10).
- II. Build the three proposed servicing depots, also shown in figure (6.10).
- III. Indoor and on-street parking places within special location following the detailed Conservation Plans. An example of which is shown in the case study chapter
- IV. Build required multistory parkings on the Old Town edge, if required.

After providing all these facilities, the whole items of traffic control - section 6.4.6.1 - should be enforced fully. The vehicular servicing situation of the Old Town's building should be kept under regular inspection to find the most beneficial from it without spoiling the traditional urban structure.

7.5.2.2. Buildings Rehabilitation:

Un-functioned buildings should proceed the functioned ones unless they have **Unsatisfactory uses** and which could be good attraction to encourage the rich to invest in the Old Town. Al-Wakalah Al-Garbiyyah, for example has a very bad structure, as many of its upper floors are badly affected by the 1927 earthquake, which consequently are unused. Also the used parts are occupied by unsatisfactory uses, copper-smith and pipe storage. So this building within its zone should be given the priority. The same case could be when dealing with the Khan Al-Tujjar, bath-houses, and cAbd Al-Hadi, Al-Bayk and Al-Nimir palaces, which all should be given the priority over other buildings within their zones. Adapted uses for these buildings should follow the guide lines discussed in section 6.5.2. Such early finished rehabilitation work could be used to advertise the whole Conservation Programme and help rising required funds. Also the rehabilitation of deserted houses will provide sufficient substitutes for rehousing those who will be moved out of their buildings while they are being improved.

Part Four

The Case Study

Chapter Eight

*Conserving
Haret Al-Qaysarriyyah*



Figure (8.1): Location of the studied area within the Old Town.

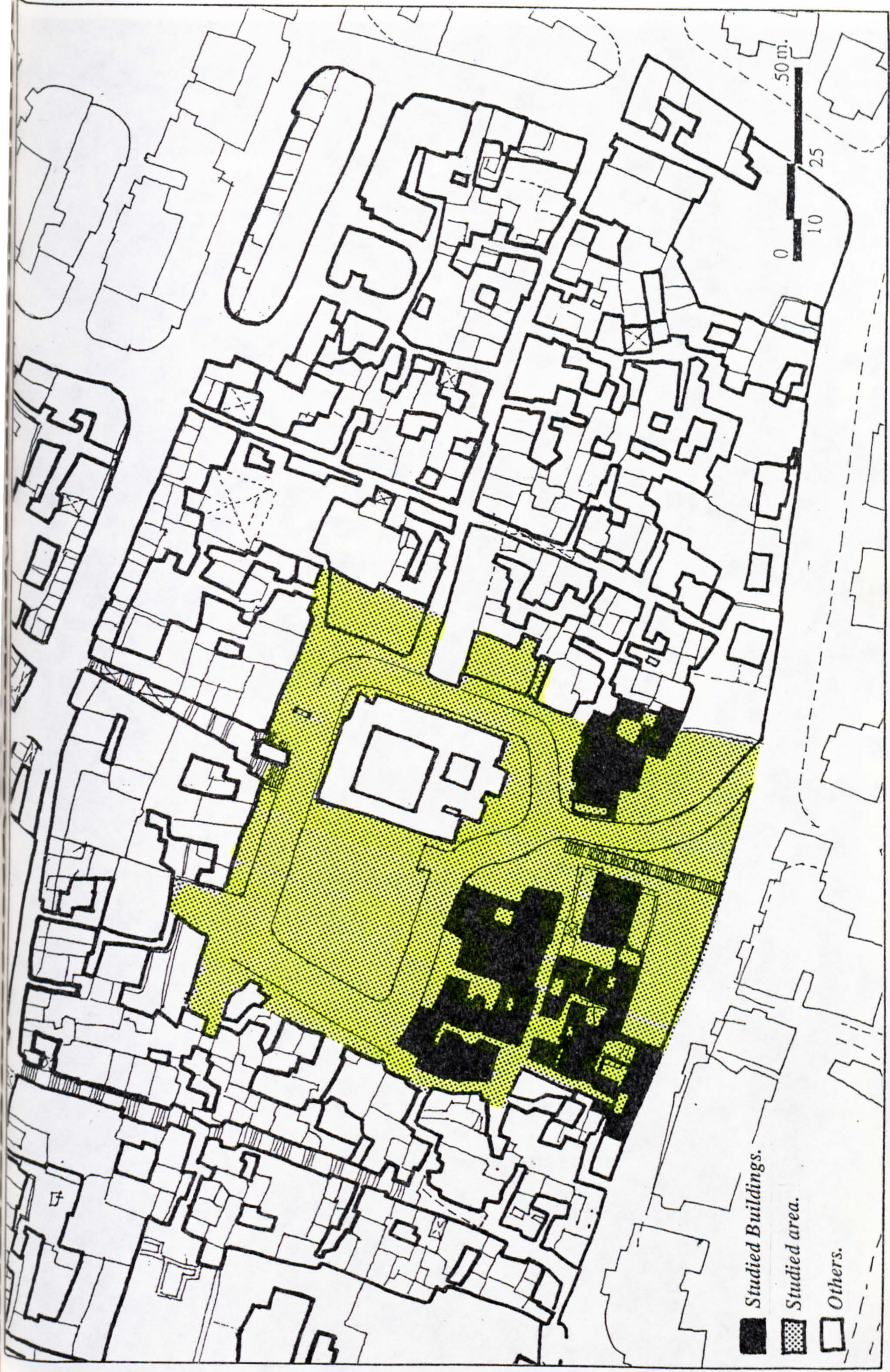


Figure (8.2): Location of the studied area within Haret Al-Qaysariyyah 222



Figure (8.3): General view of the studied area; looking southwards.

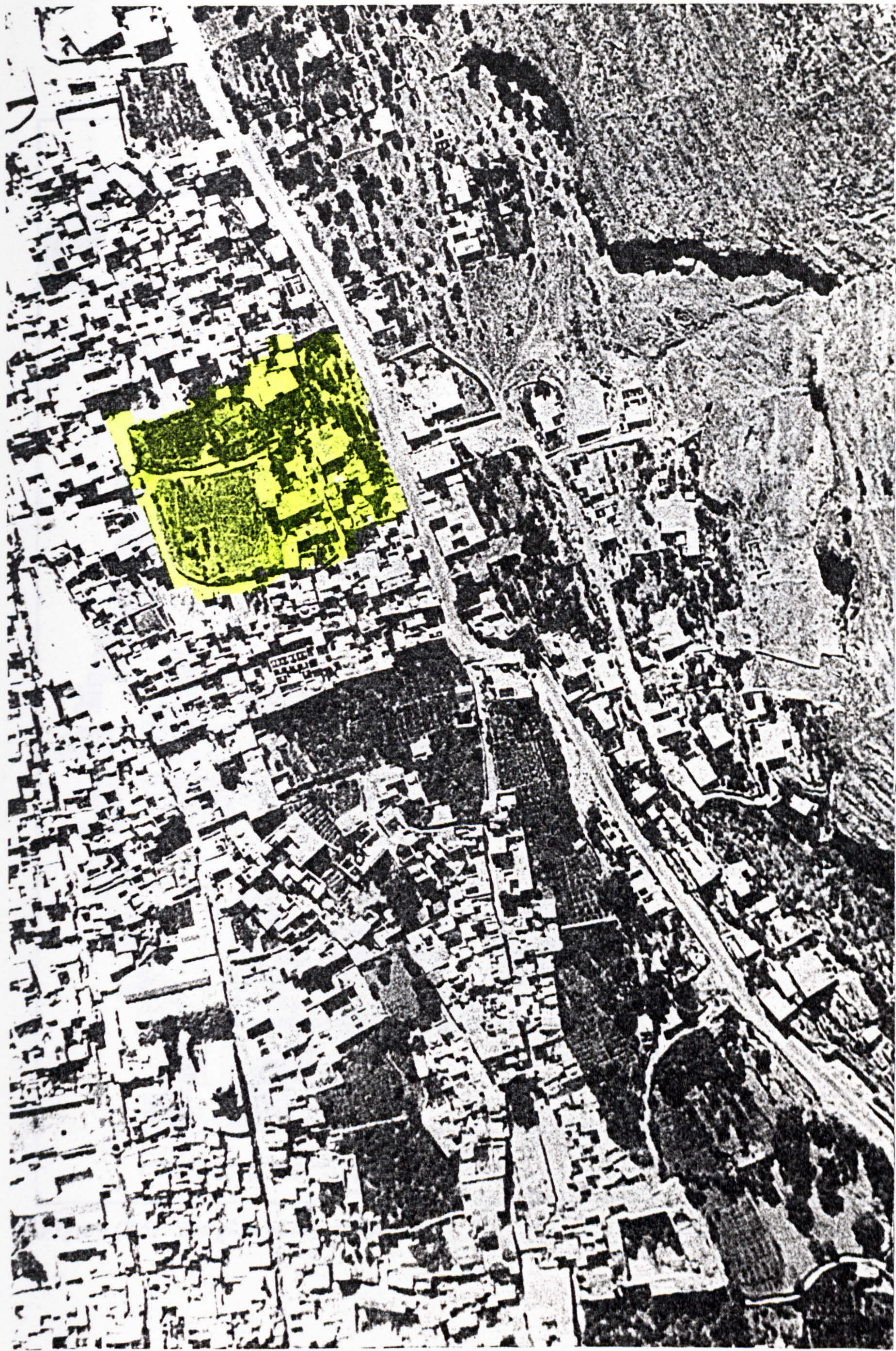


Figure (8.4): An aerial photo of the studied area in 1944. Source: Courtesy of Mr F. Ya'ish, 1991.

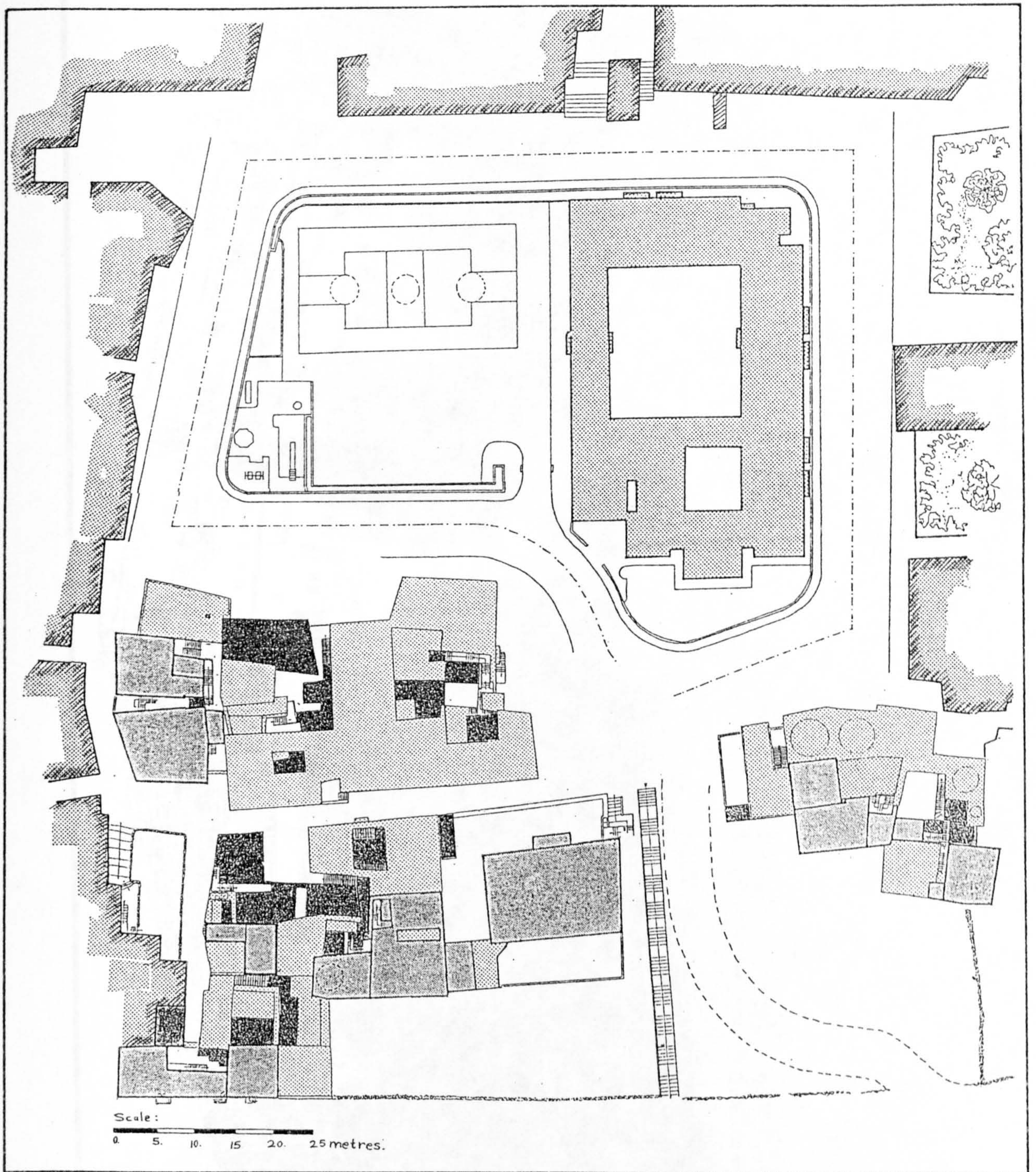


Figure (8.5): Site plan of the studied area.

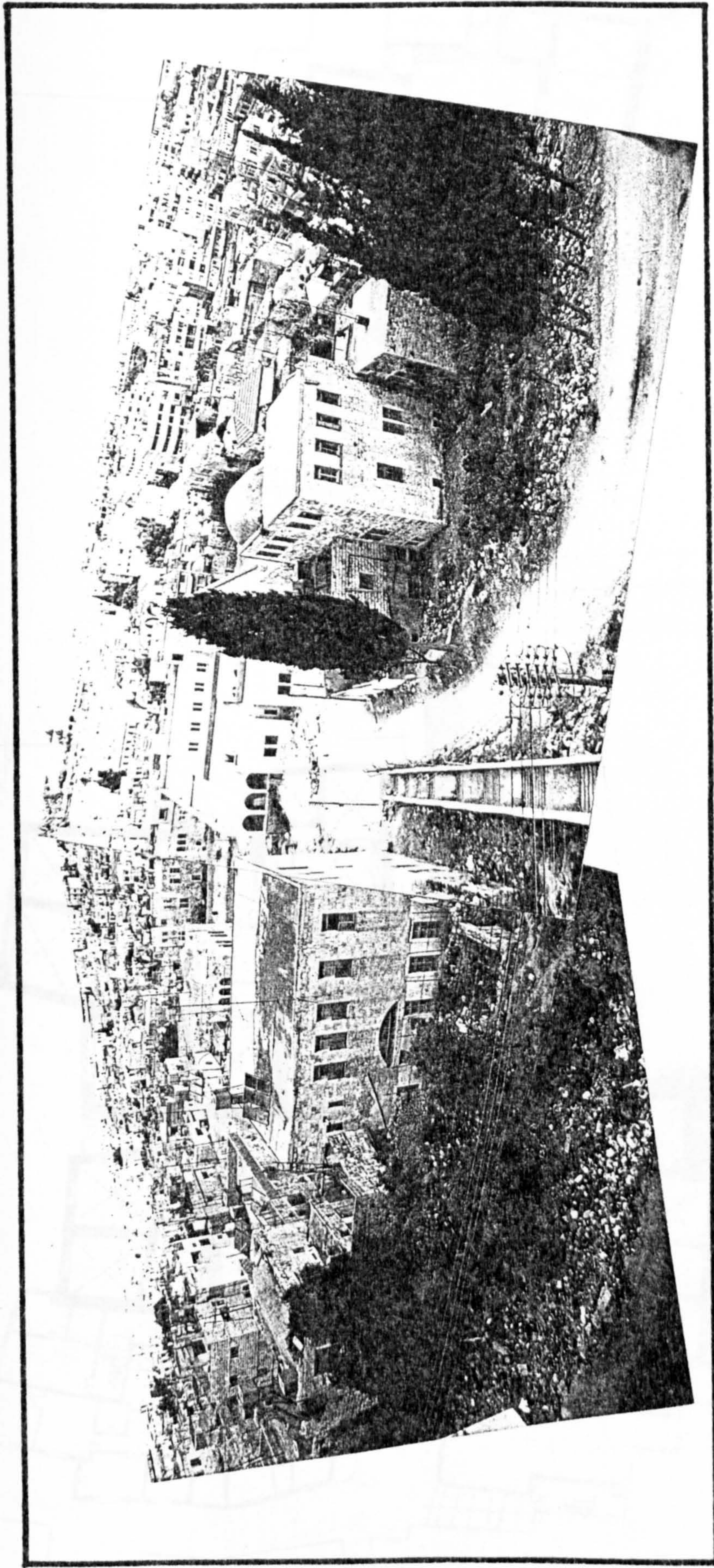


Figure (8.6): General view of the studied area; looking northwards.

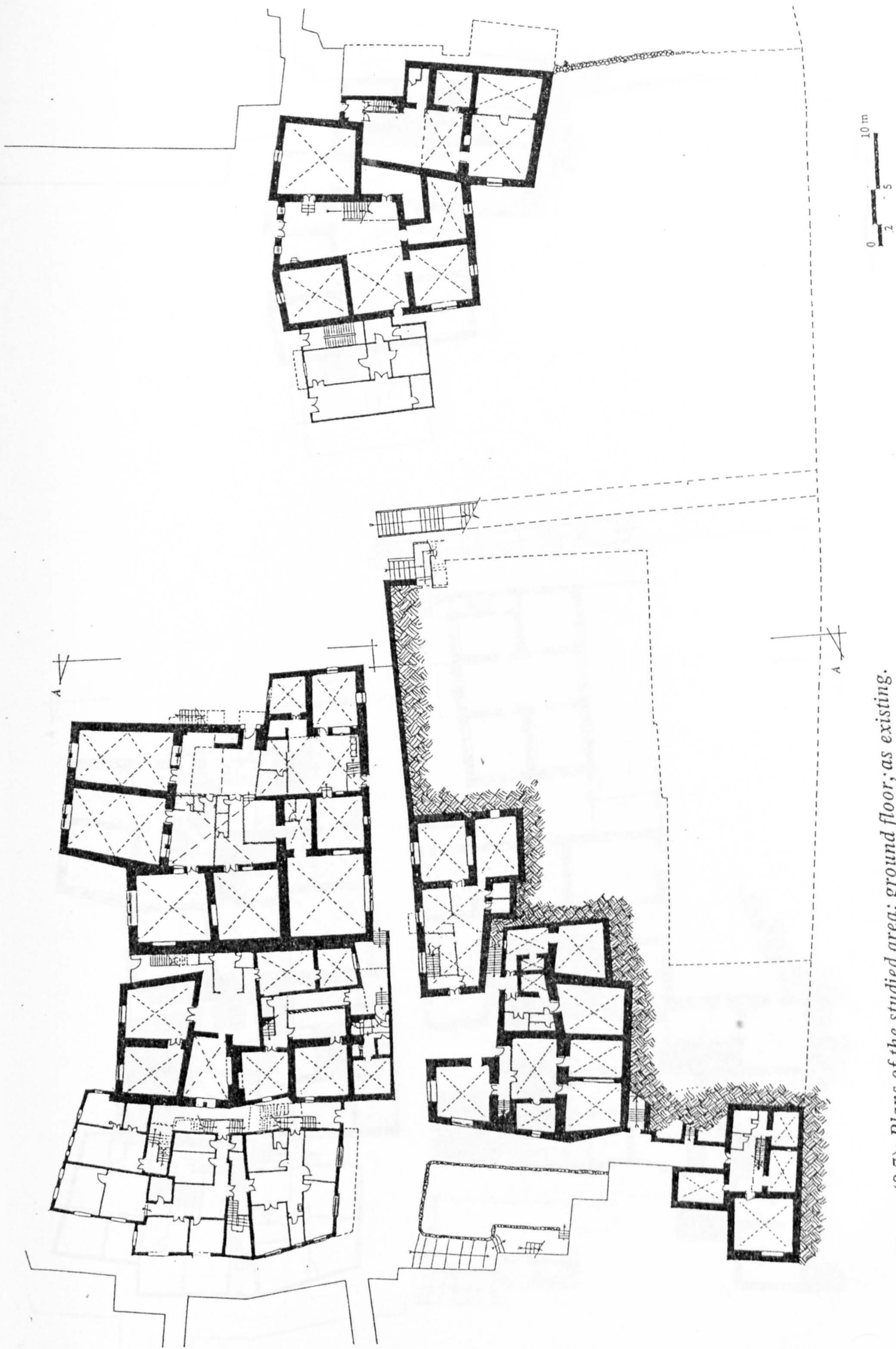


Figure (8.7): Plans of the studied area; ground floor; as existing.



Figure (8.8): Plans of the studied area; first floor, as existing.



Figure (8.9): Plans of the studied area; second floor, as existing.

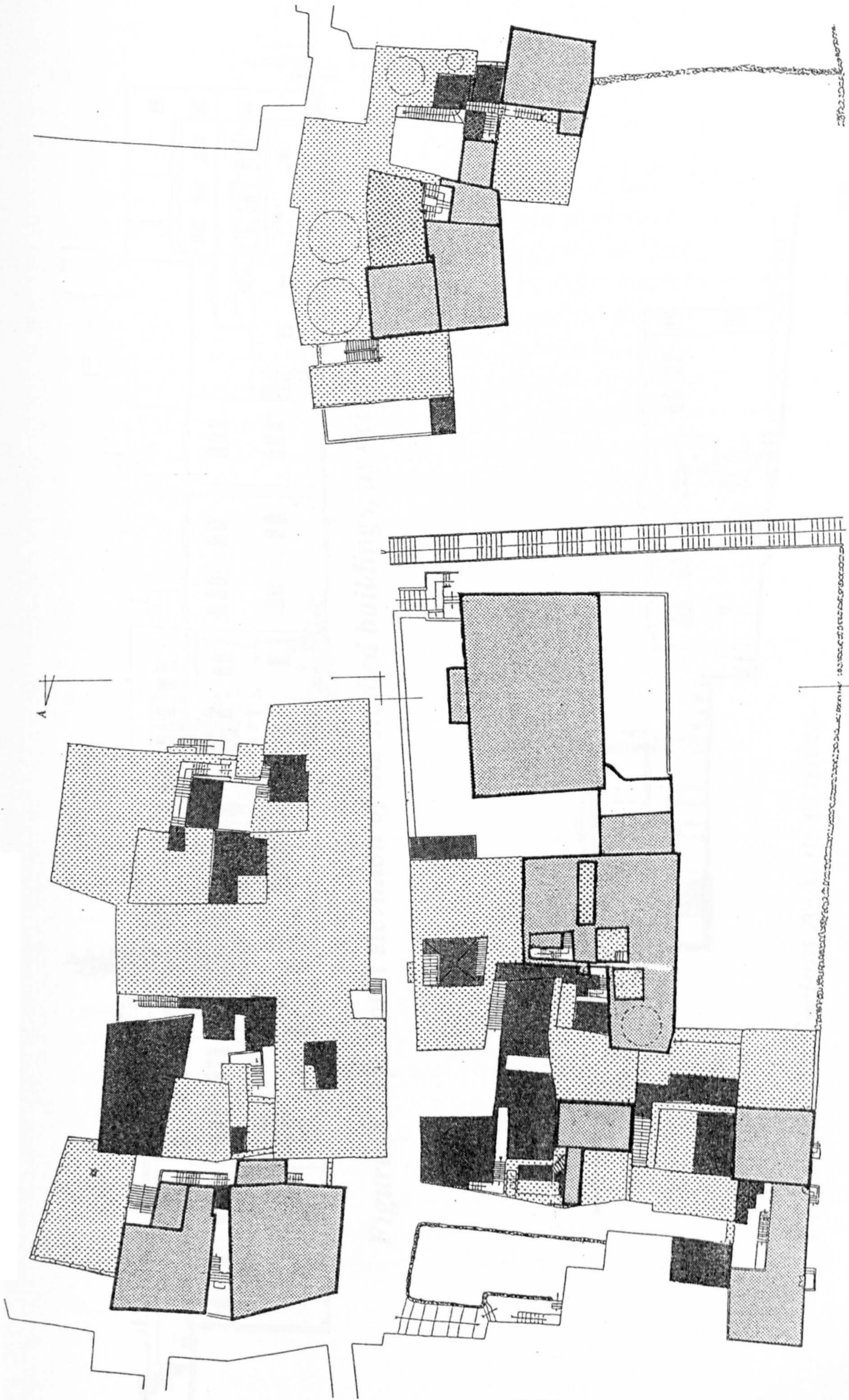


Figure (8.10): Plans of the studied area; roof plan, as existing.



Figure (8.11): North elevation of the studied buildings, as existing.

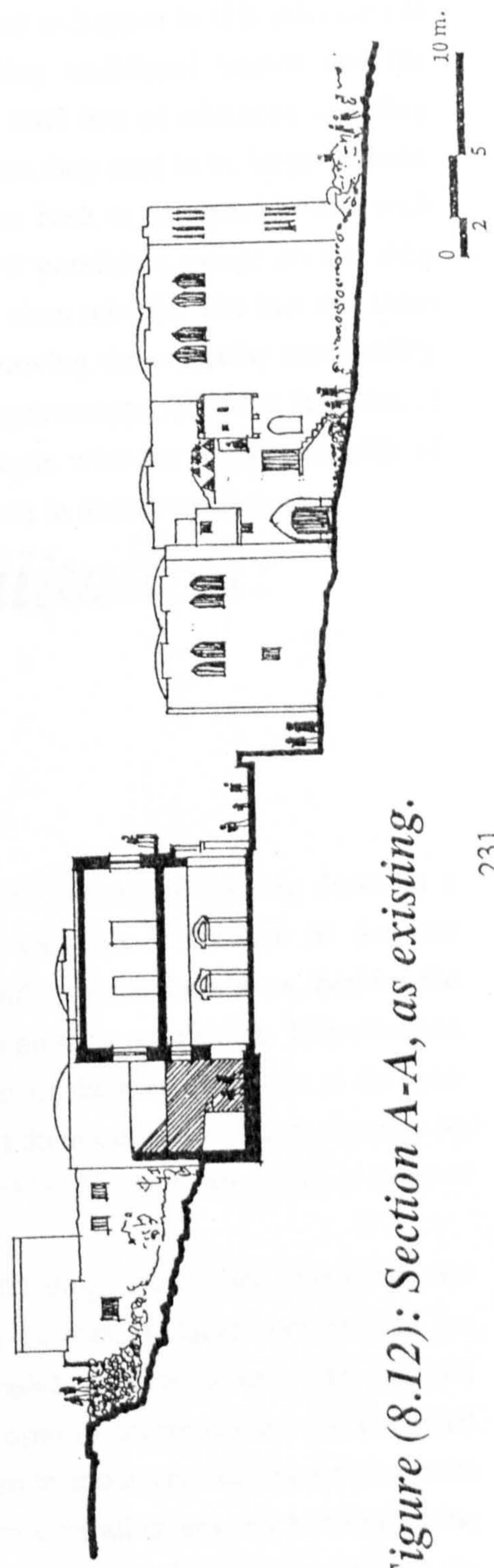


Figure (8.12): Section A-A, as existing.

8.1. Objectives:

The intention in this study is to show what is expected to happen to this selected site after conservation, in terms of up grading the existing traditional houses and the environment surrounding. The traditional houses have little bits of additions and they have been carved up into make much small houses, where they used to be larger houses. So the objective of the case study is to turn these houses back to courtyard houses with greenery, also with a reasonable vehicular access, and if possible a garage so that they can effectively compete for inhabitants with the middle class suburbs. The fact that there is a new recently opened road in the site will help improving the vehicular accessibility and raising the area level to fit the twentieth century requirements. All these facilities, if made available, will attract back into the town the people who are actually capable of spending sufficient money in these buildings to keep them in decent condition.

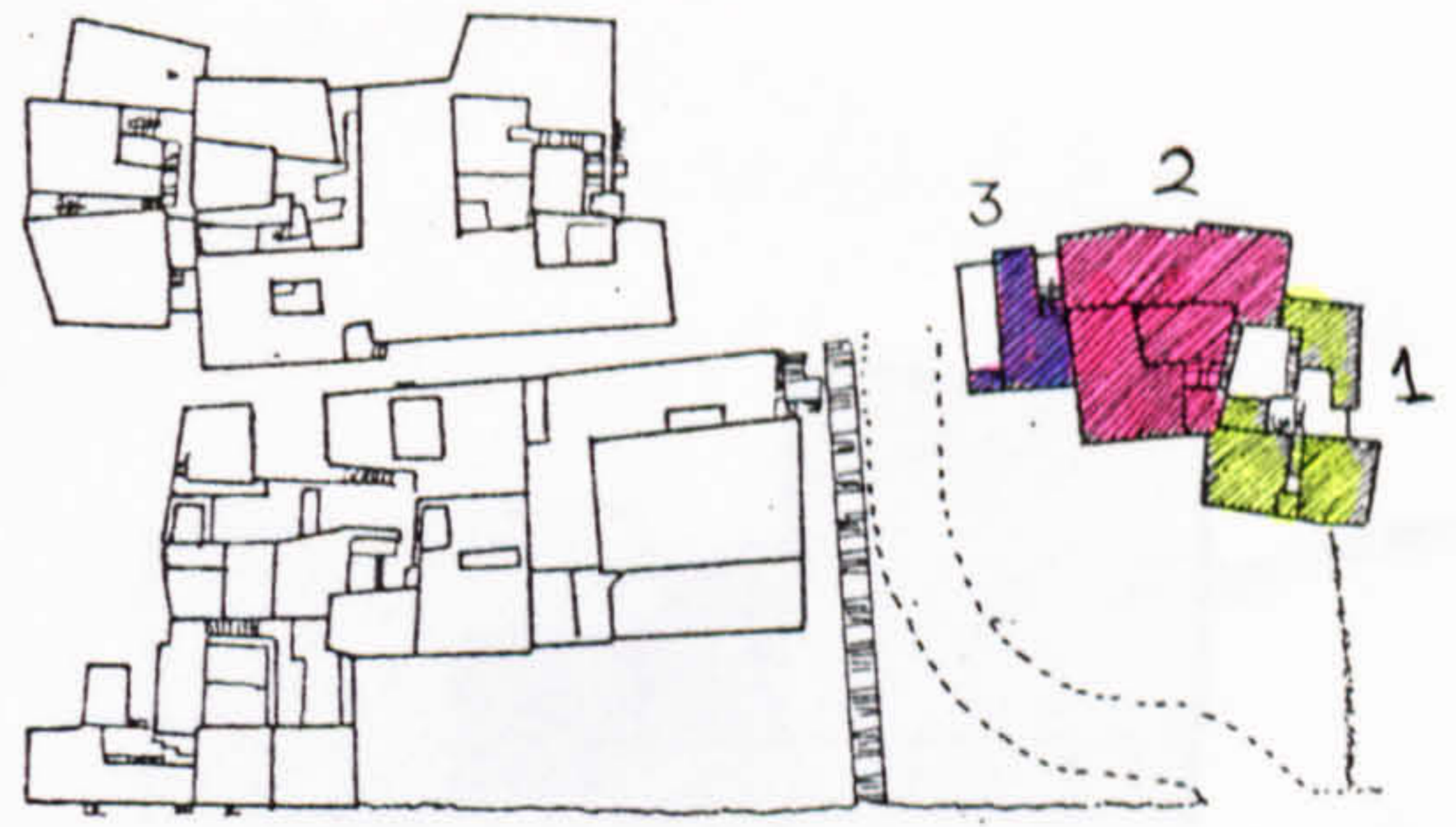
8.2. Buildings Rehabilitation:

8.2.1. Existing Condition:

The Old Town, as previously mentioned, is in the process of running down in a manner that is typical of any neglected historic town. This is because of the low efficiency both the properties and the open spaces, and in particular streets, besides the recent very difficult living conditions under the Israeli military occupation. This situation made people not to want to live there, and the richer of them to move out to the new suburbs. The owners of the deserted buildings just let them out and trying to squeeze as many people as they can to get as much rent as possible. All they care about is to have the maximum money without spending any.

This situation is obvious in this site. The eleven buildings are divided into forty-nine housing unites, which, of course, was not the case in the past. Building number four; for example; is a traditional courtyard large house consists of two storeys. The original building design elements indicate that this building used to accommodate one extended family, each of its nuclear families lived in a separate room and all shared the basic domestic facilities; kitchen and WCs. Nowadays; this building has ten housing units; only one is occupied by its owner, seven units are occupied by different tenants and the other two are deserted. The following pages show the existing condition of the studied buildings.

*Figure (8.13):
Buildings no. 1, 2 and 3:*



Location within the site.



Plate (1.1): South-west elevation of buildings 1, 2 and 3.

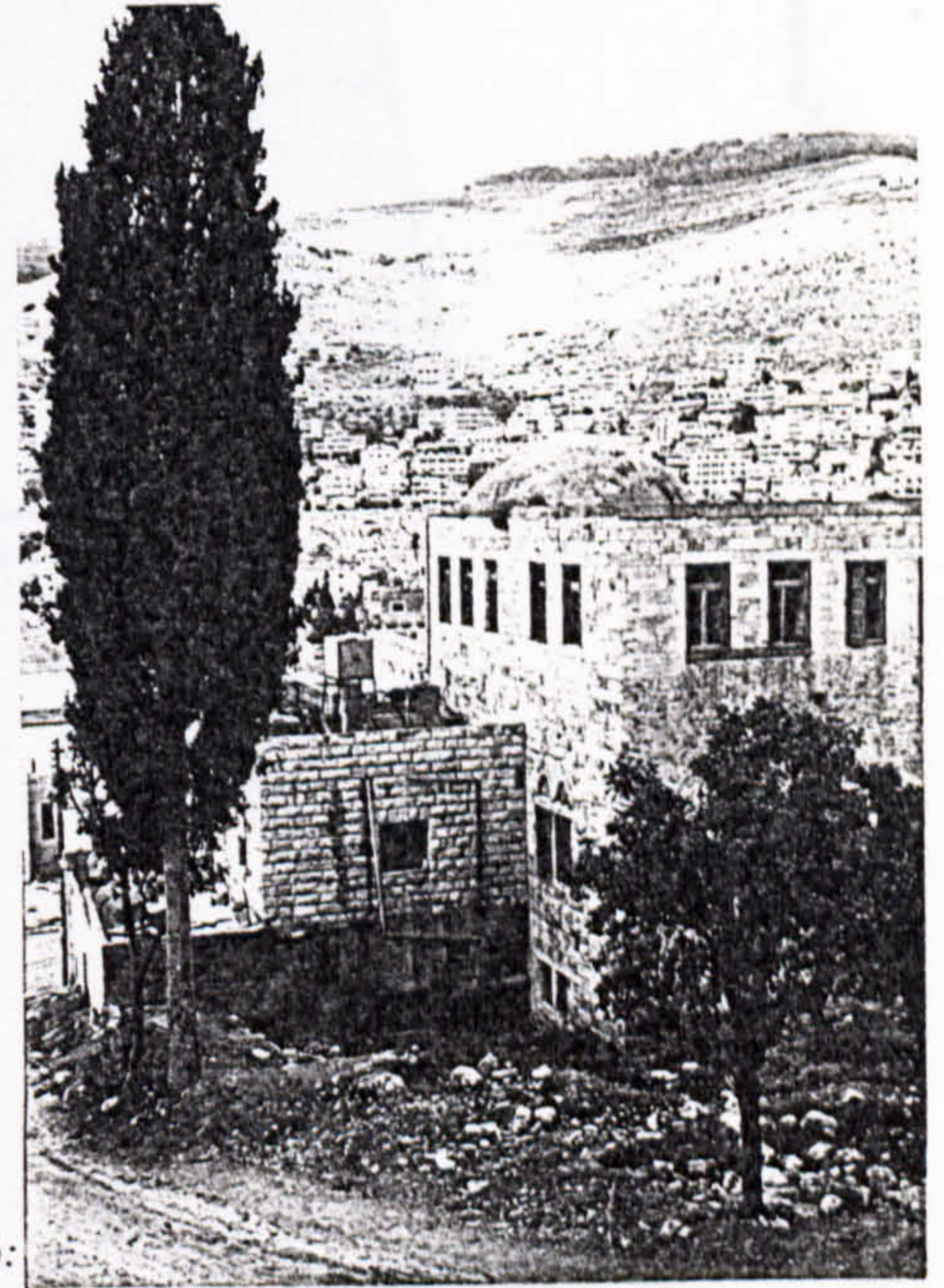


Plate (1.2):

A closer look to the south-west elevation of buildings 1 and 2.

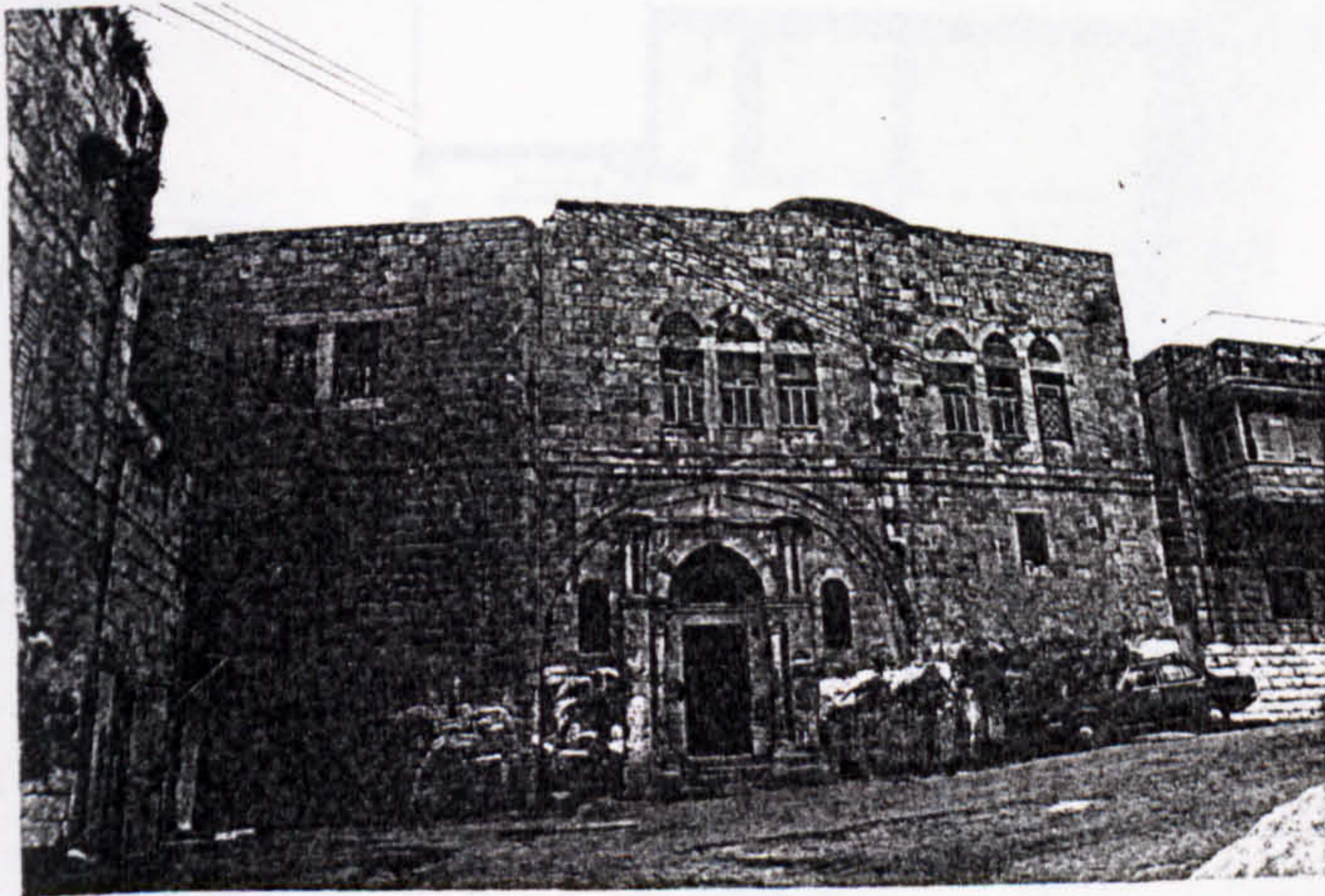


Plate (1.3): North elevation of buildings 2 and 3.



Plate (1.4): A closer look to the south elevation of buildings 1, 2 and 3.

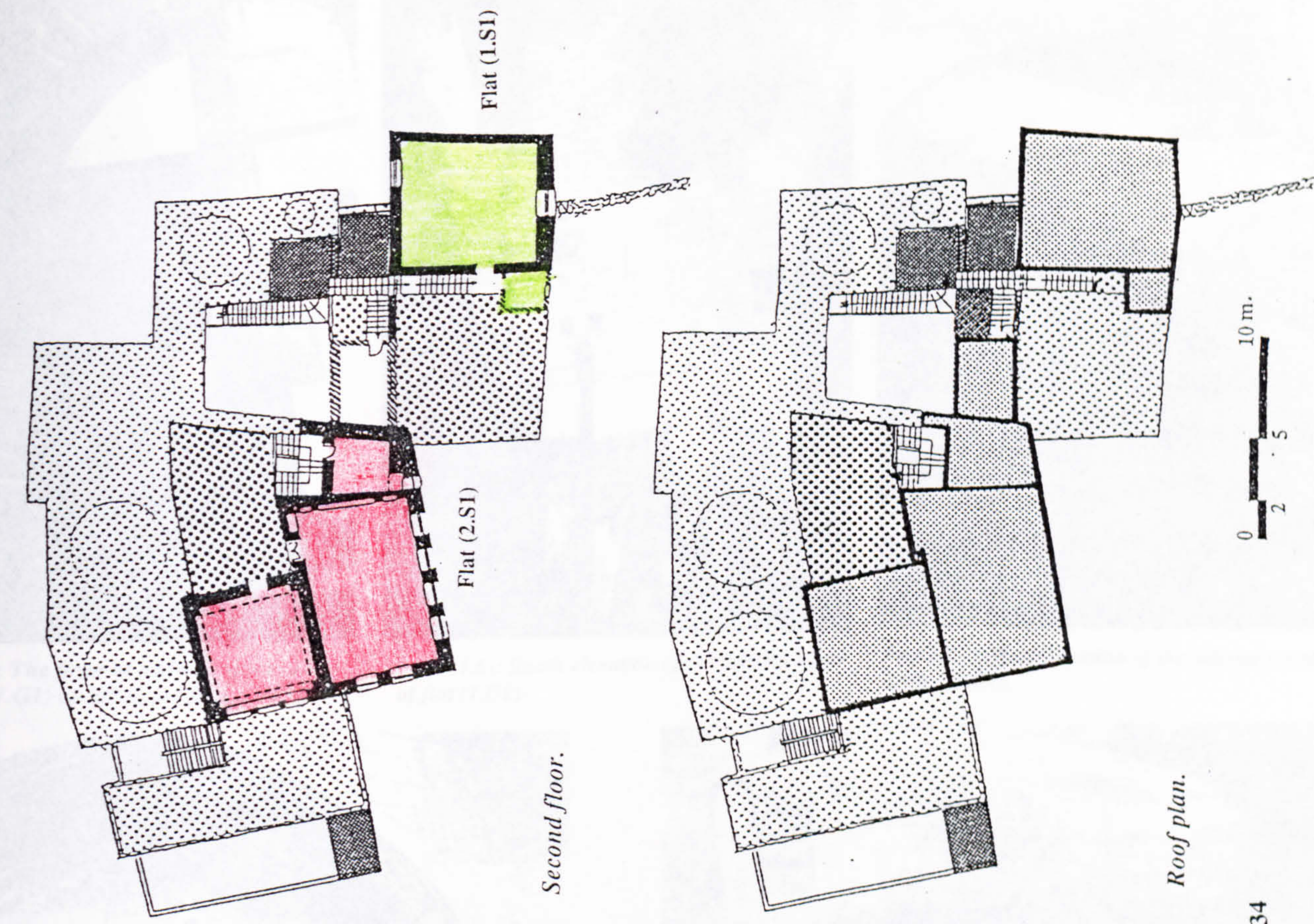


Figure (8.14): Plans of Buildings 1, 2, & 3, as existing.



Plate (1.5): The foyer of main entrance; on right flat (1.G1) on left upper flats.

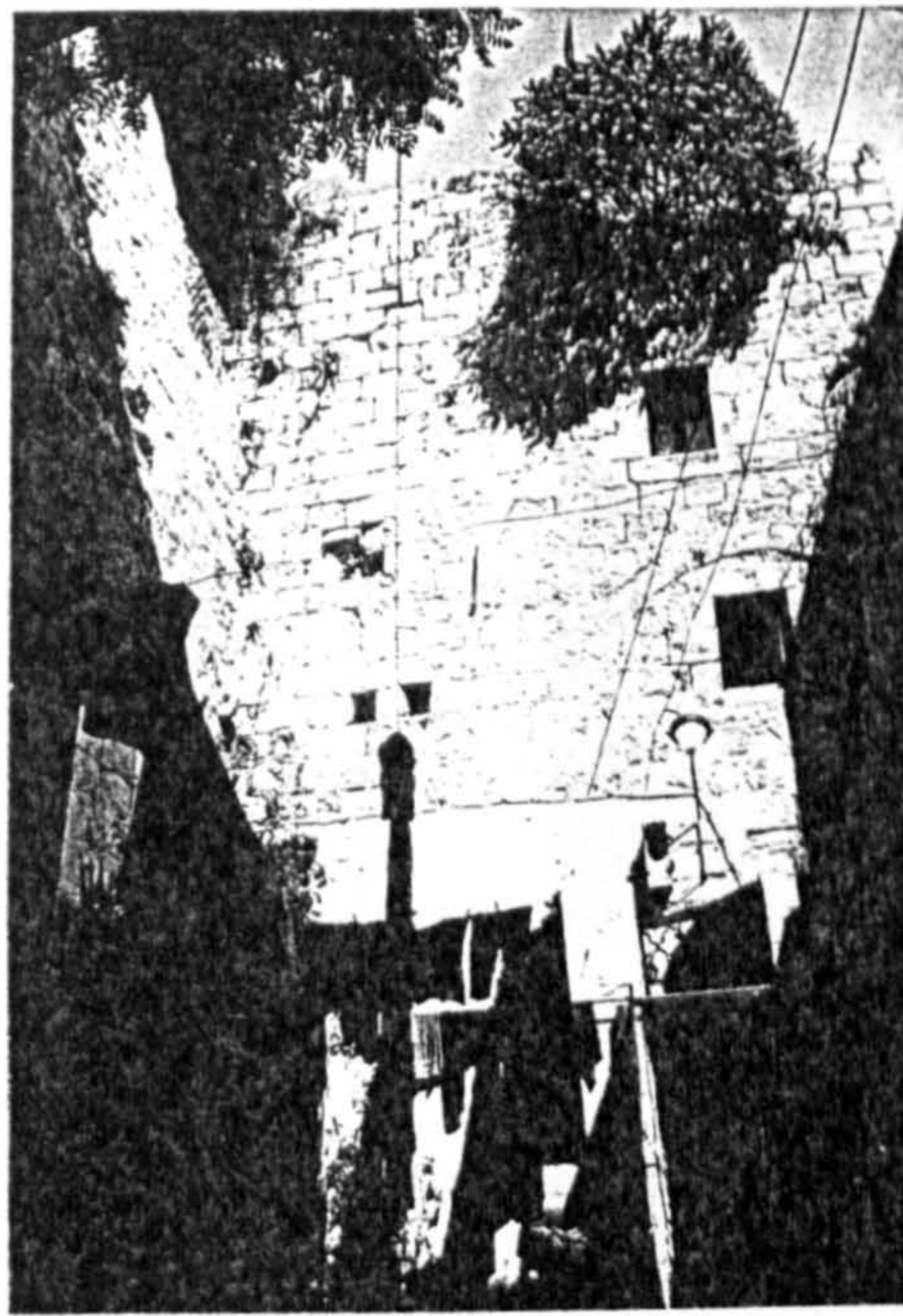


Plate (1.6): South elevation of the interior court of flat (1.G1).

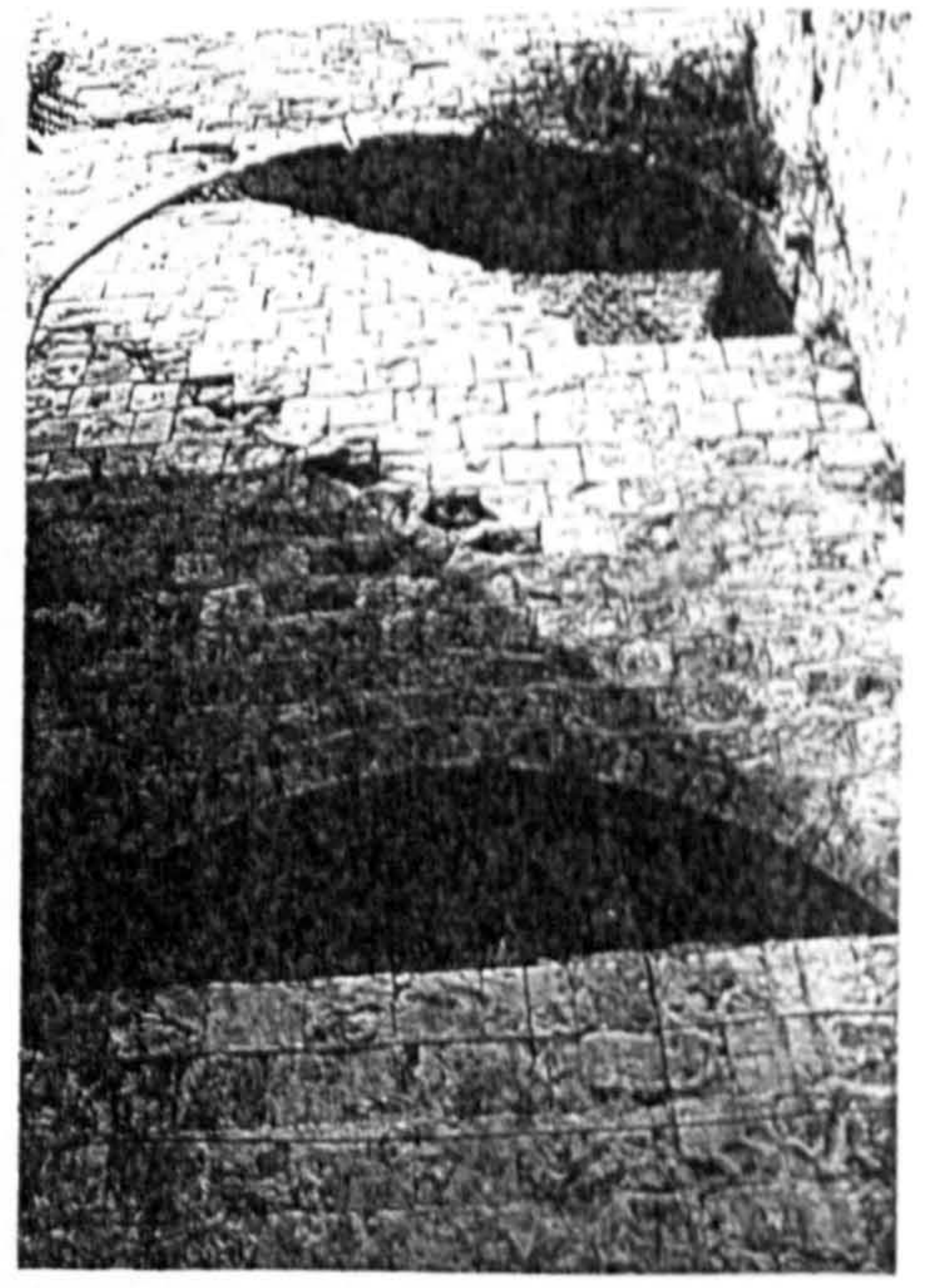


Plate (1.7): East elevation of the interior court of flat (1.G1).



Plate (1.8): The covered part of the interior court of flat (1.G1).

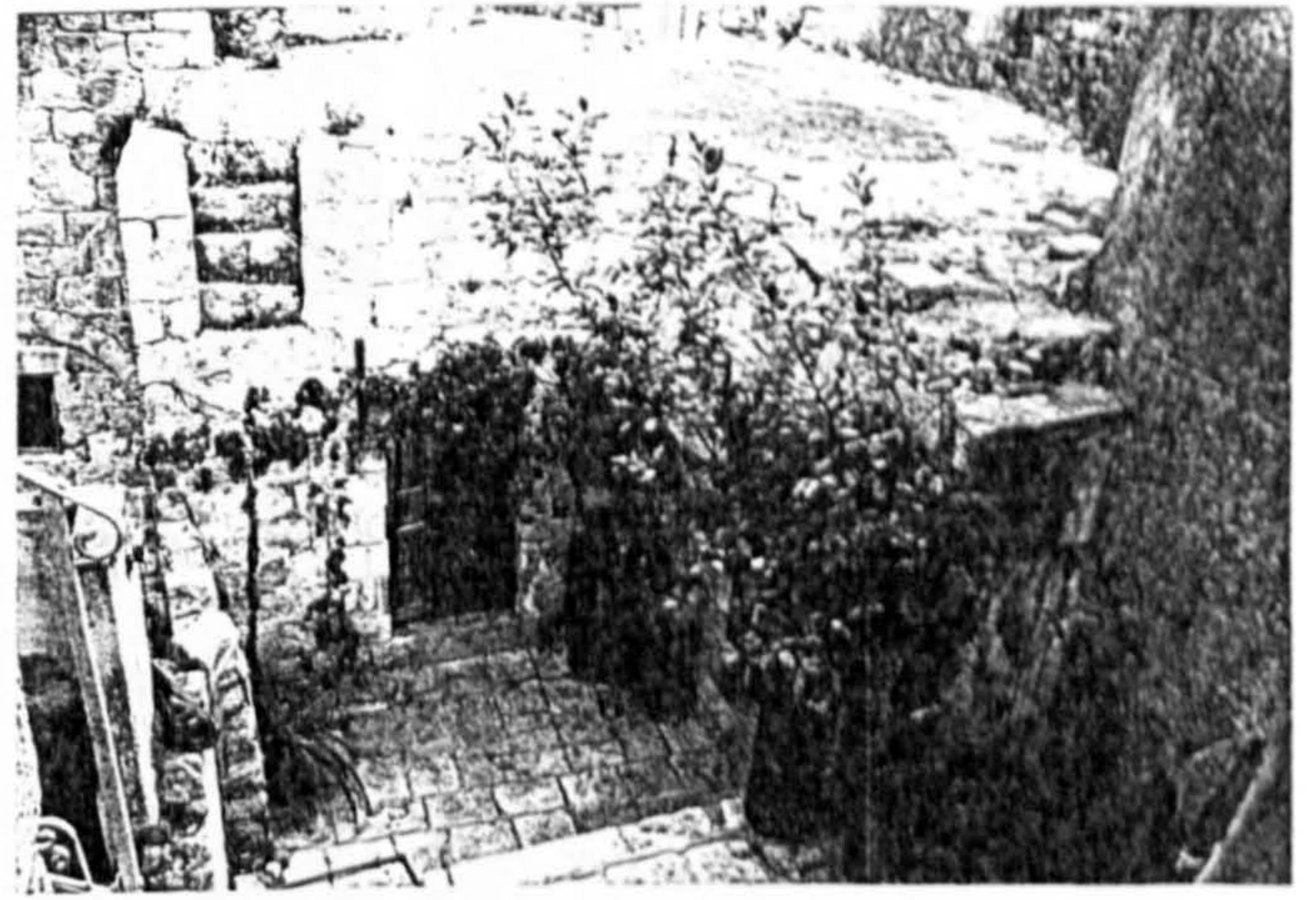


Plate (1.9): First floor terrace looking south.



Plate (1.10): First floor terrace looking north.
Figure (8.15): Building no. 1, Existing Condition.



Plate (1.11): First floor terrace and its relation with the ground floor court; notice-the screen wall on the main stair edge.



Plate (1.12): Stairs leading to the second floor flats; notice their unsafe design.



Plate (2.1): Main entrance of building no.2; notice stone bad condition.

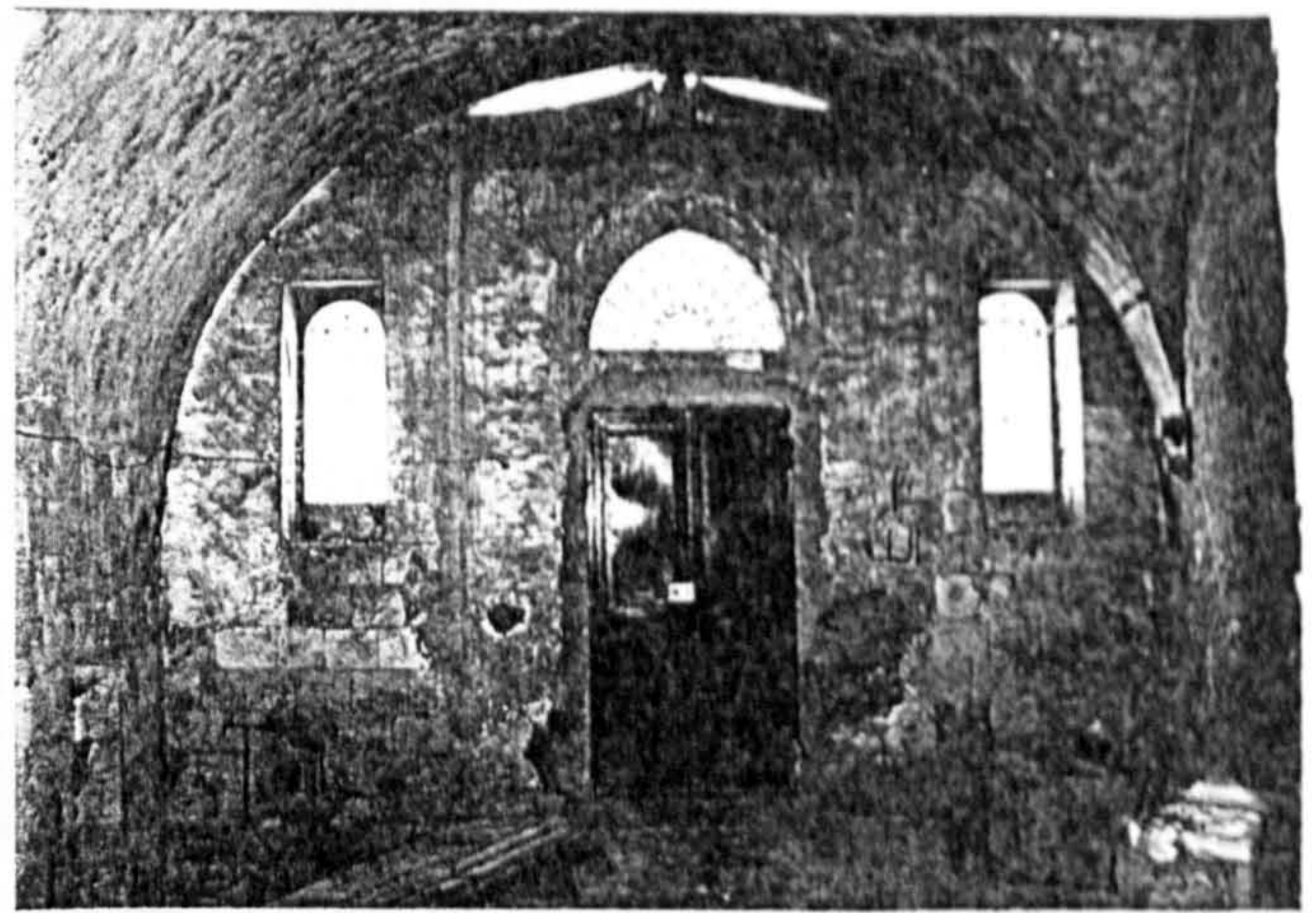


Plate (2.2): Entrance hall; large but useless.

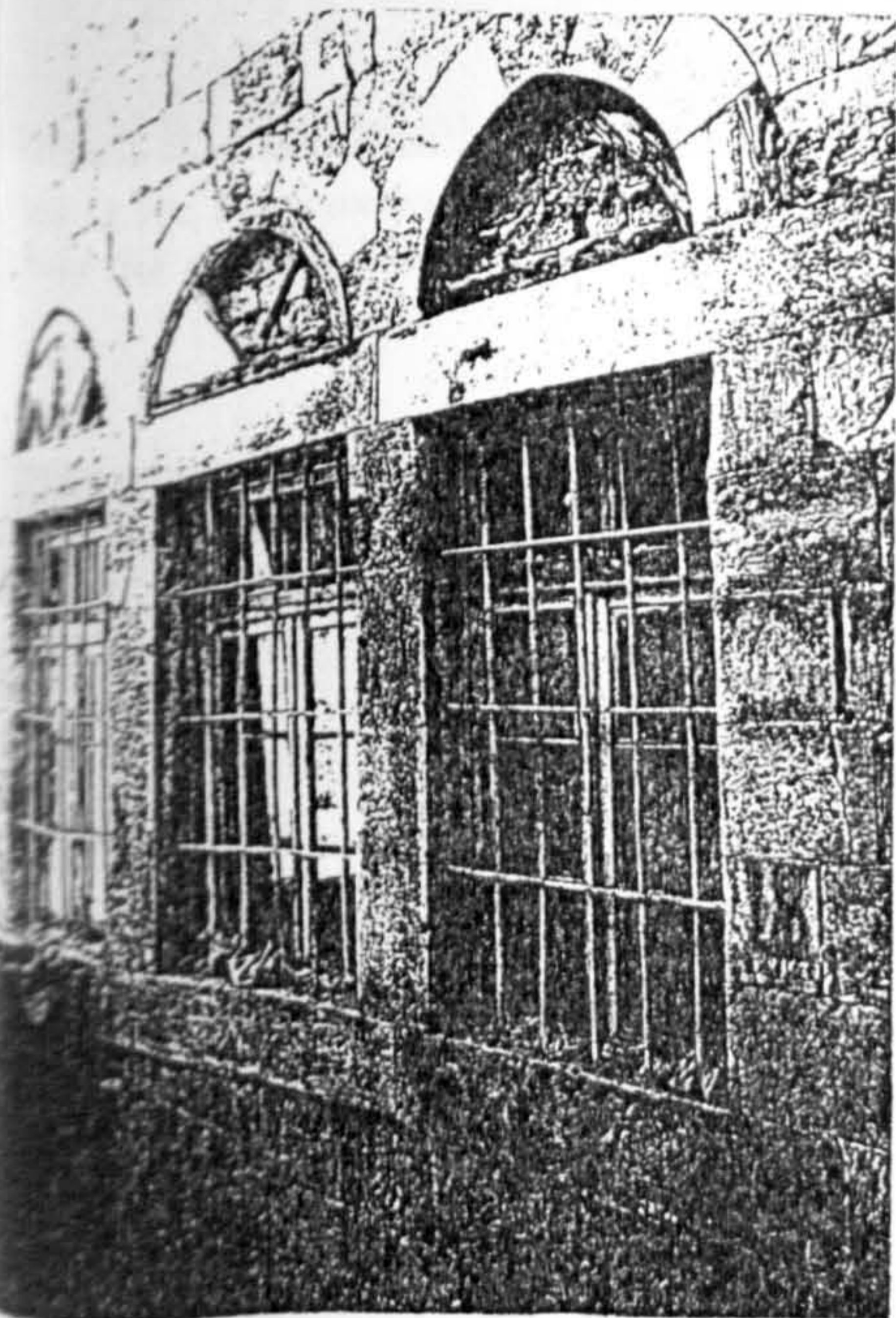


Plate (2.3): Windows of the west elevation; notice the closure of the arched tops with concrete blocks.



Plate (2.4): The upper floors stair case through the main hall; notice the bad condition.

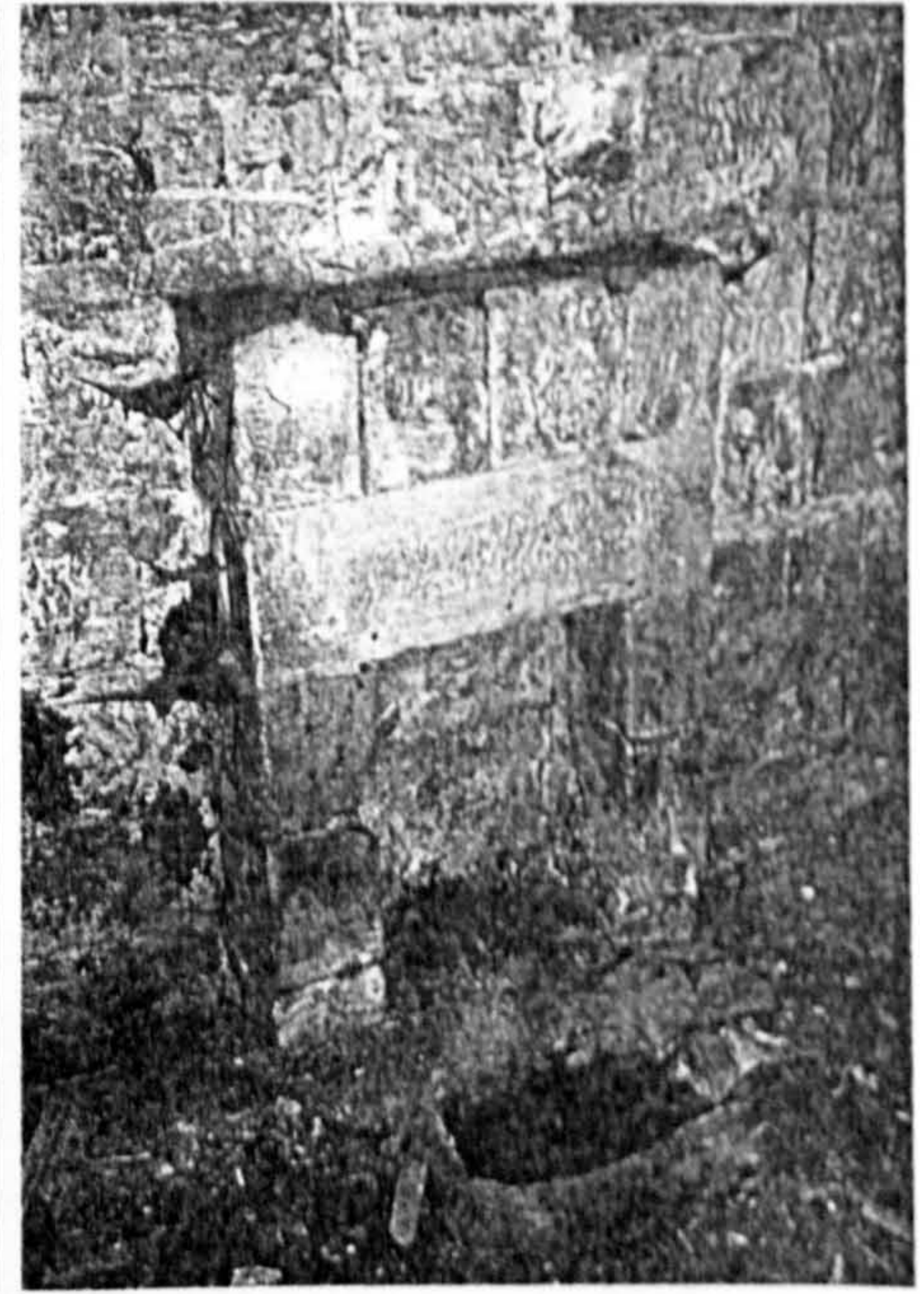


Plate (2.5): Cistern outlet; ignored and deserted.



Plate (2.6): The cistern sink on the ground floor.

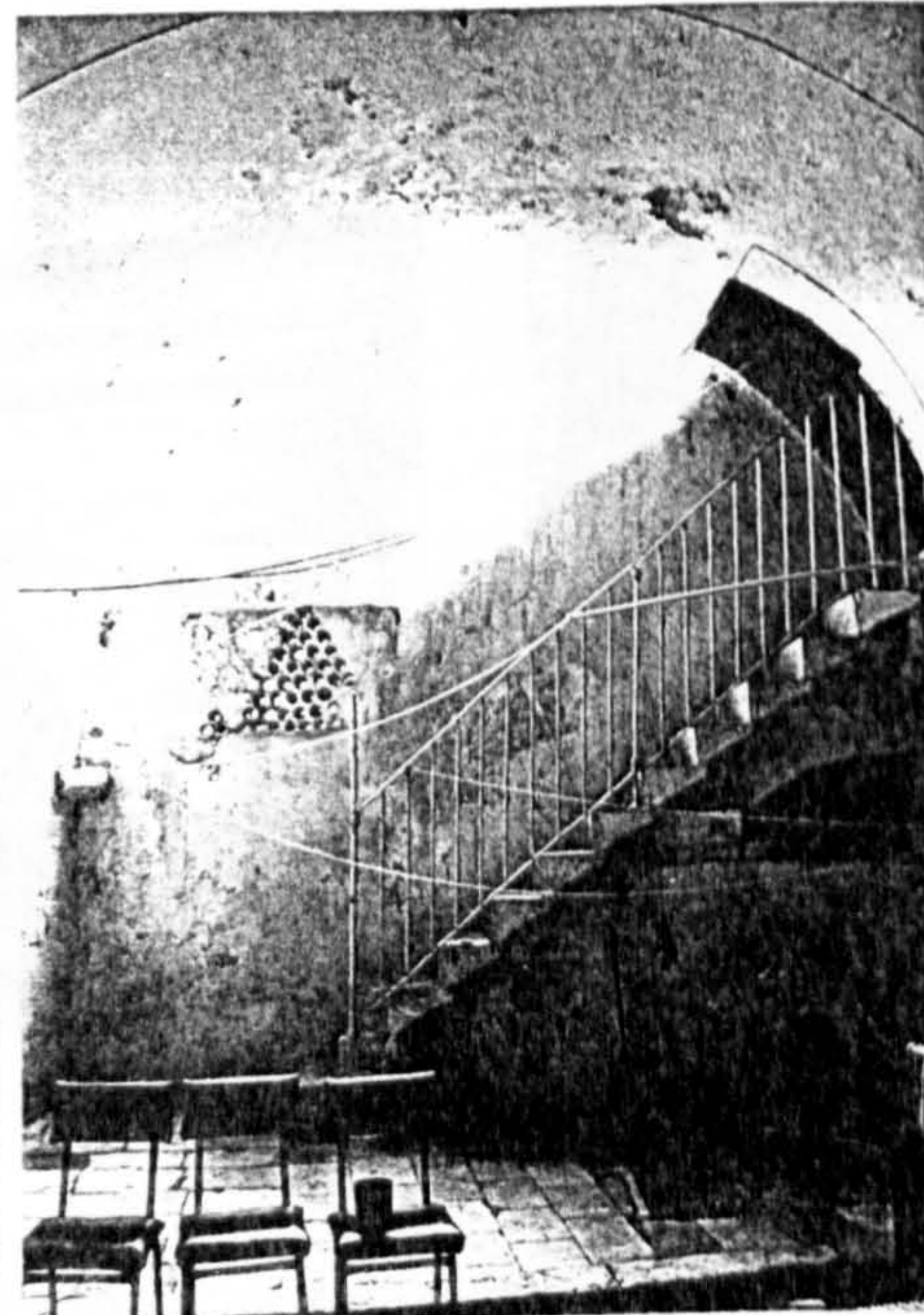


Plate (2.7): Stair case between the first and second floors.



Plate (2.8): The top of the stair case leading to the first floor.

Figure (8.16): Building no. 2, Existing Condition (1).



Plate (2.9): The condition of interior stone within the ground floor.



Plate (2.10): A bed-setting room in flat (2.F2); in sound condition.



Plate (2.11): The same bed-setting room looking towards the door; notice the wall cupboard.

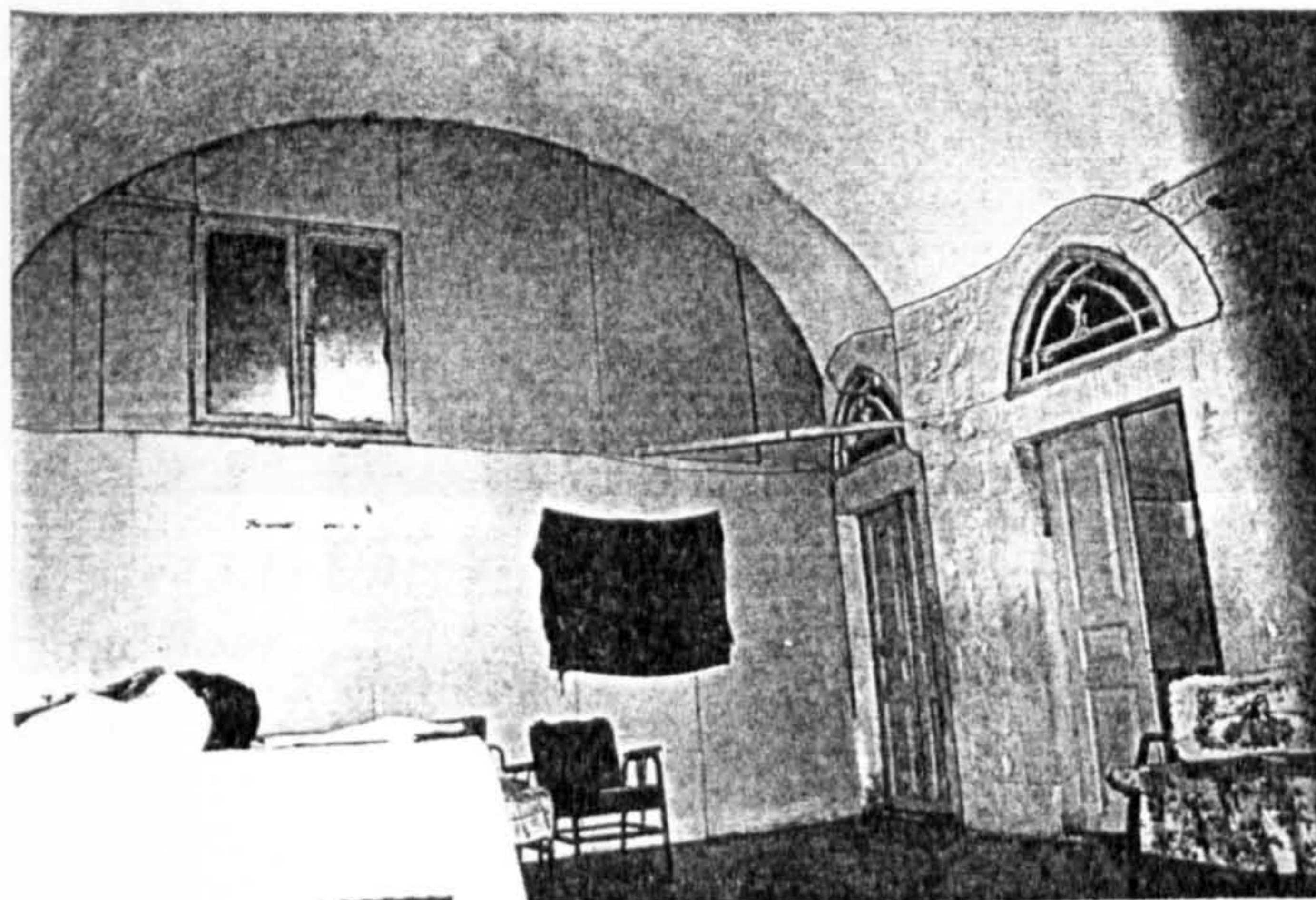


Plate (2.12): The first floor main hall, divided into two parts by a light wooden partition.



Plate (2.13): The two doors connecting the new and the transitional parts of flat (2-3.F2).

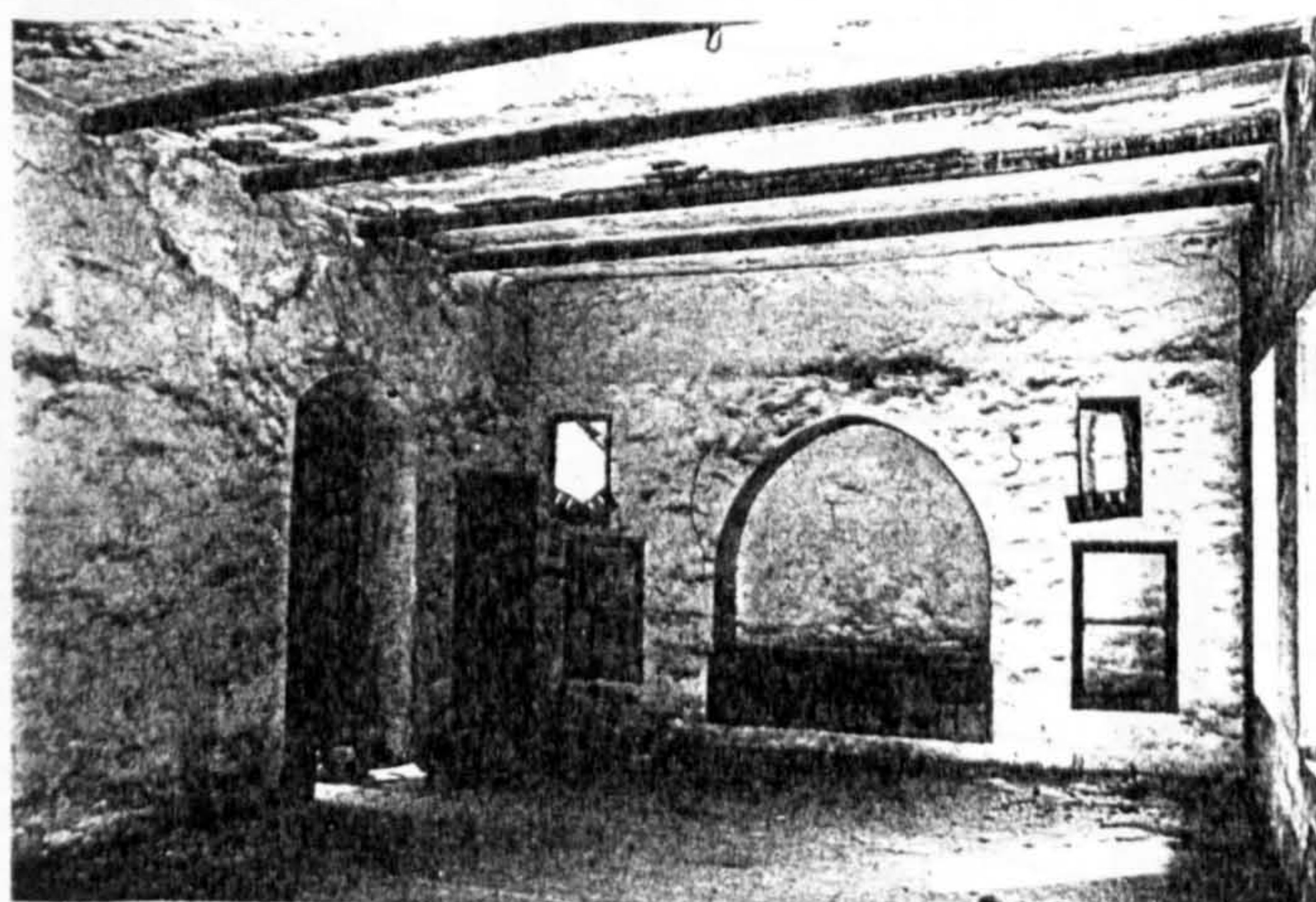


Plate (2.14): The main room in flat (2.S1); deserted.

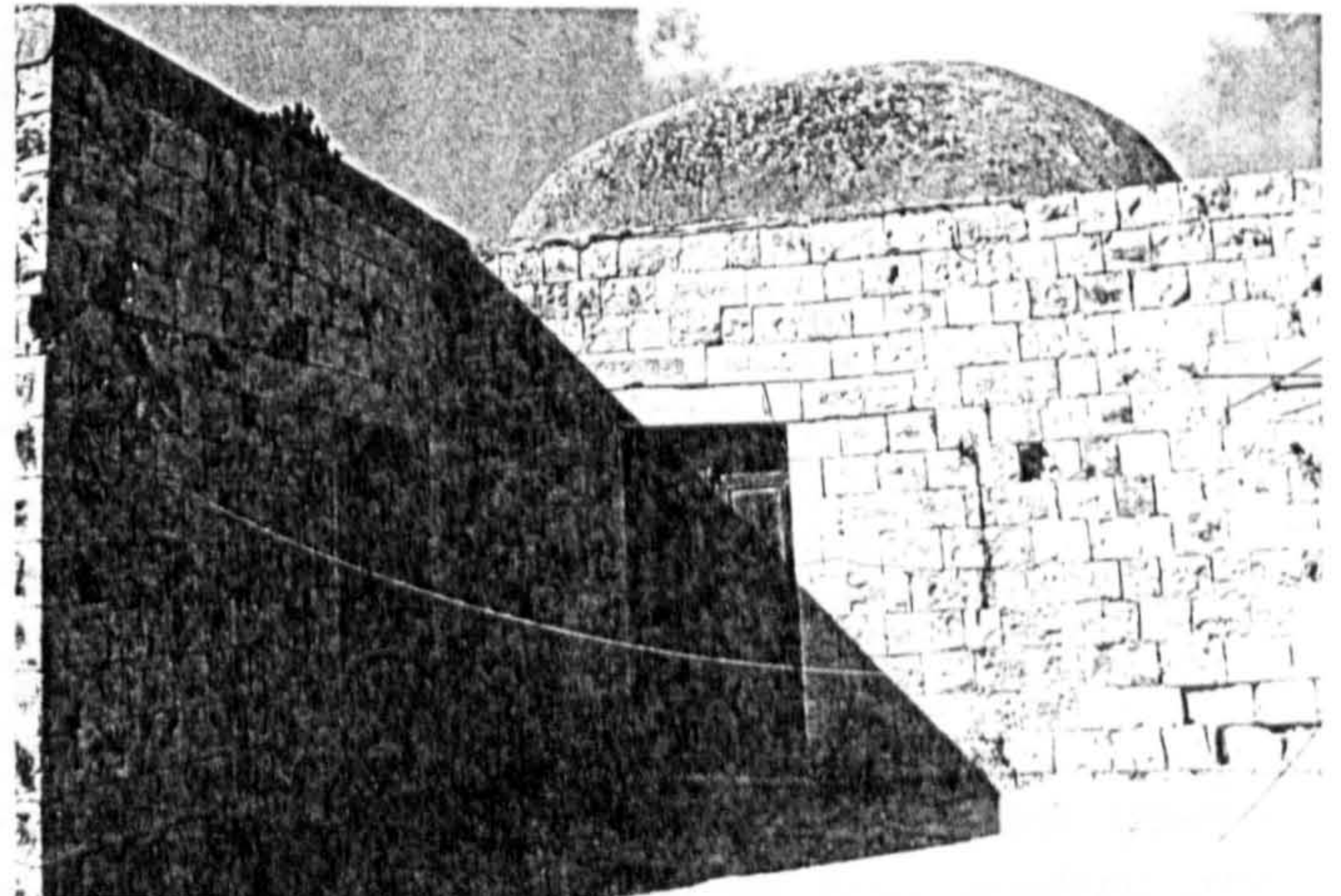


Plate (2.15): The second floor terrace of flat (2.S1).

Figure (8.17): Building no. 2, Existing Condition (2).



Plate (3.1) Uncovered staircase leading to the first floor.

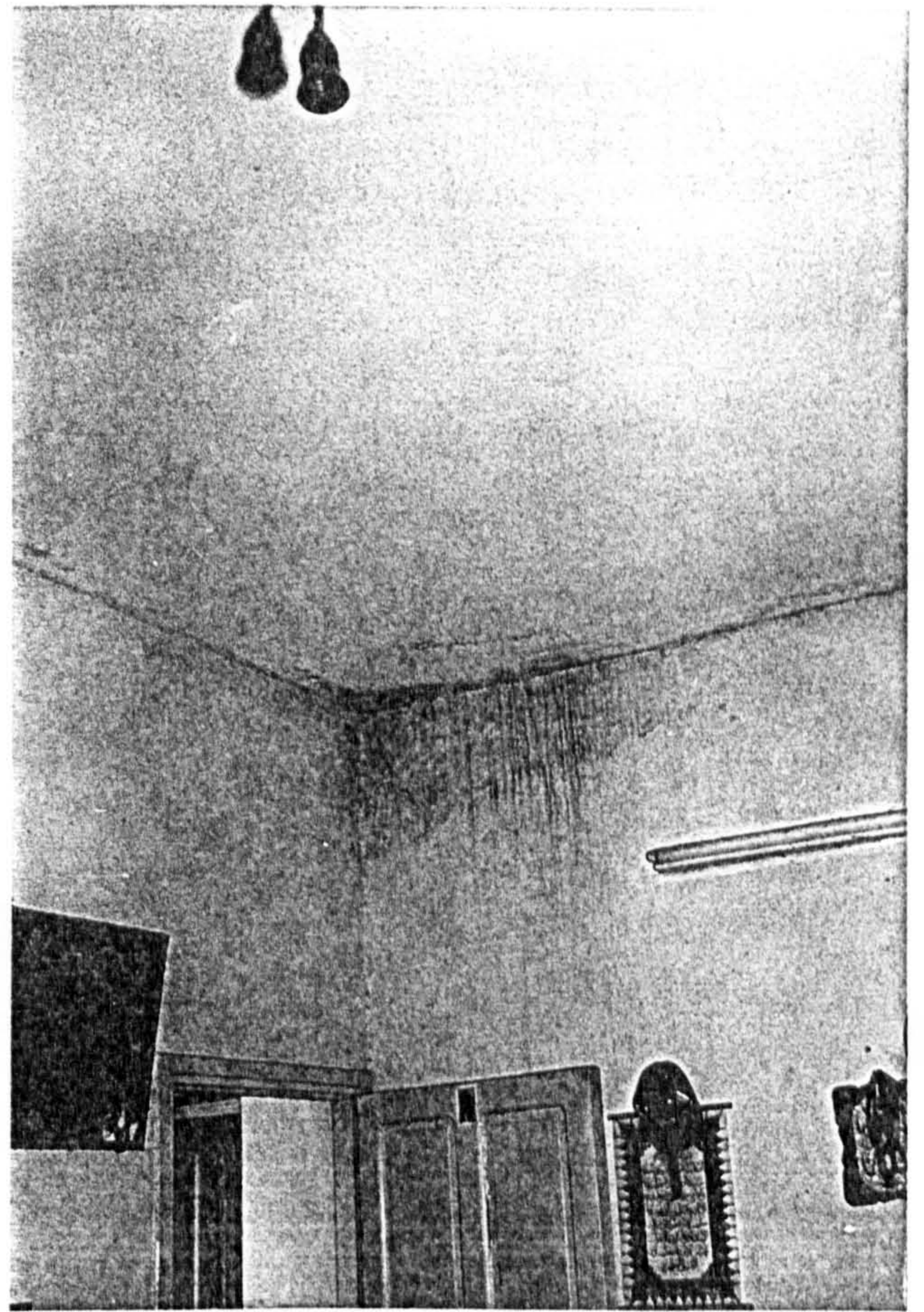


Plate (3.2): Dampness effect on the interior walls and ceiling.

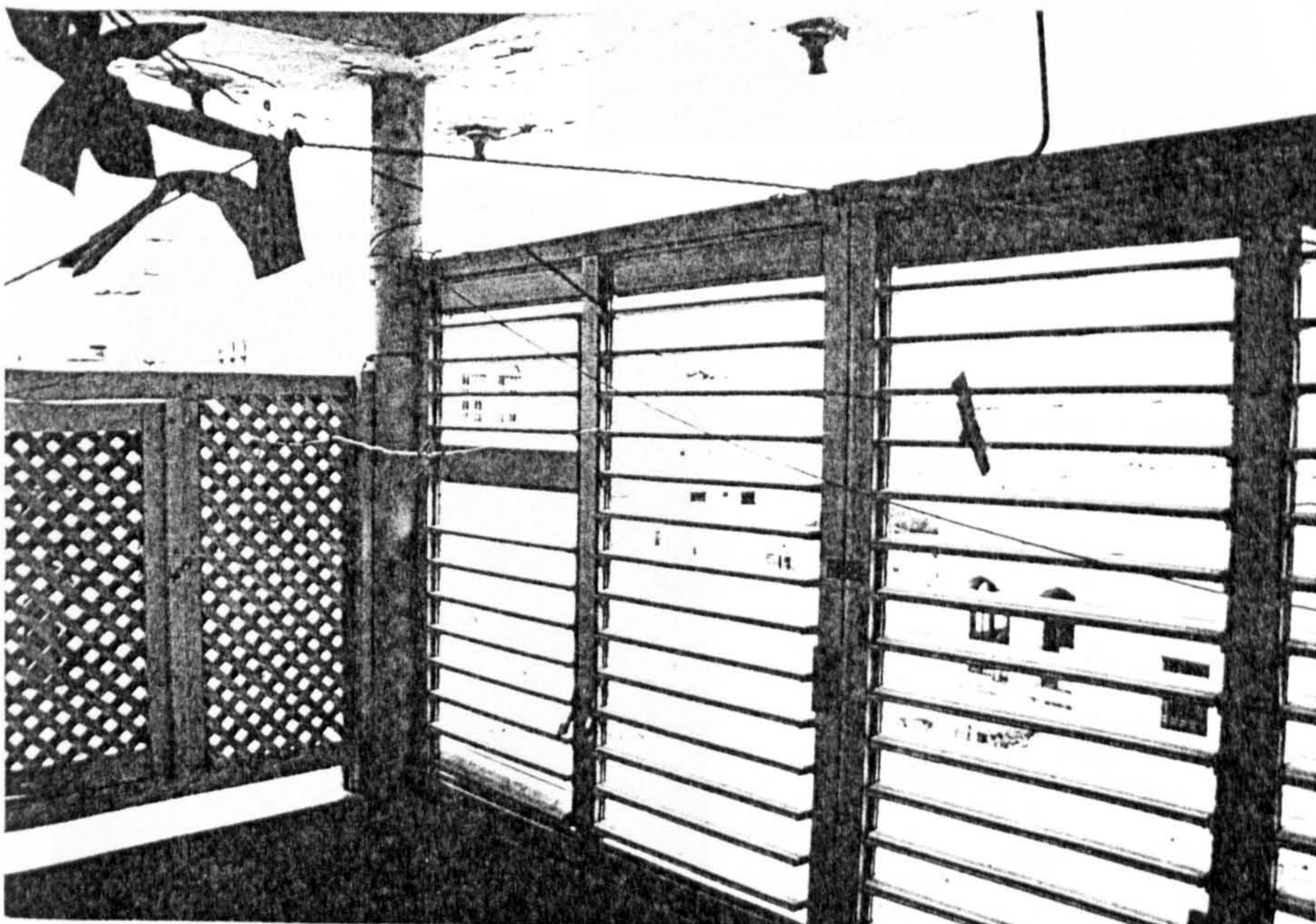
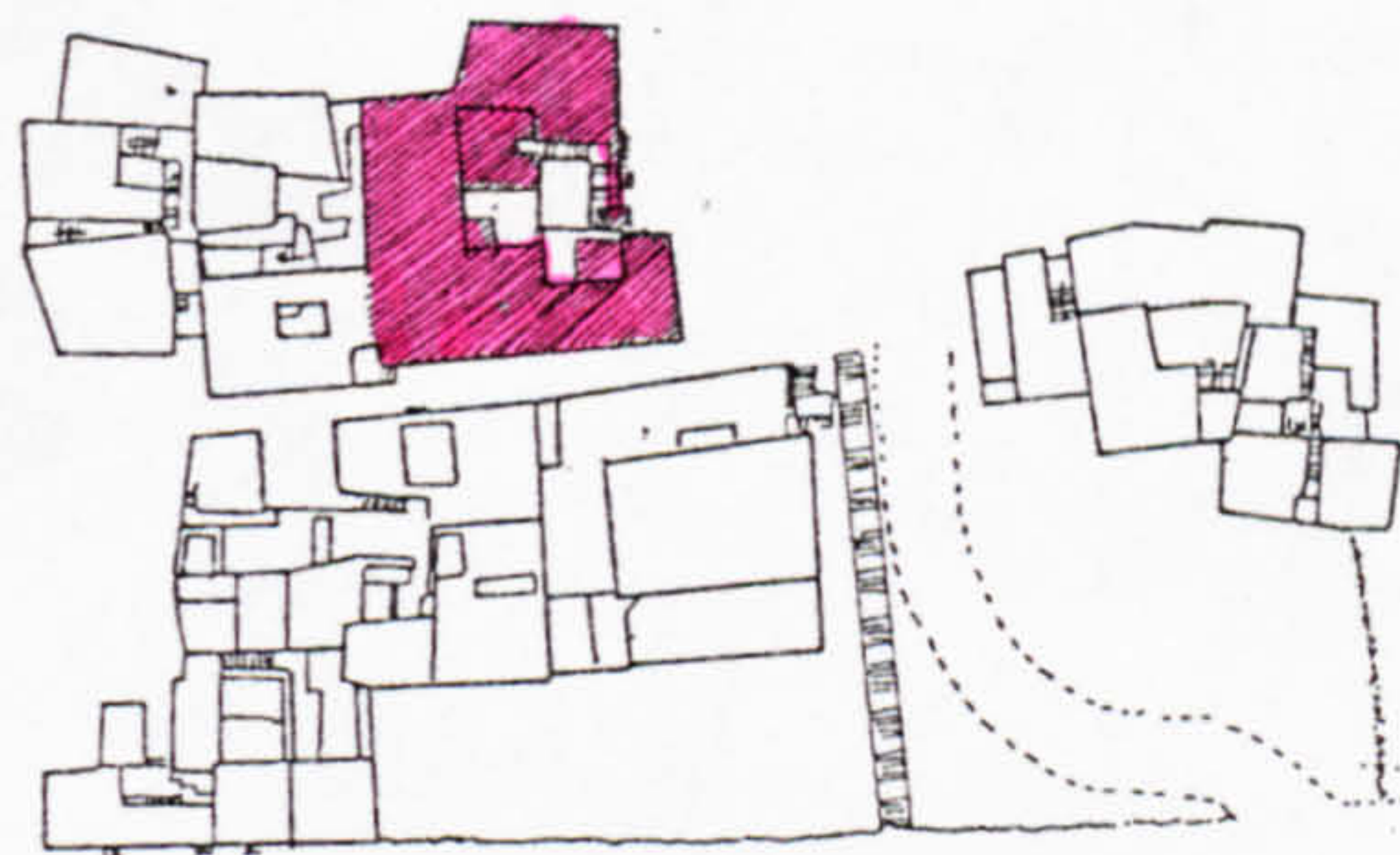


Plate (3.3): Two window types - from right to left: modern and traditional) within the same balcony of flat (2-3.F2).

Figure (8.18): Building in Poor Maintaining Condition.

*Figure (8.19):
Building no.4:*



Location within the site.



Plate (4.A): East elevation; notice the walls' cracks.

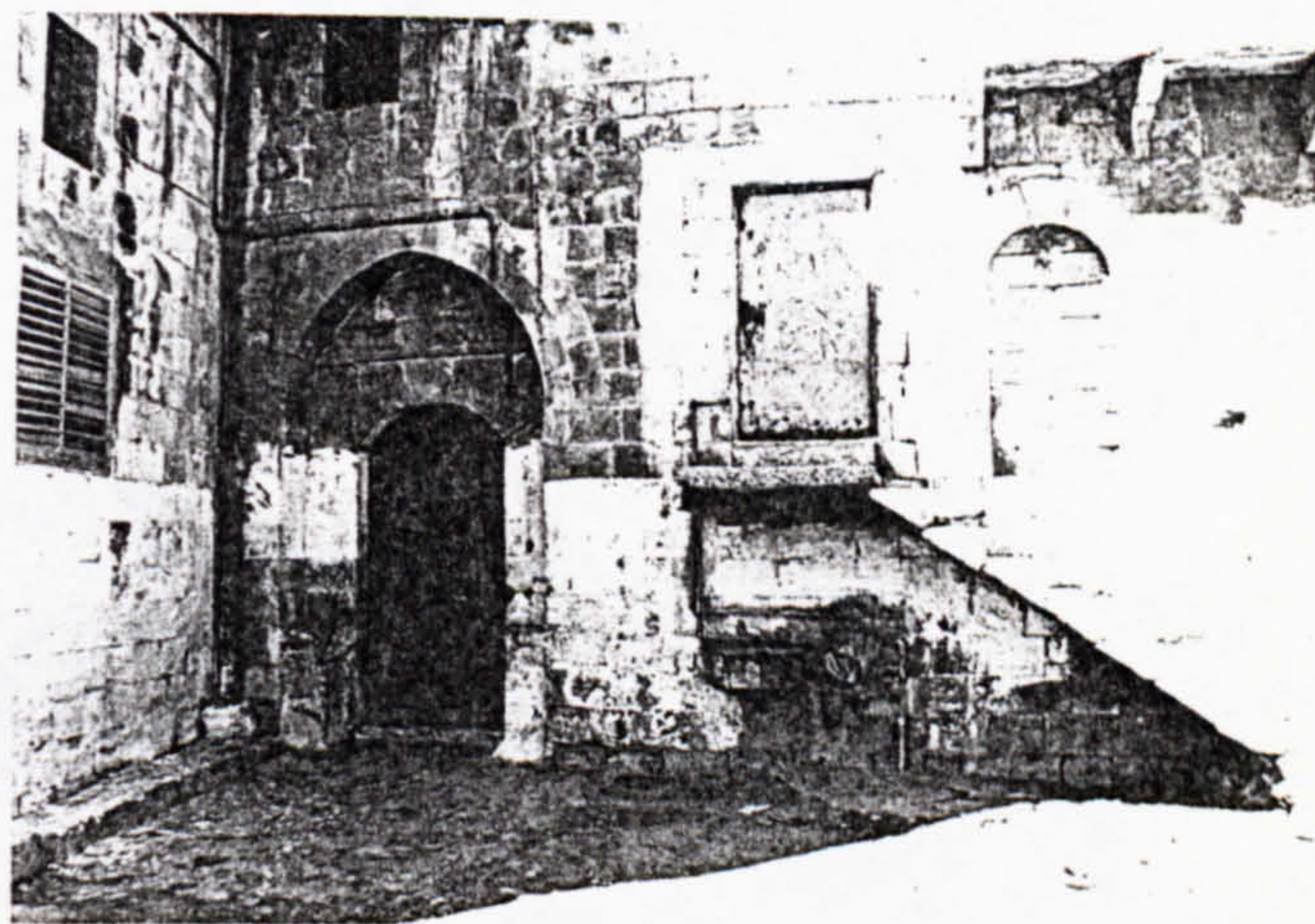


Plate (4.B): The two main entrances of the building.



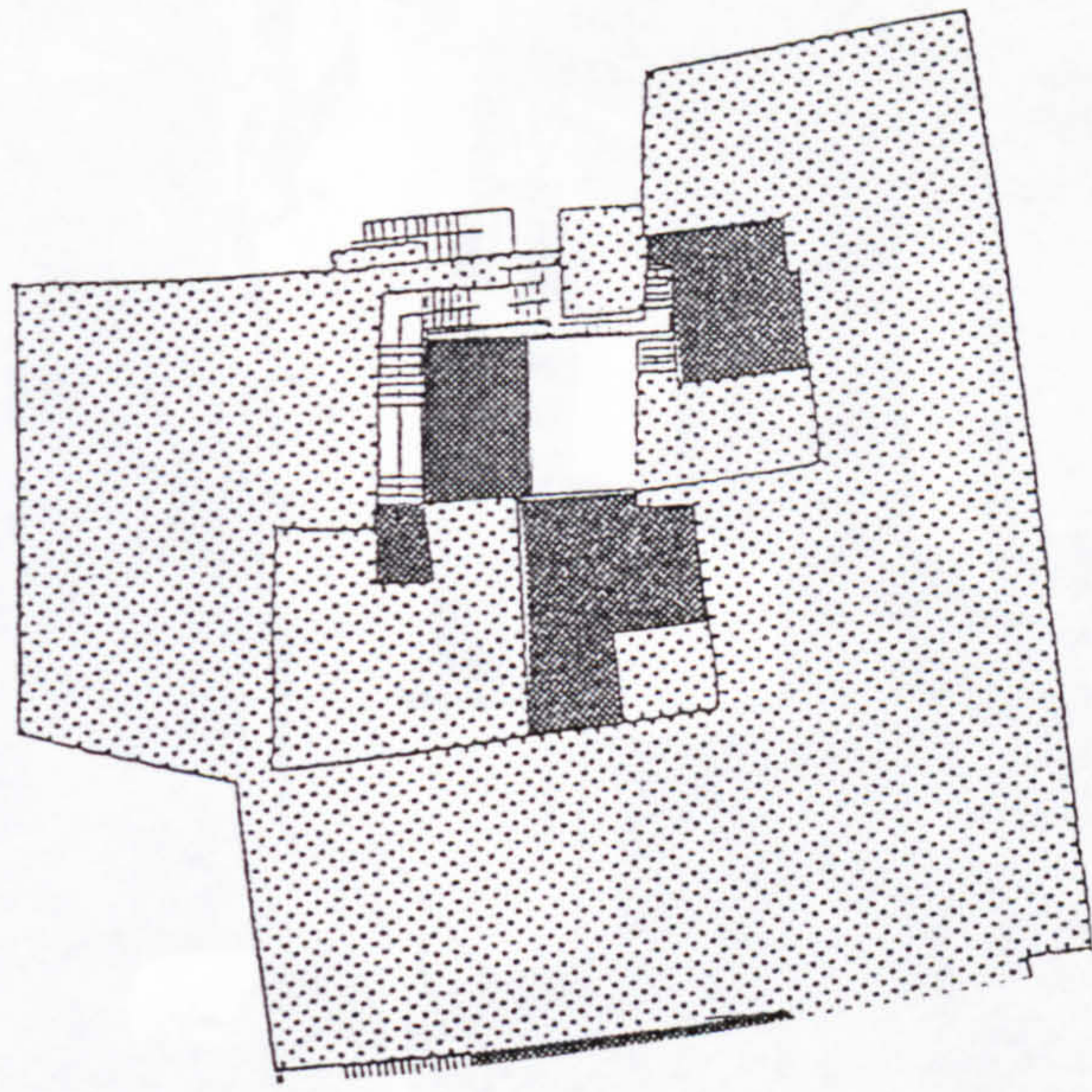
Plate (4.C): The two cantilever structures on the east elevation.



Plate (4.D): Part of the north elevation; notice the wall cracks.



Plate (4.E): Detail of the ground floor main entrance.



Roof plan.



First floor.



Ground floor.

Figure (8.20): Plans of Building 4, as existing.

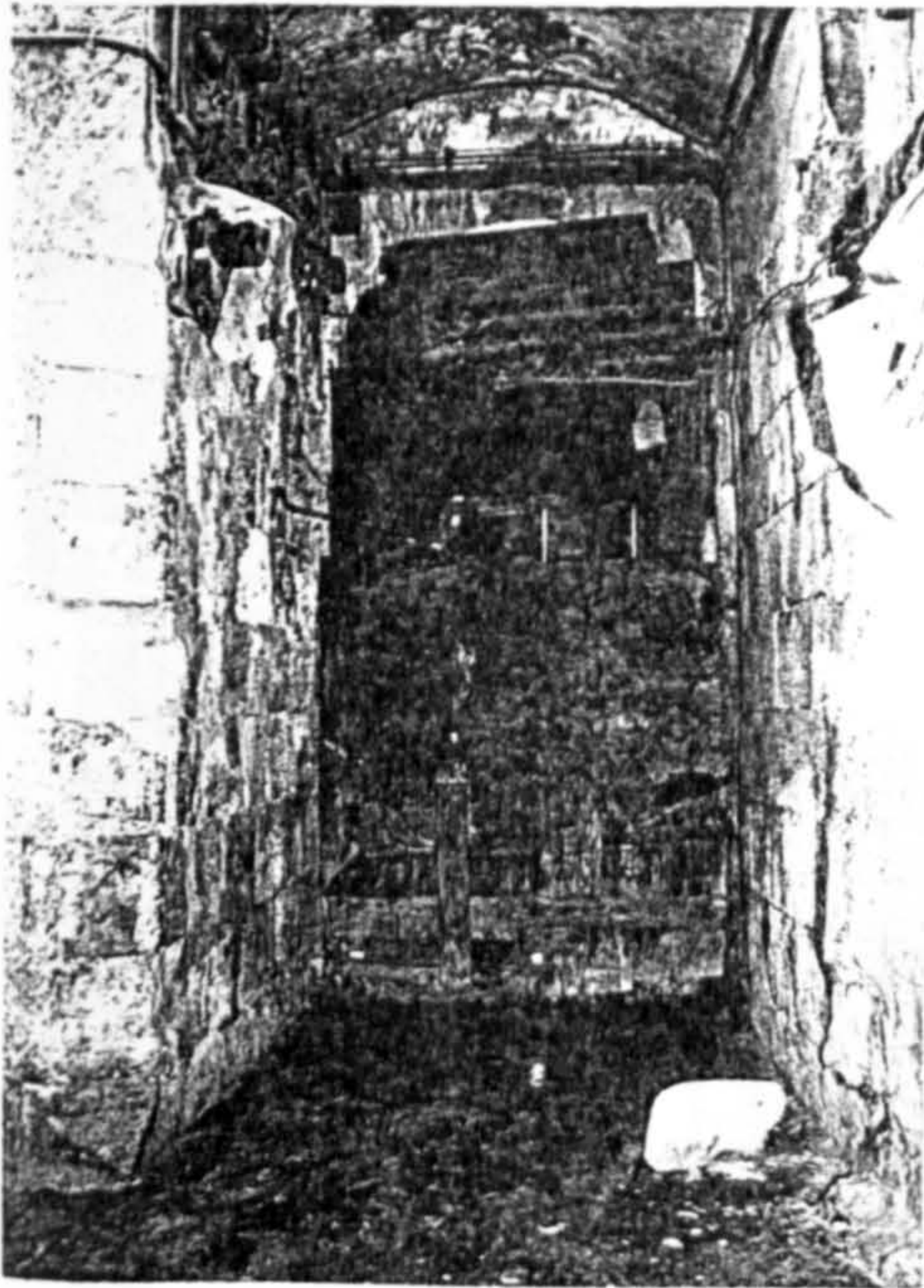


Plate (4.1): Interior of the main ground floor entrance.



Plate (4.2): Kitchen of flat (4.G3); built within the main court of the building.



Plate (4.3): WC. of flat (4.G3); built under the first floor stair.

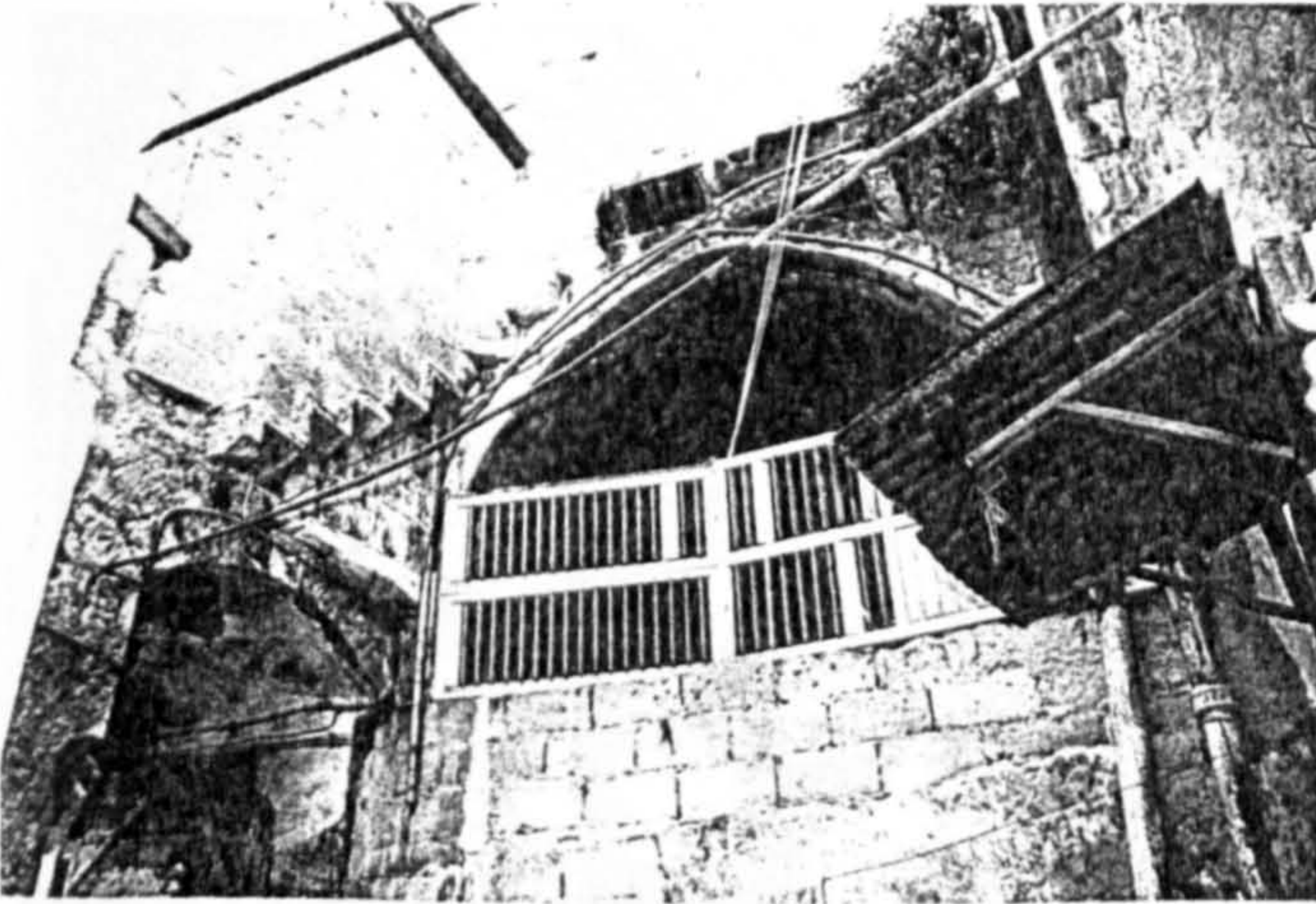


Plate (4.4): A new partition for flat (4.G2); built with concrete blocks and Aluminium shutters.

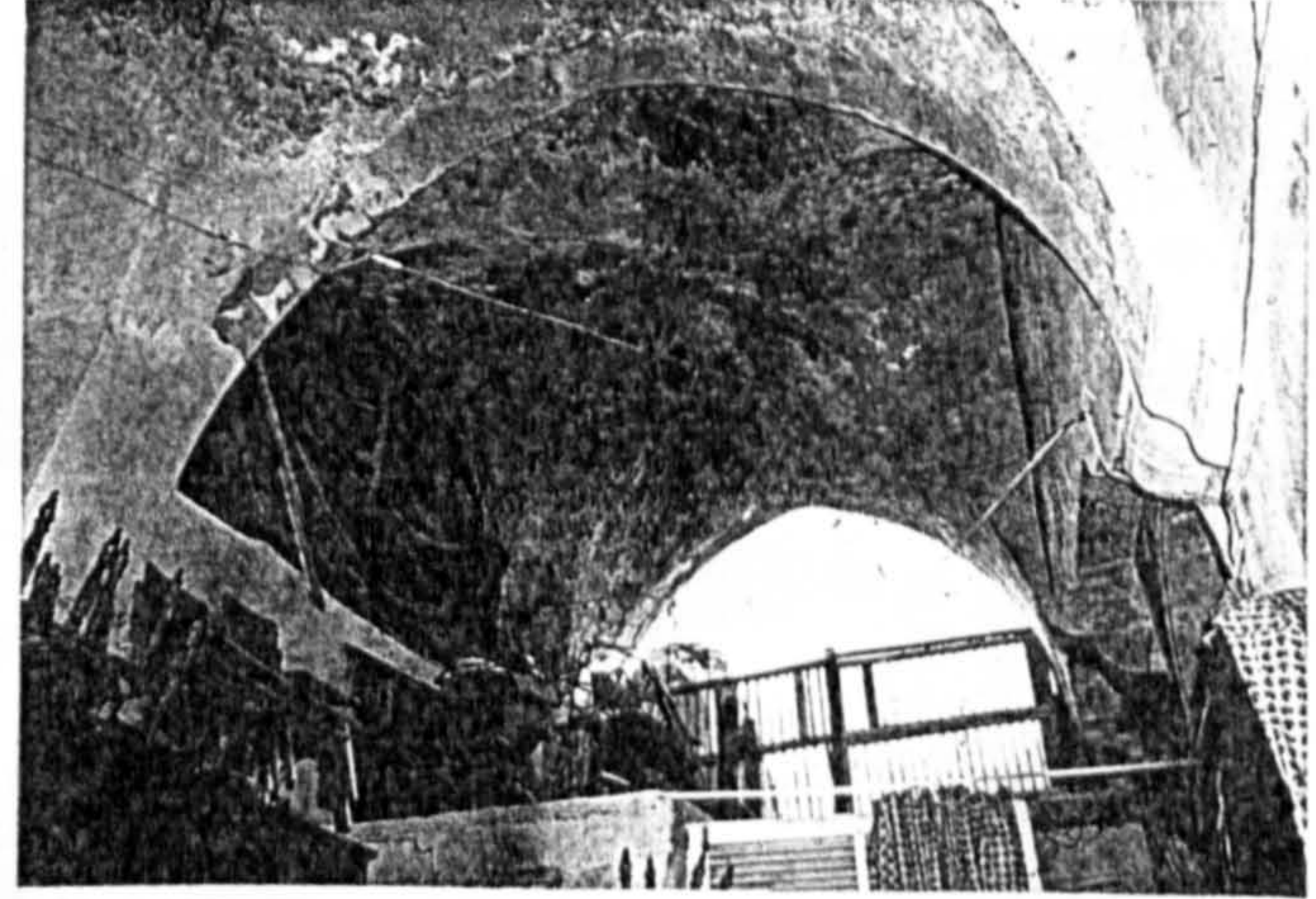


Plate (4.5): The cross vault covering the flat (4.G2) main covered court.



Plate (4.6): The entrance of flat (4.G2).



Plate (4.7): A traditional floor within flat 4.G2 in bad condition.



Plate (4.8): Kitchen-dining area within the main court of flat (4.G4).

Figure (8.21): Building no. 4, Existing Condition (1).



Plate (4.9): Entrance of flat (4.G4); notice the added toilet and bath room.



Plate (4.10): The stair leading up to the first floor flats; notice the high screen wall on the left.

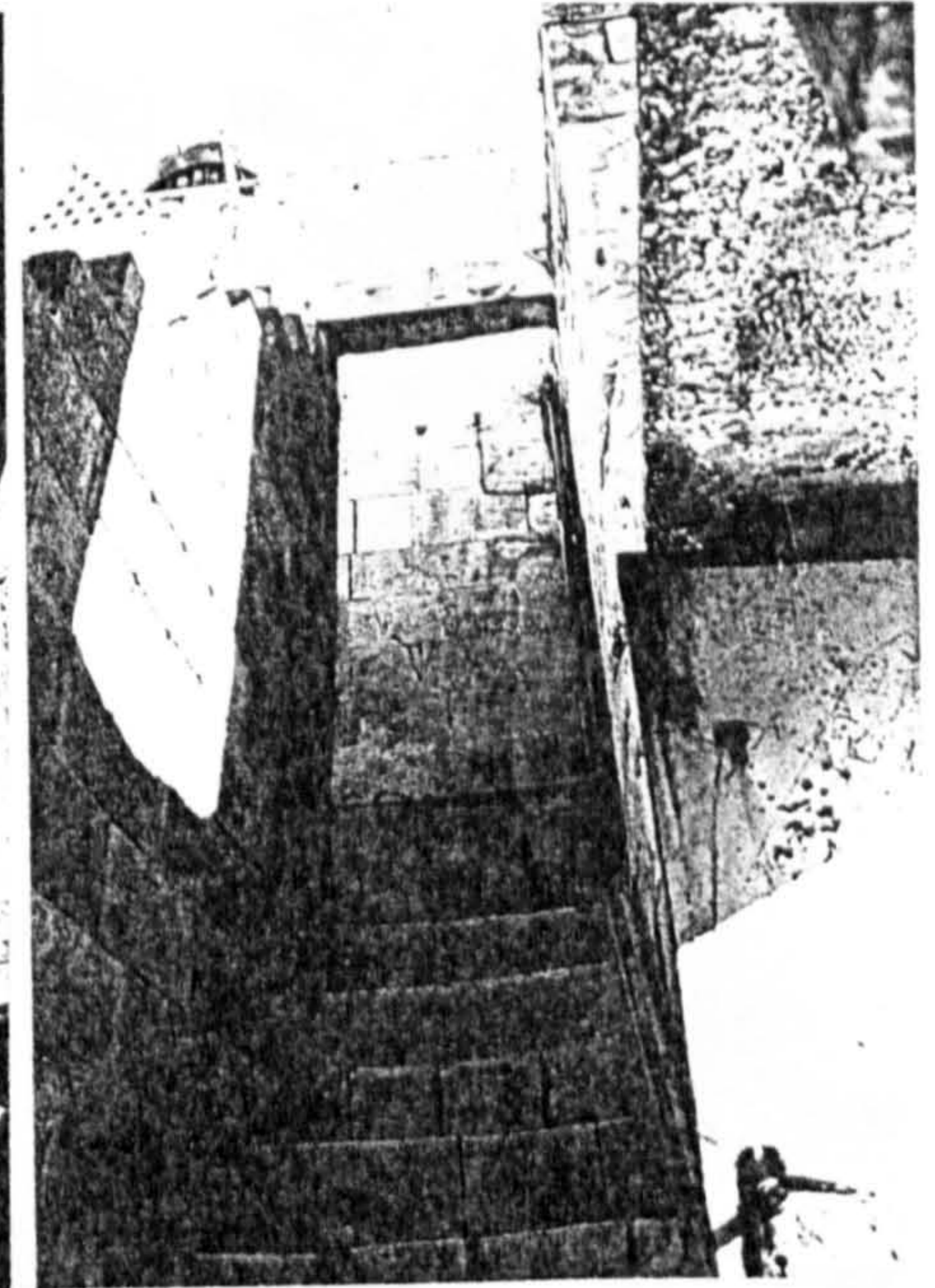


Plate (4.11): Top of the stair shown in plate (4.10).

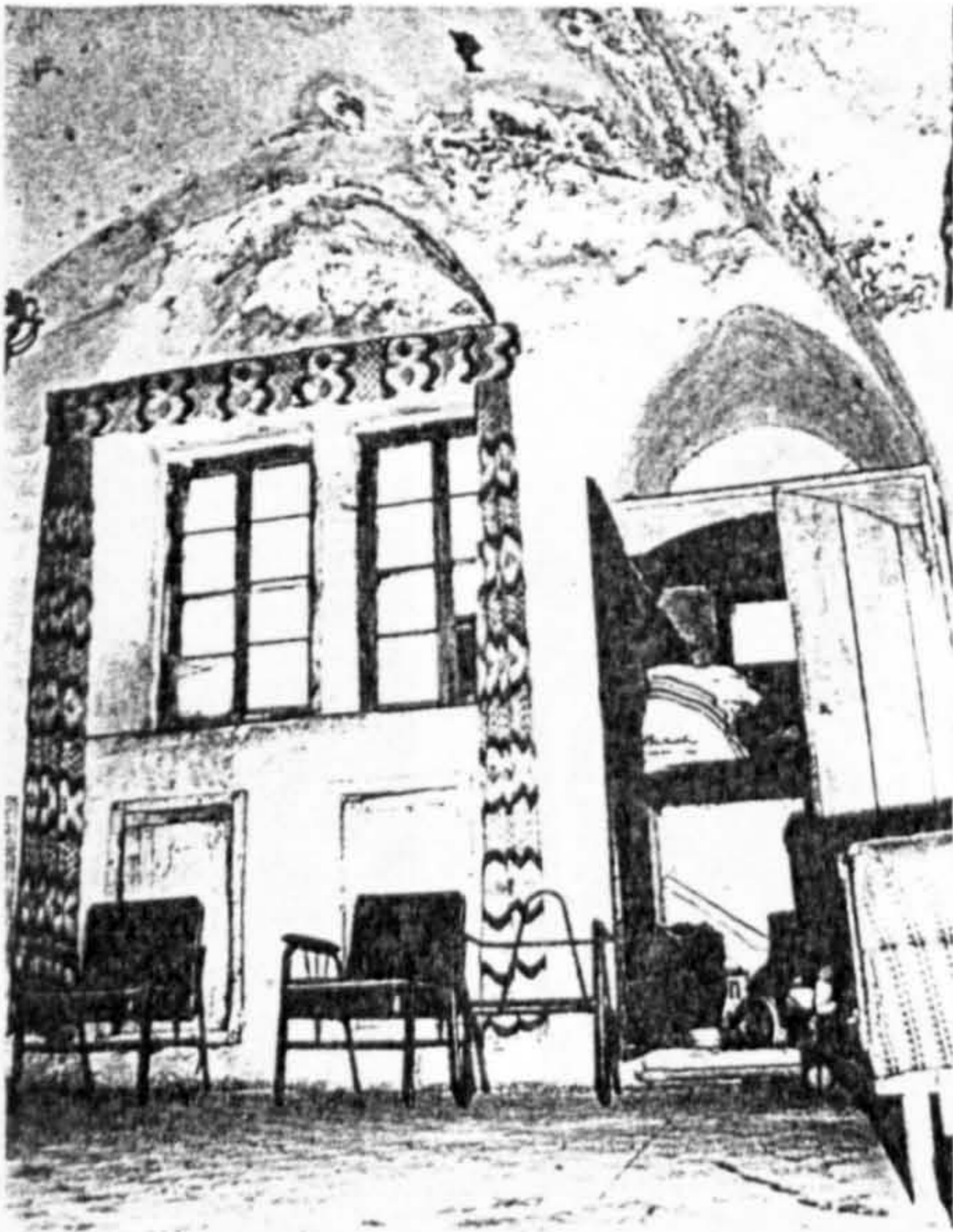


Plate (4.12): Inside on the rooms of flat (4.F3); notice the walls condition.



Plate (4.13): New additions within flat (4.F4).

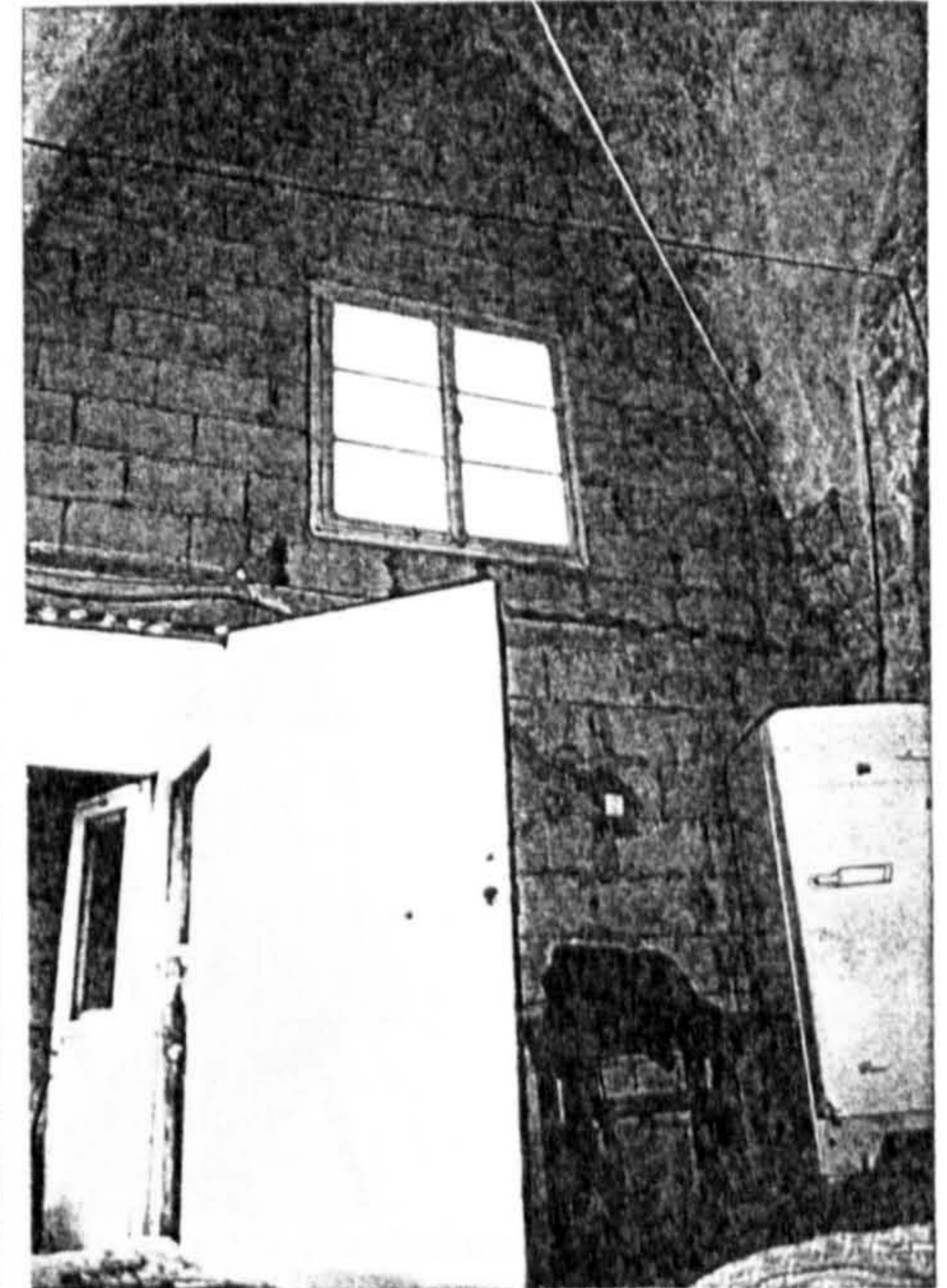


Plate (4.14): Inside one of the flat (4.F4) new rooms created by closing the court.

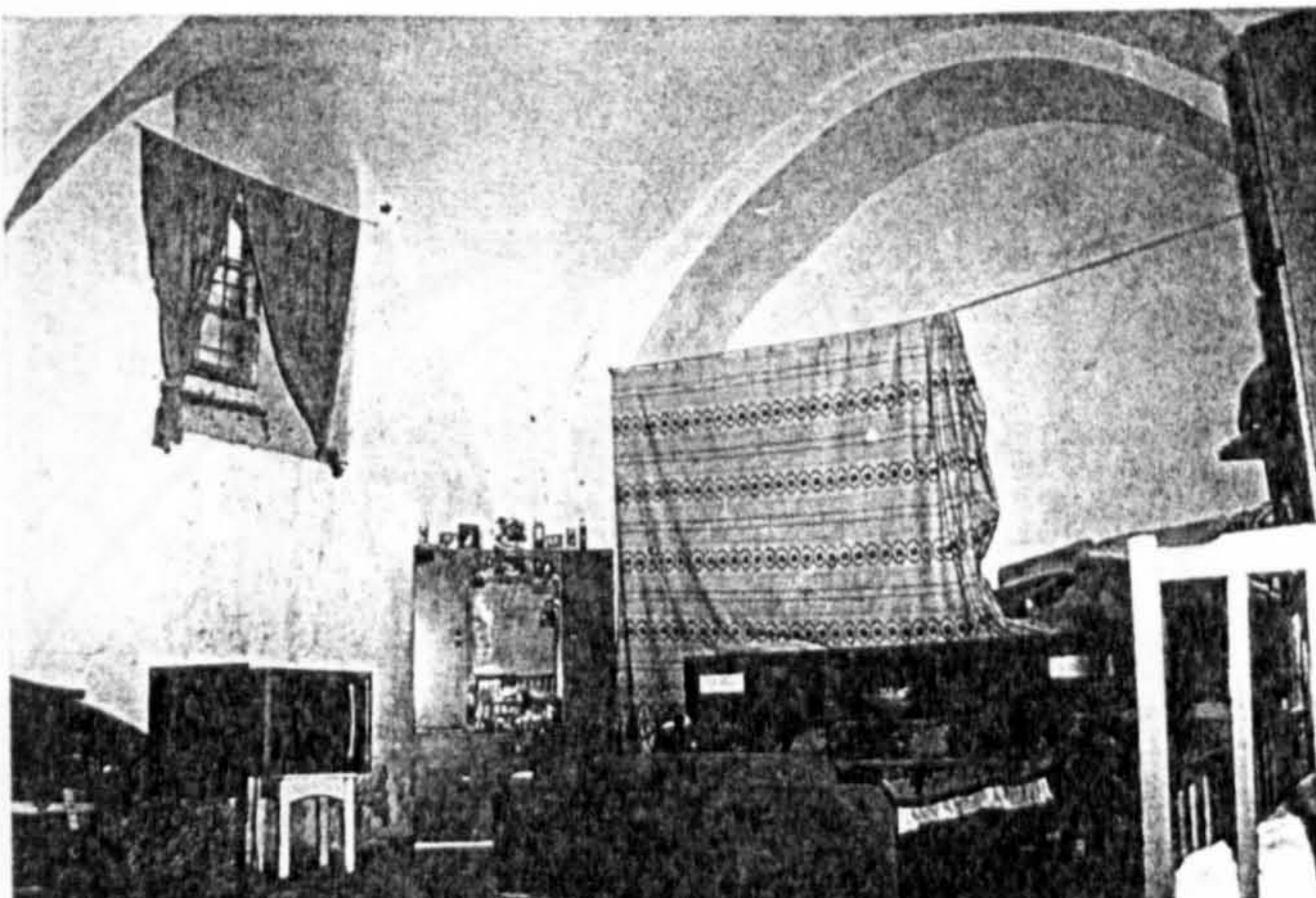


Plate (4.15): A bed-setting room within flat (4.F4).



Plate (4.16): Flat (4.F4) kitchen with a back door leads to the roof stair.

Figure (8.22): Building no. 4, Existing Condition (2).



Plate (4.17): The staircase, that its entrance was shown in plate (4.16).

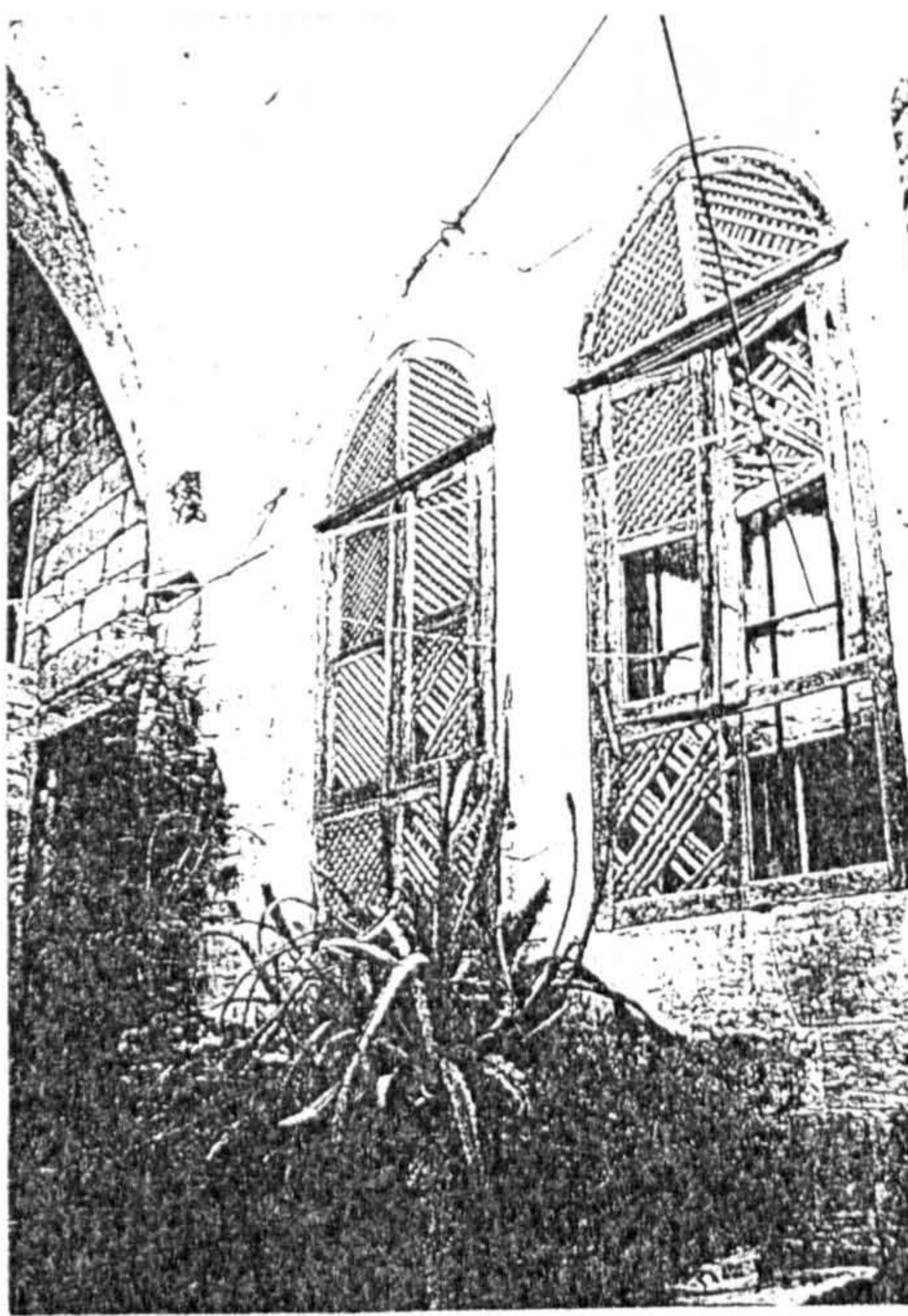


Plate (4.18): Traditional wooden screens in flat (4.F.4) in bad condition.

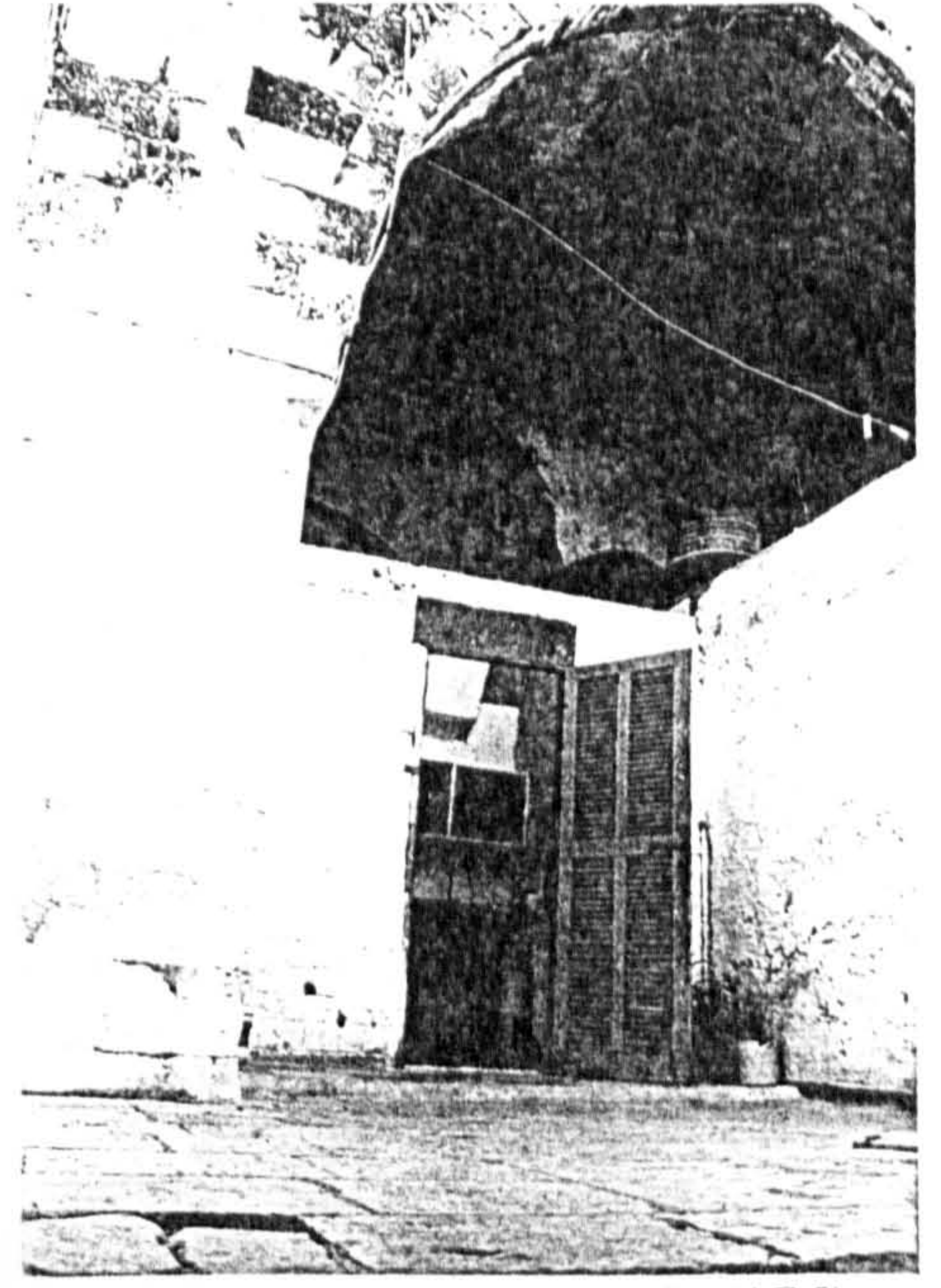


Plate (4.19): New additions within flat (4.F.5).



Plate (4.20): Traditional windows within flat (4.F5); notice the closure of their tops with wooden sheets.

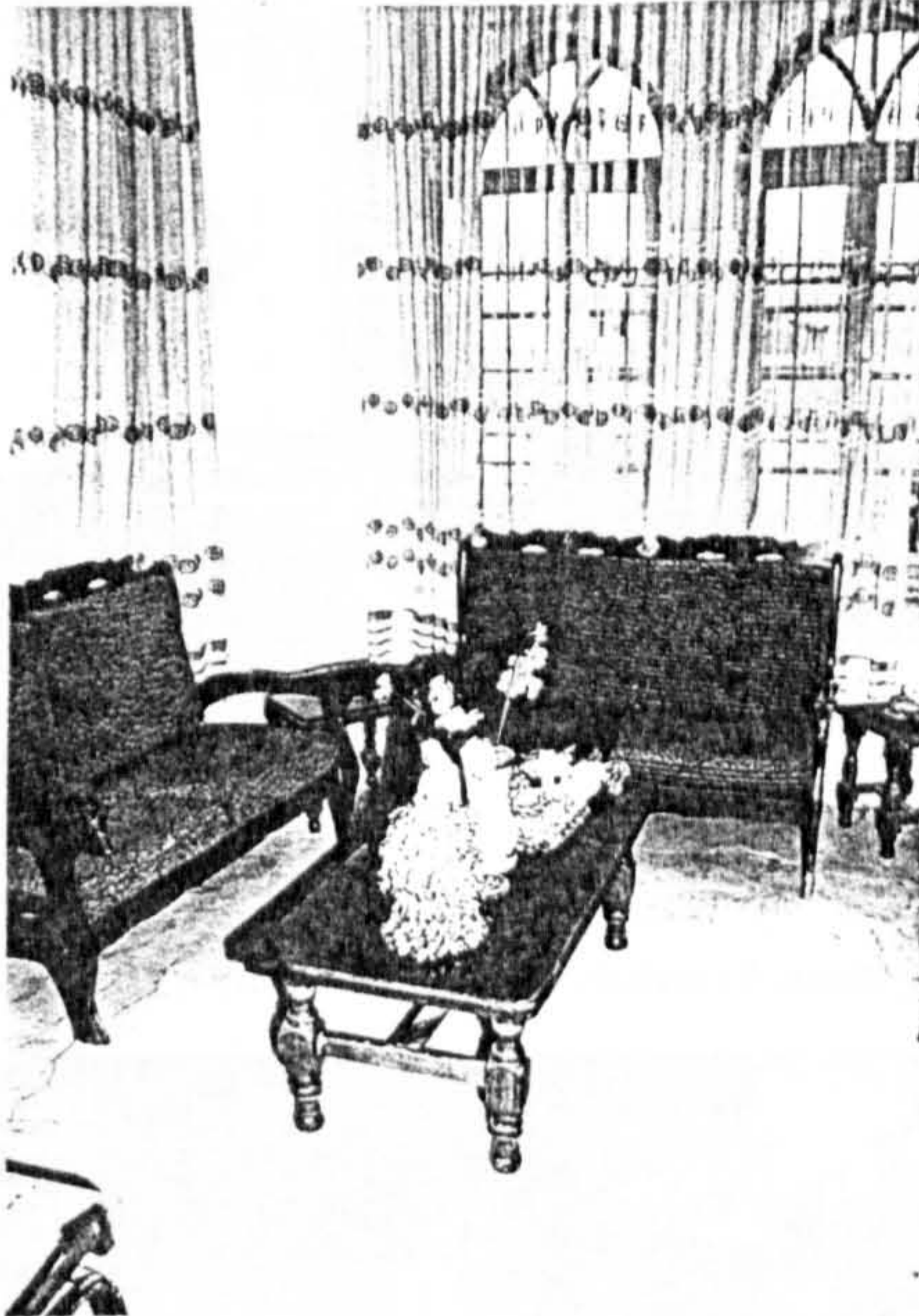


Plate (4.21): The guest room of flat (4.F.5).

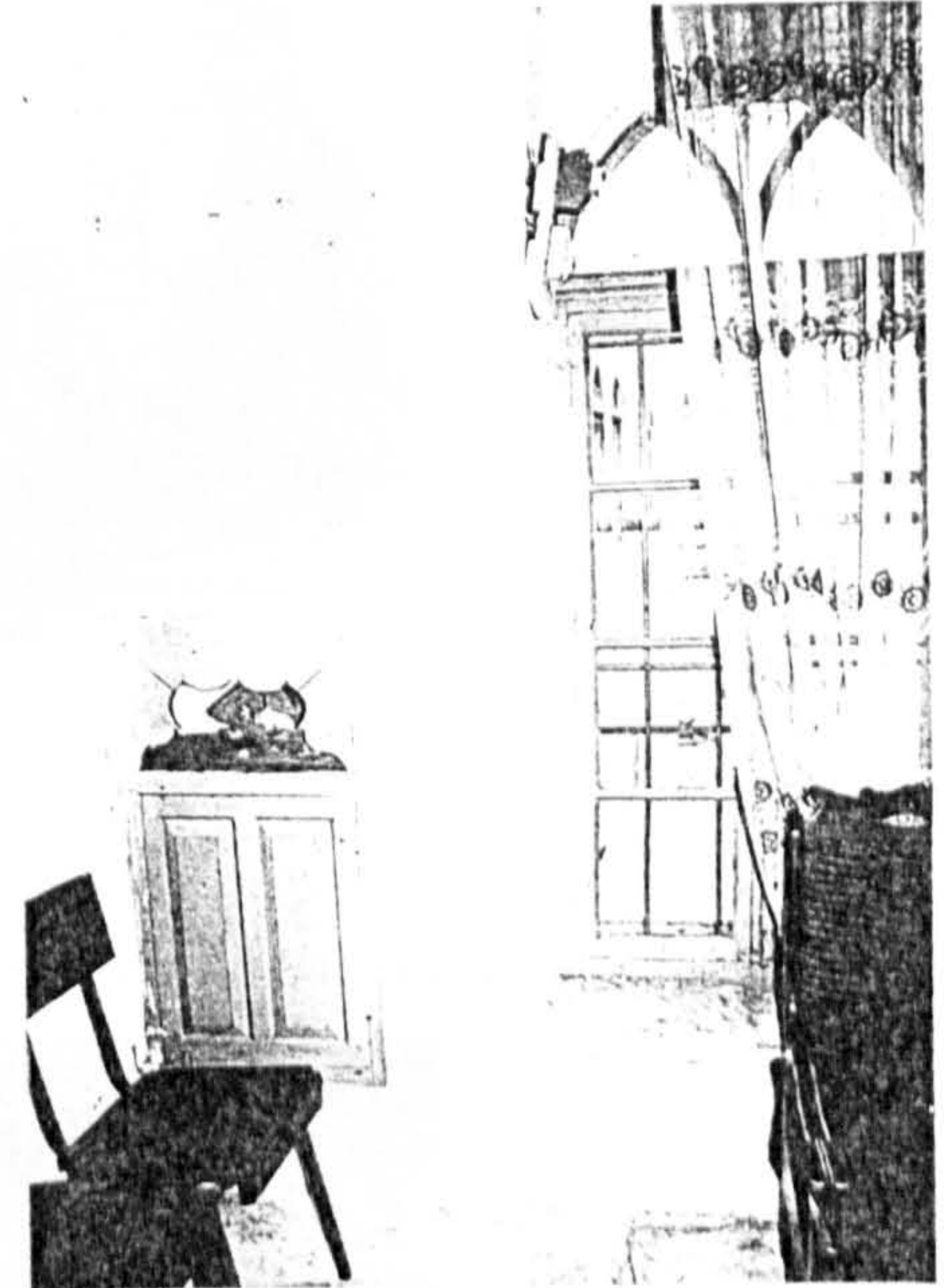


Plate (4.22): Inside the same guest room of flat (4.F5); notice the small wall cupboard.

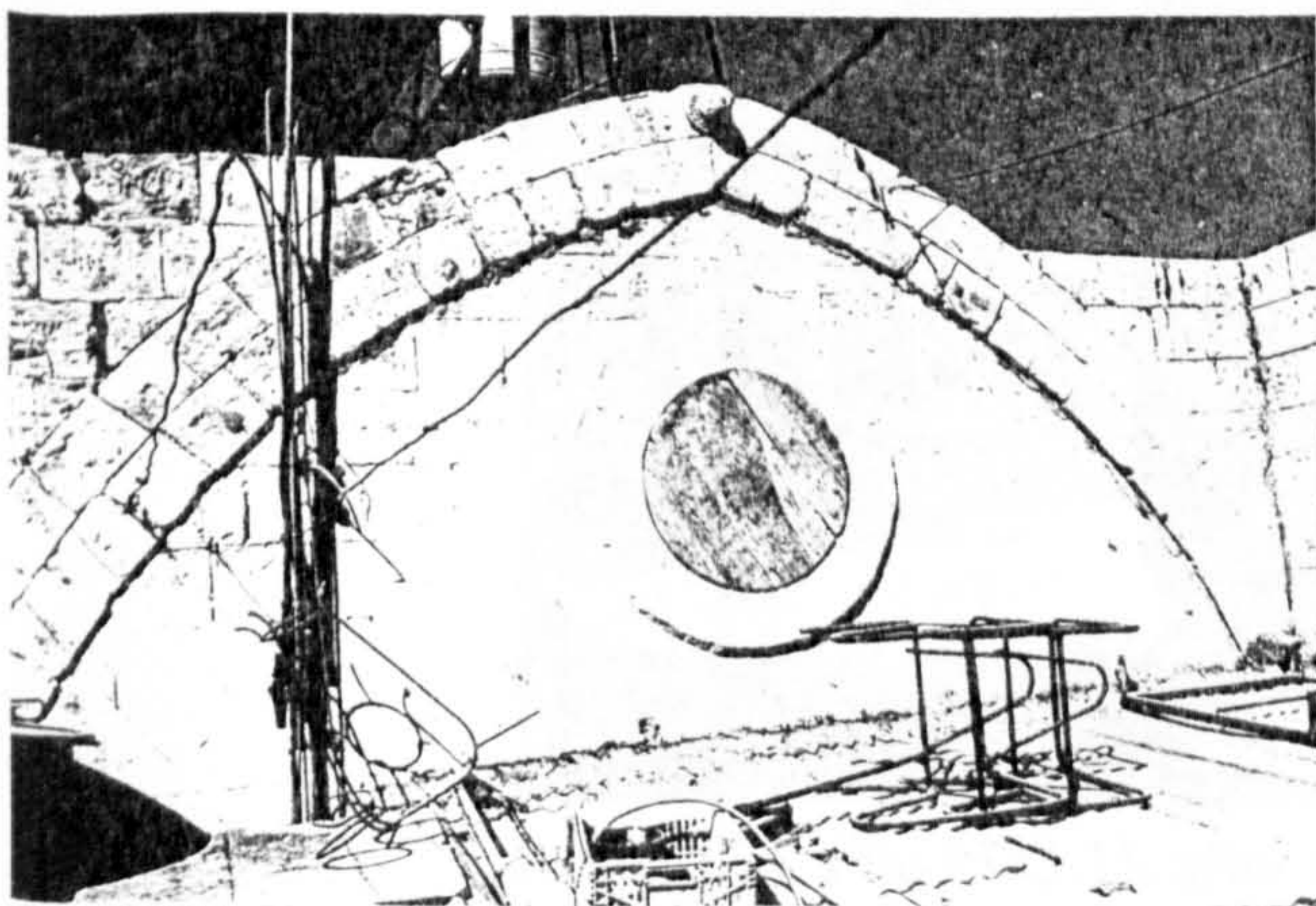


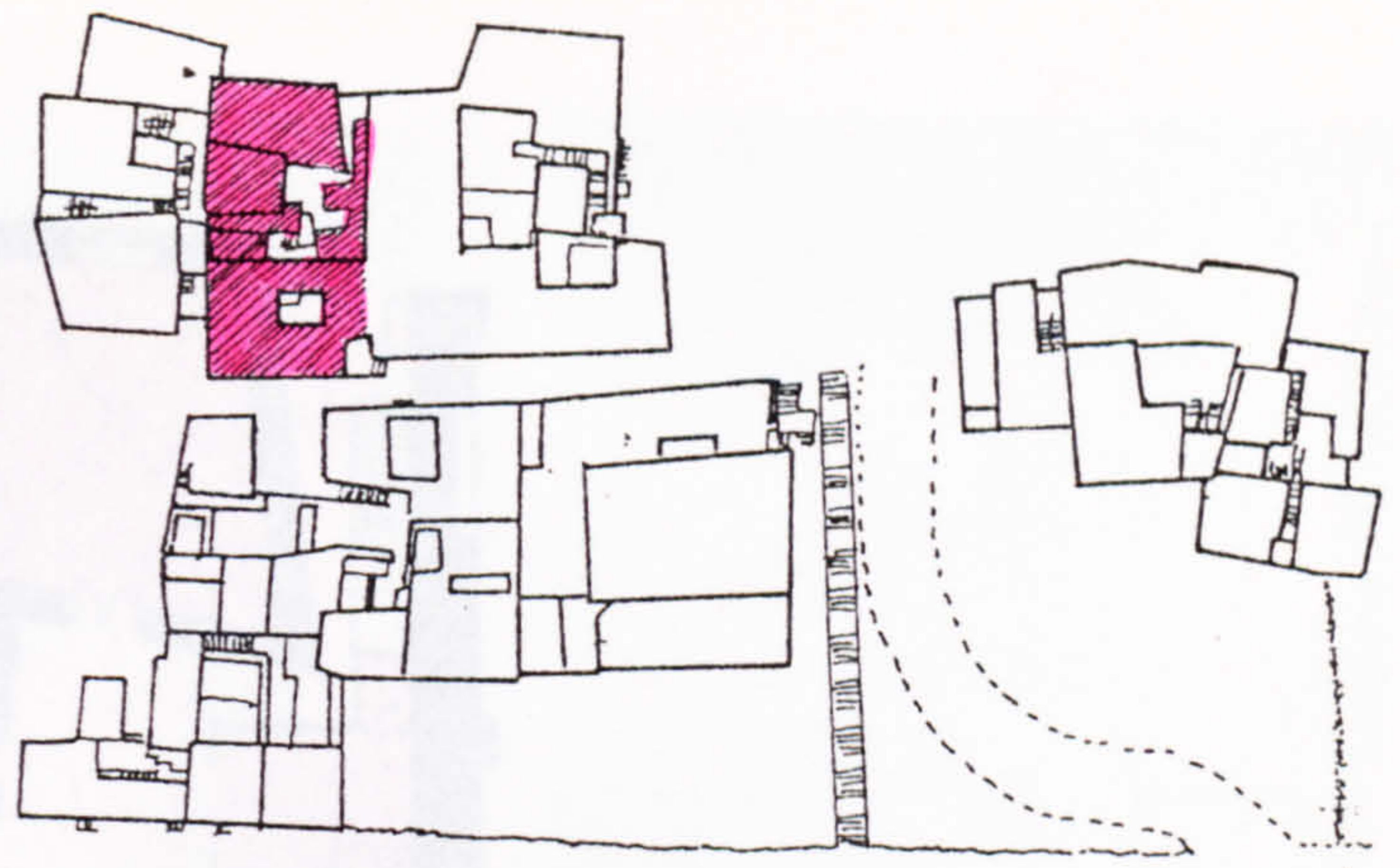
Plate (4.23): The added metal roof of the flat (4.F.5) court; notice the closure of the circle window.



Plate (4.24): Interior view of a bed-setting room within flat (4.F.5); notice how large it its size is.

Figure (8.23): Building no. 4, Existing Condition (3).

*Figure (8.24):
Building no. 5*



Location within the site.

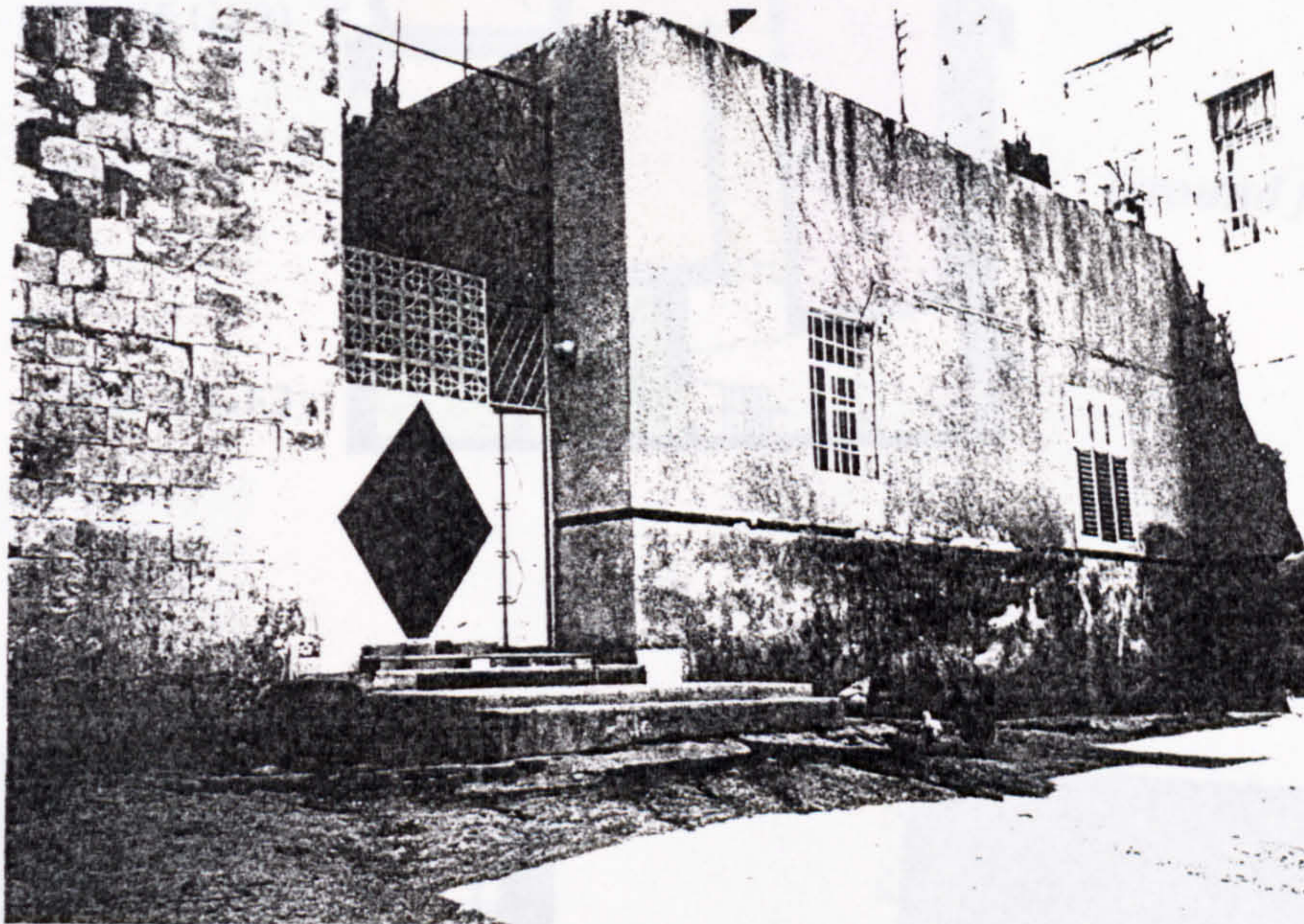


Plate (5.1): North elevation.

Flat (5.G1) has been evacuated under the Israeli military orders in order to be demolished.

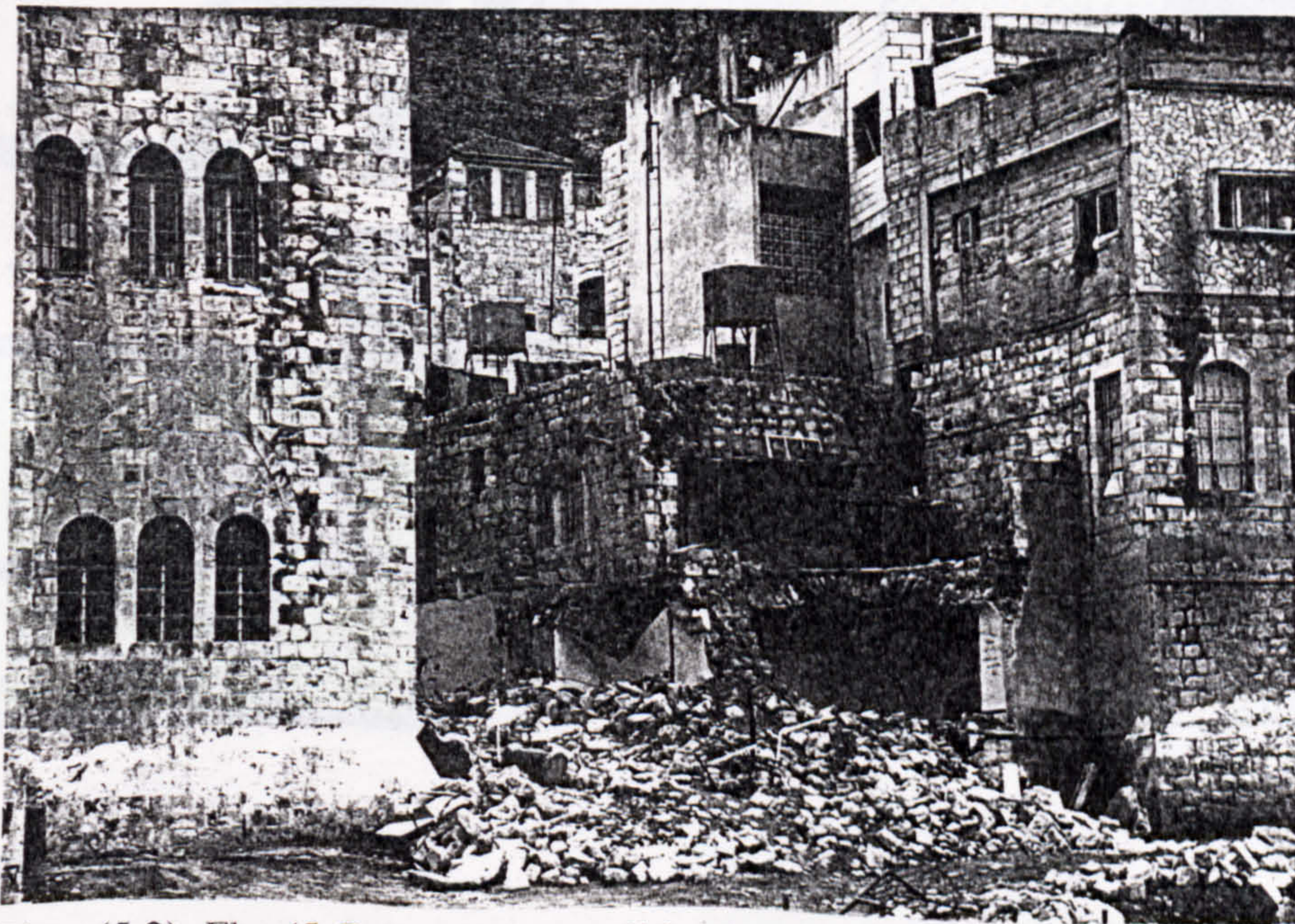
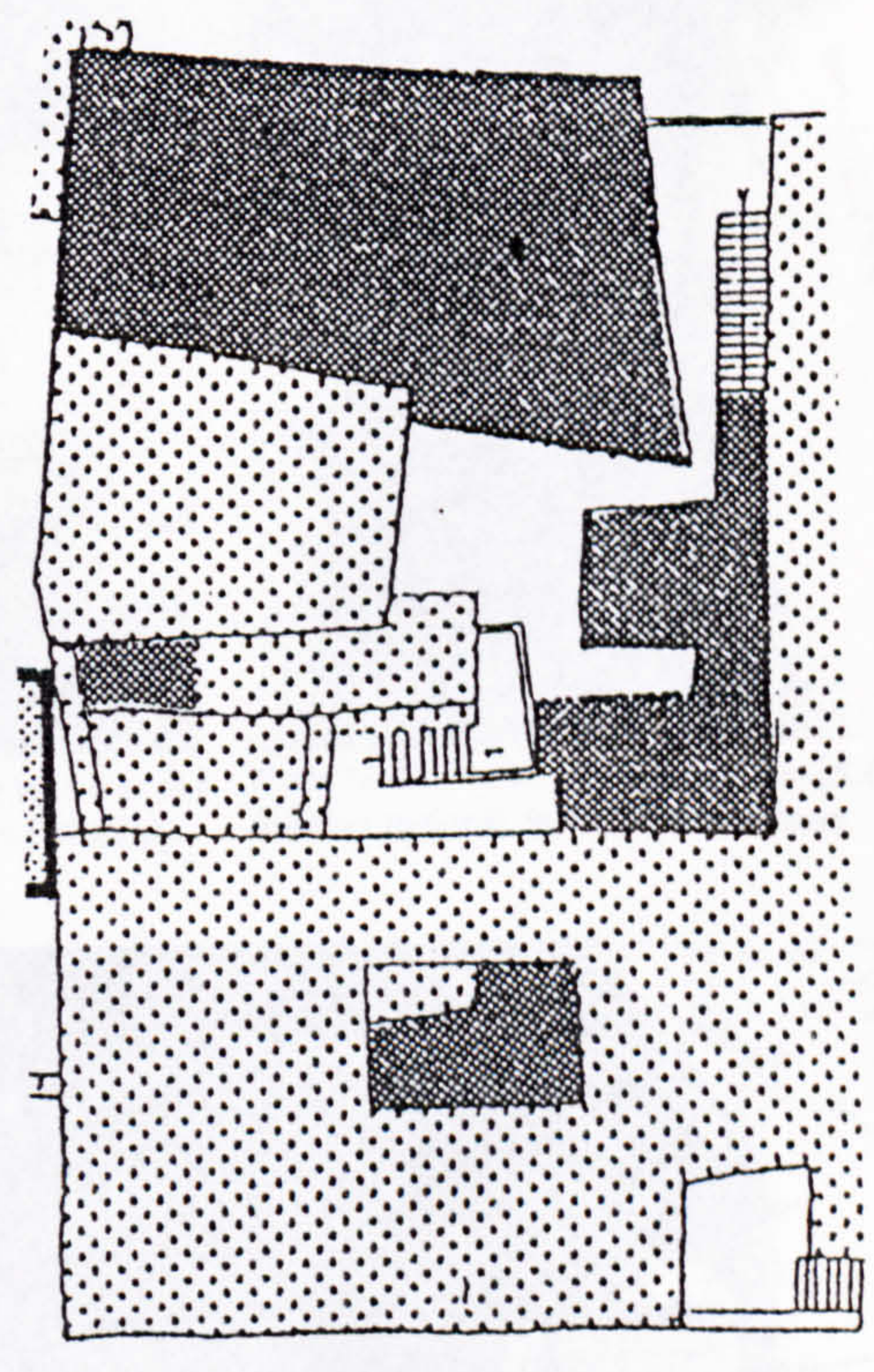
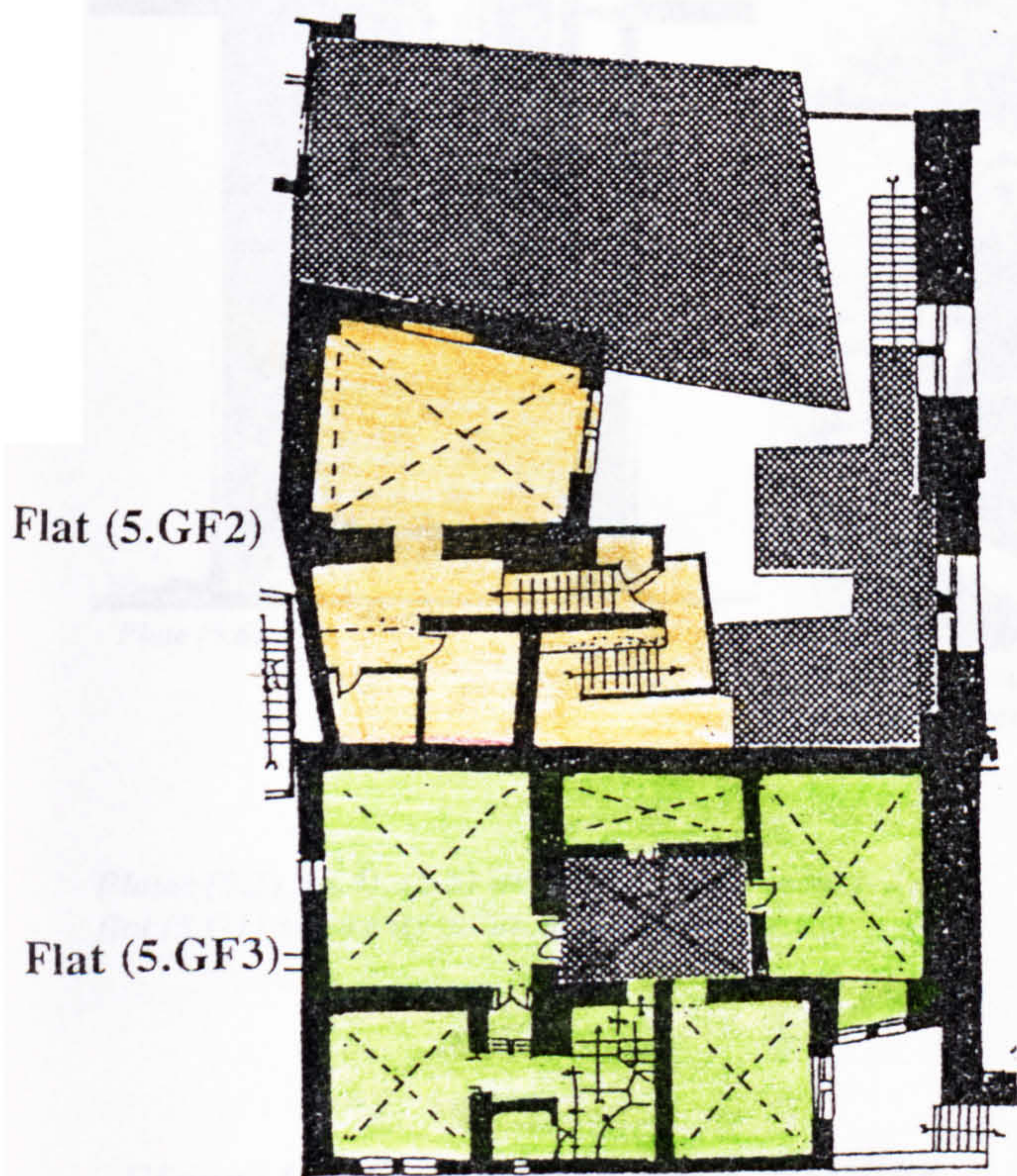


Plate (5.2): Flat (5,G.1). after demolition.



First floor.

Roof plan.

Figure (8.25): Plans of Building 5, as existing.

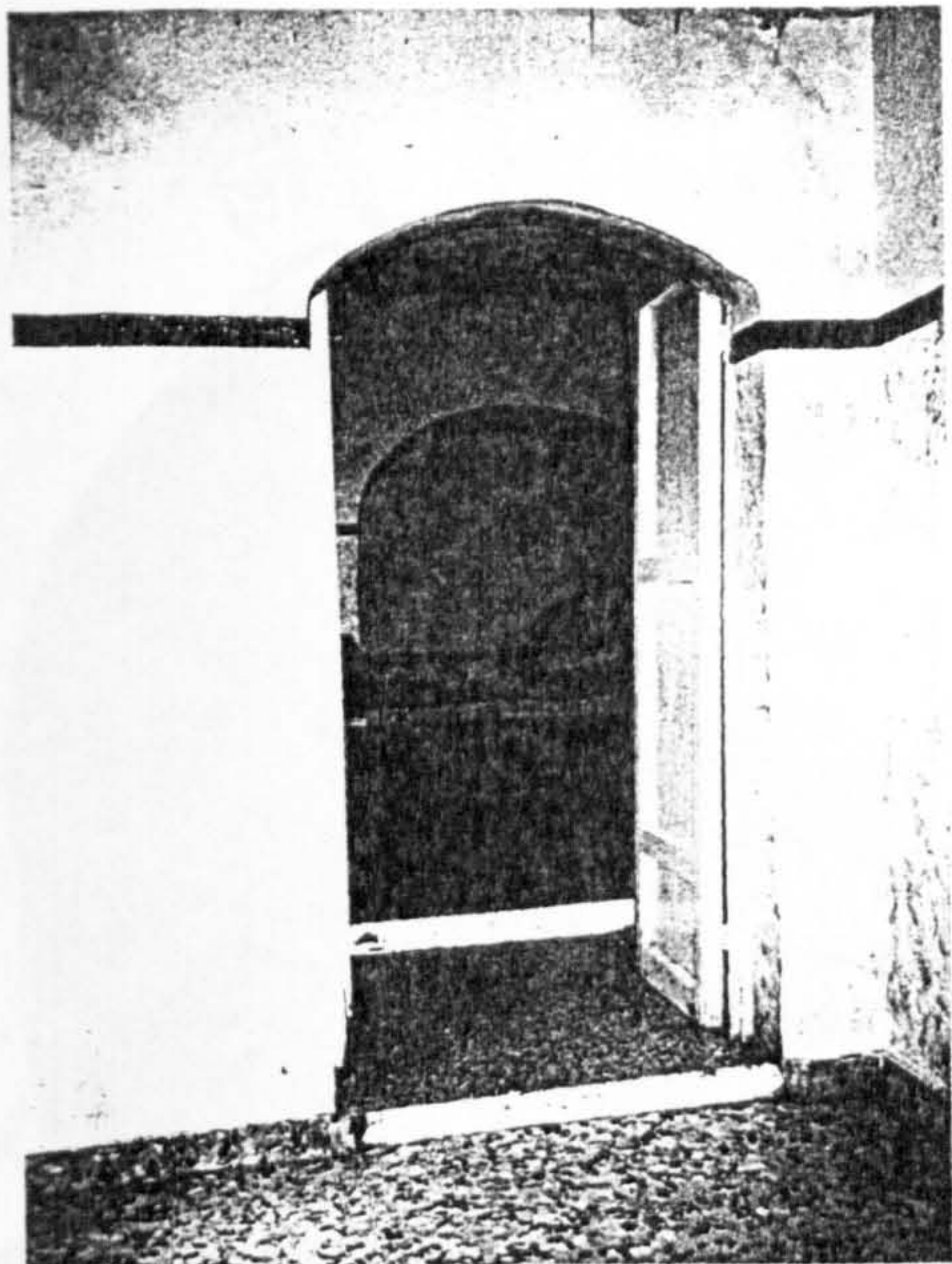
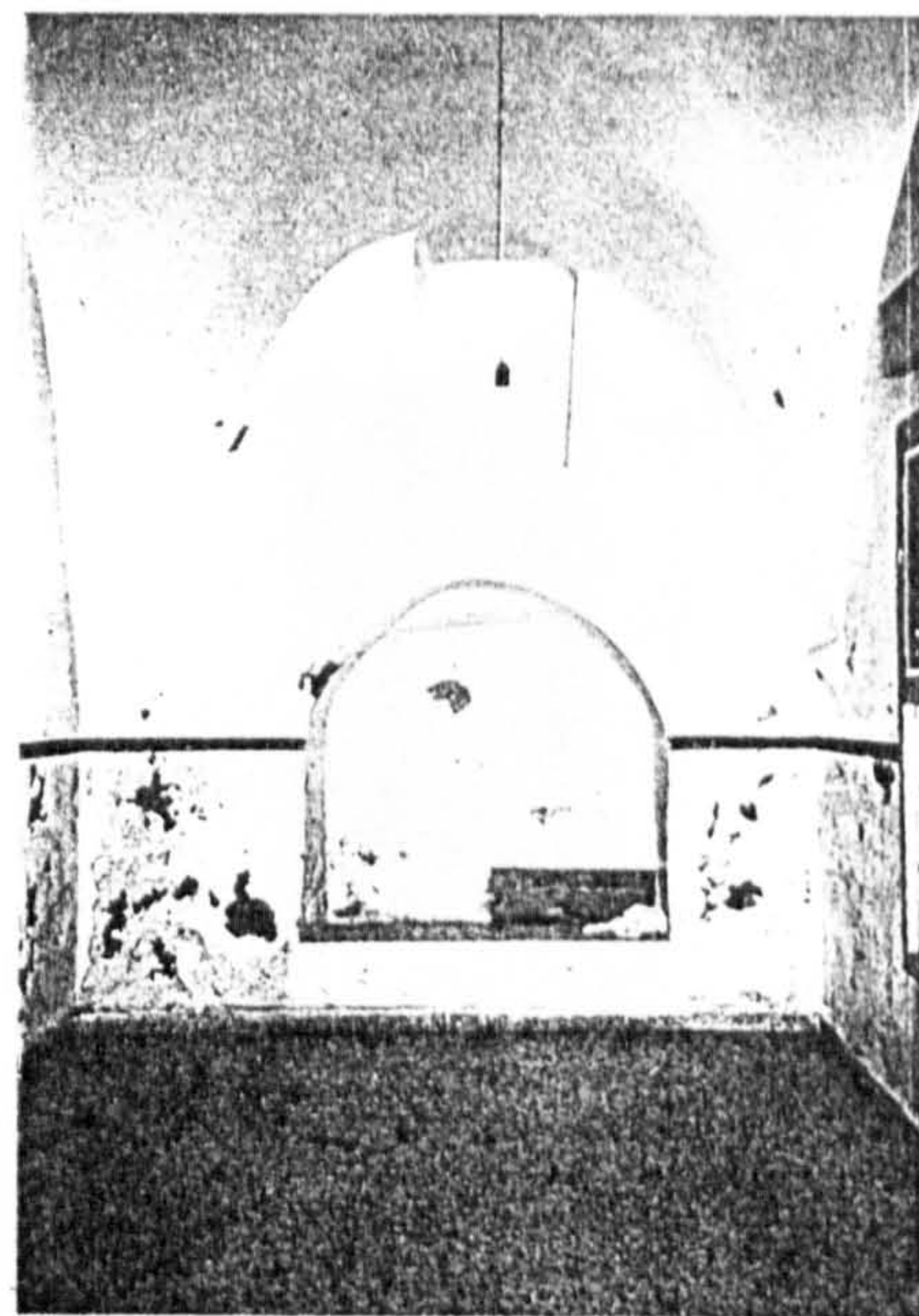


Plate (5.3)



Plate (5.4)



Plate(5.5)

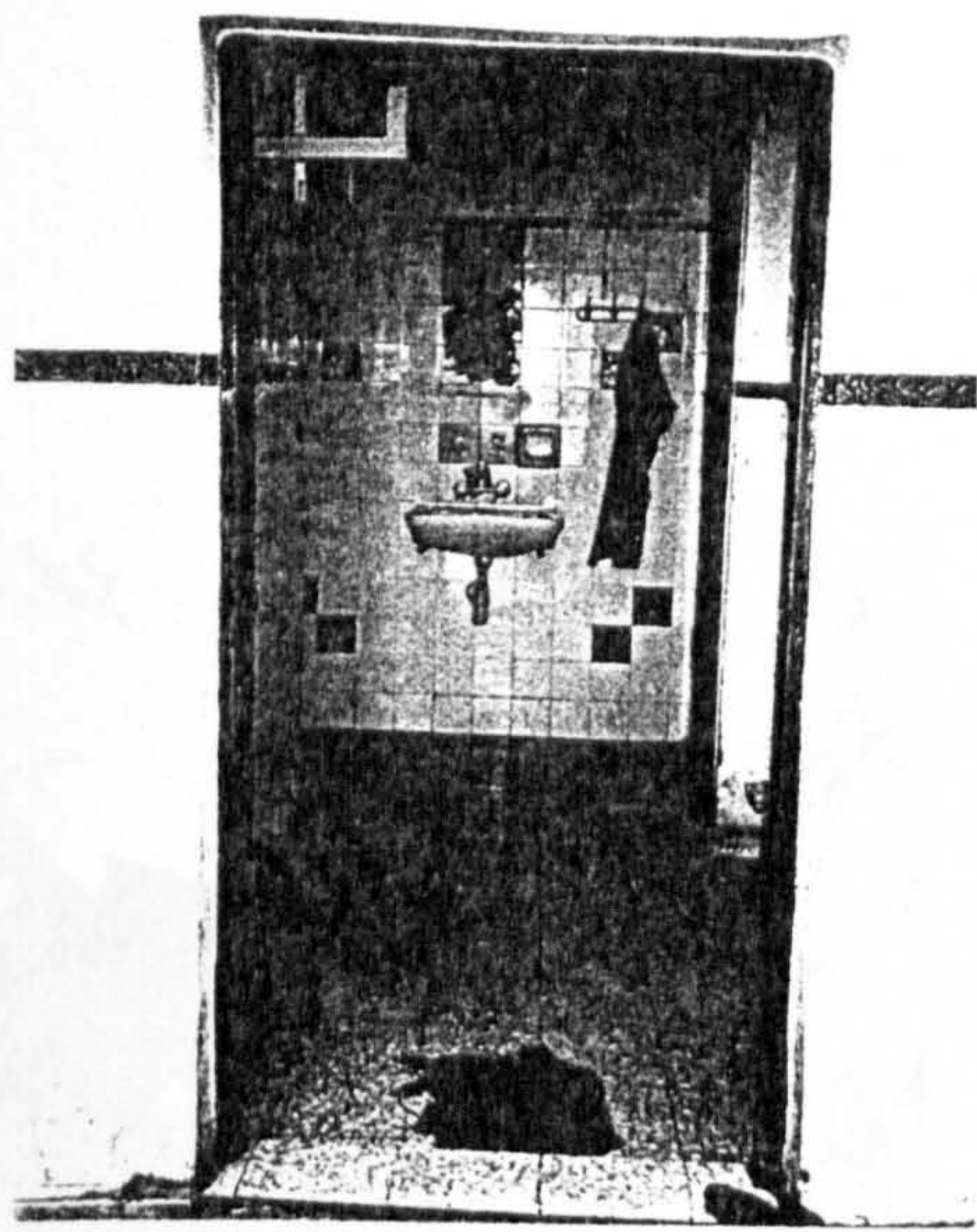


Plate (5.6)



Plate (5.7): South-east elevation which has the main entrances of flats (5.GF2) and (5.GF3).

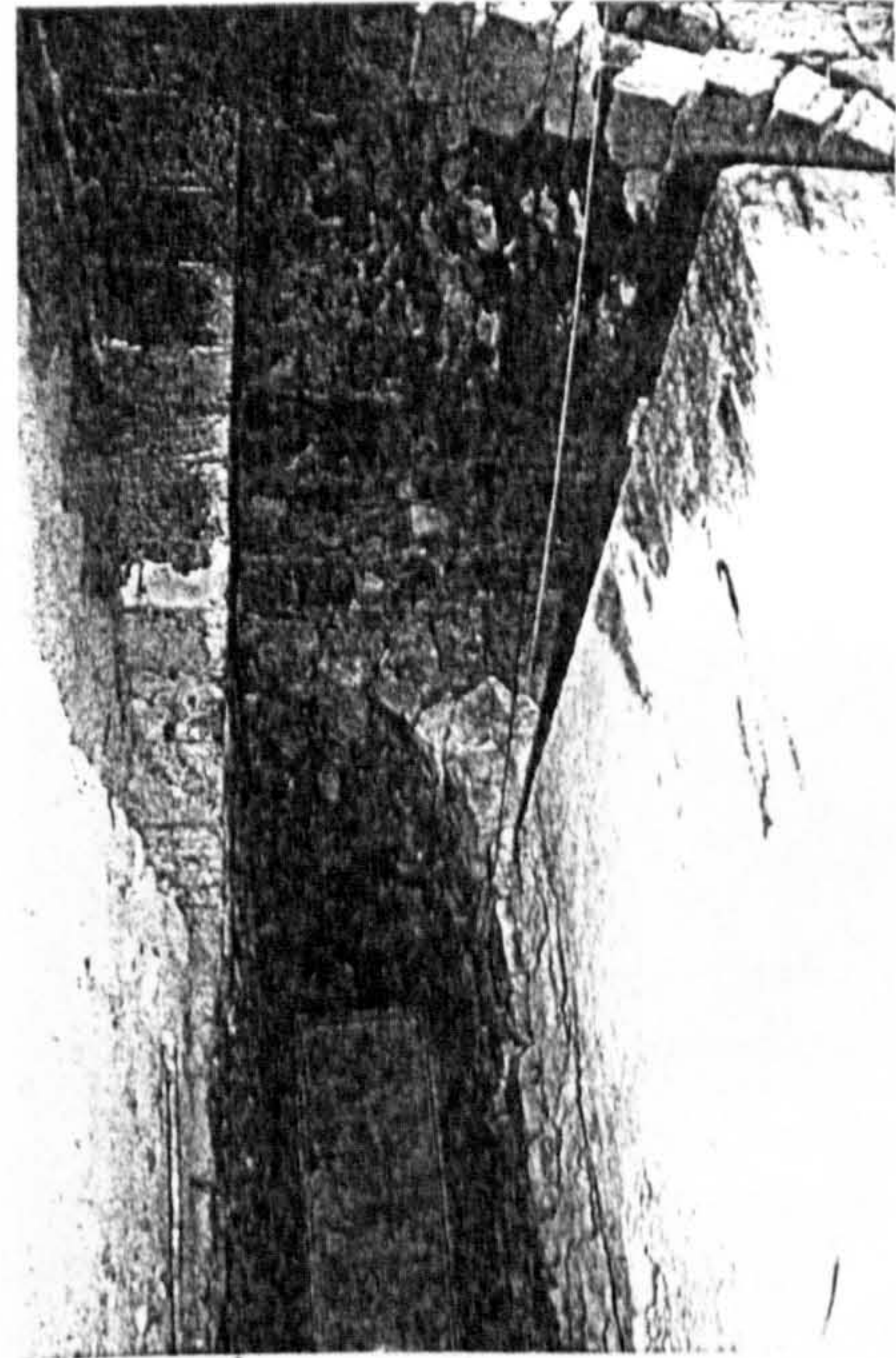


Plate (5.8): Inside the foyer of flat (5.GF2) looking towards to the external door.

Plates (5.3), (5.4), (5.5) and (5.6): The evacuated flat (5.G1) before its political demolishing.

Figure (8.26): Building no. 5, Existing Condition (1).

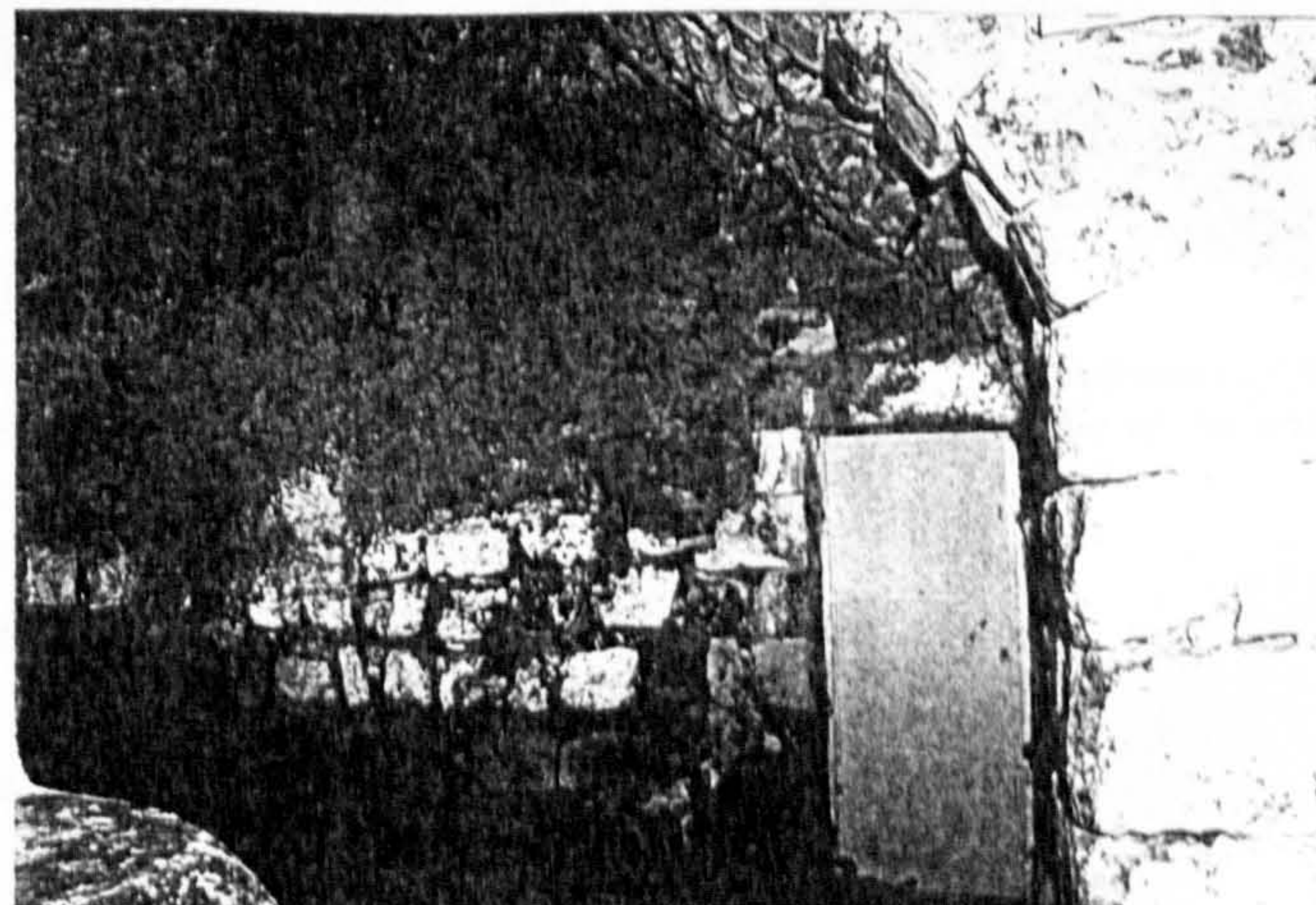


Plate (5.9): The entrance of flat (5.GF2).



Plate (5.10): Approaching the entrances of the two flats (5.GF2) and (5.GF3).

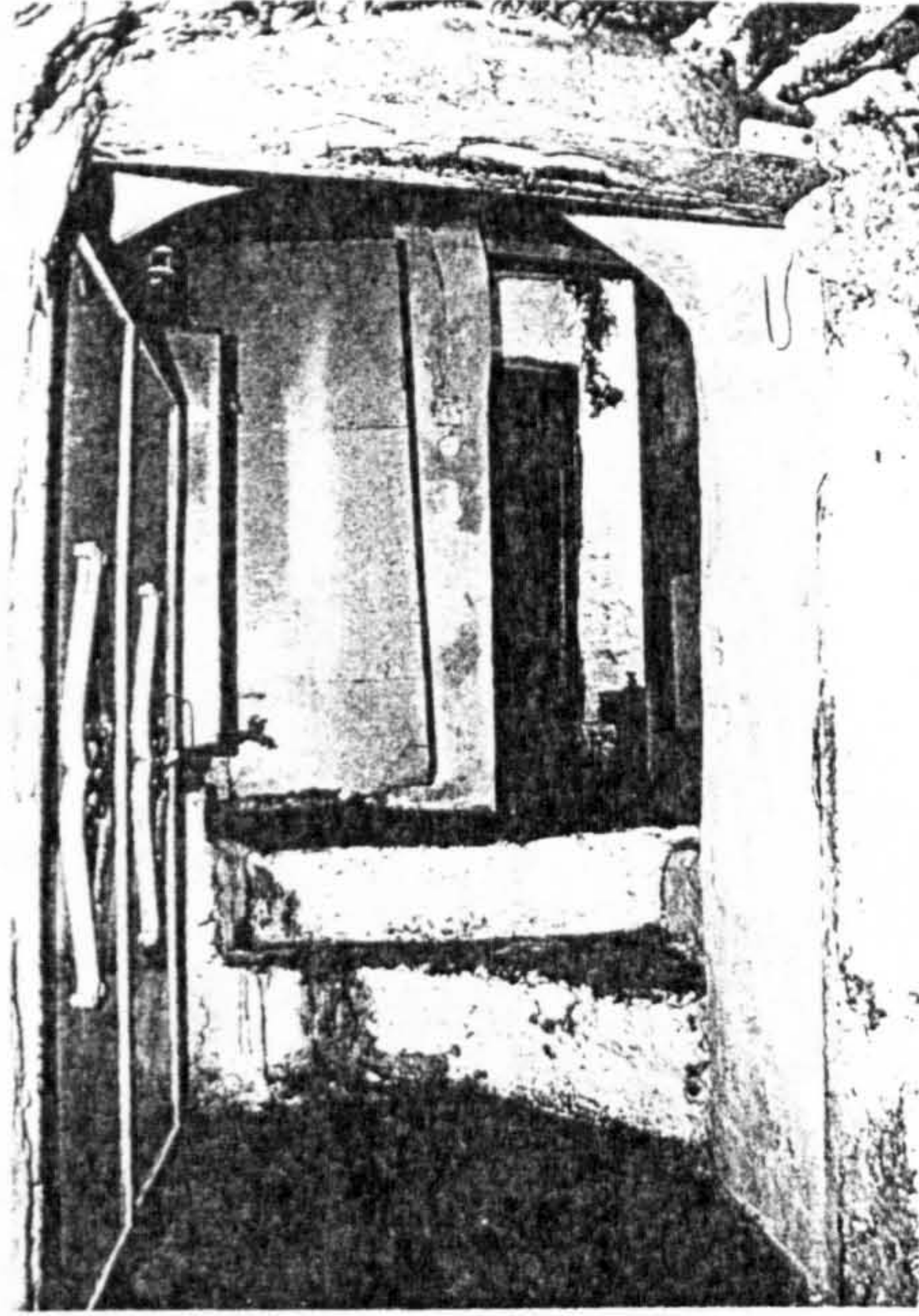


Plate (5.11): The main entrance of flat (5.GF3).



Plate (5.12): The court of flat (5.GF3); on the left. On the right hand side is the stair leads up to the roof.



Plate (5.13): The open court of flat (5.GF3).



Plate (5.14): Looking towards the court of flat (5.GF3) from this bed room; notice the only upper window it has.

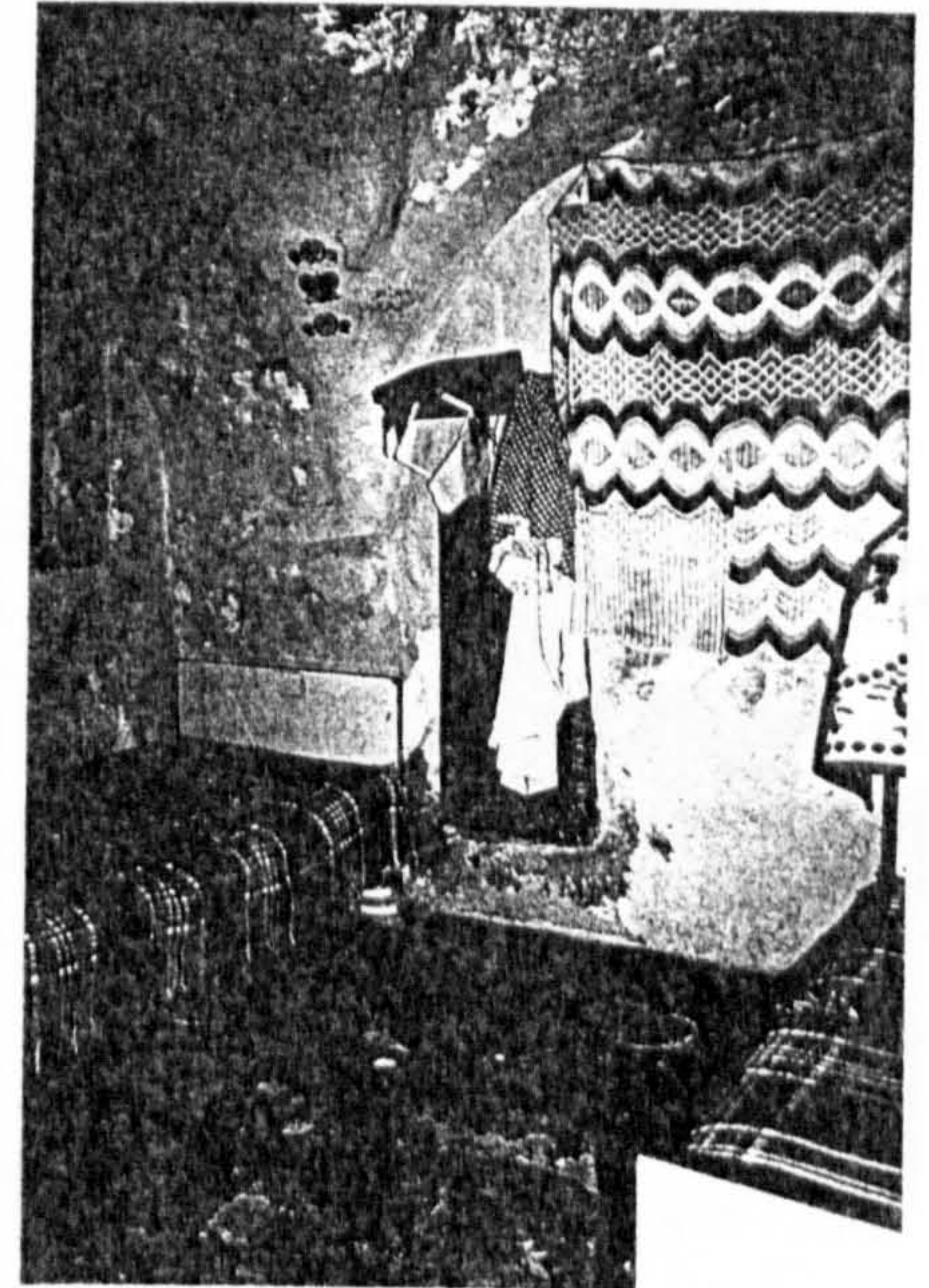


Plate (5.15): Inside one of the bedrooms of flat (5.GF3); notice the bad condition of the walls, vault and floor have.

Figure (8.27): Building no. 5, Existing Condition (2).

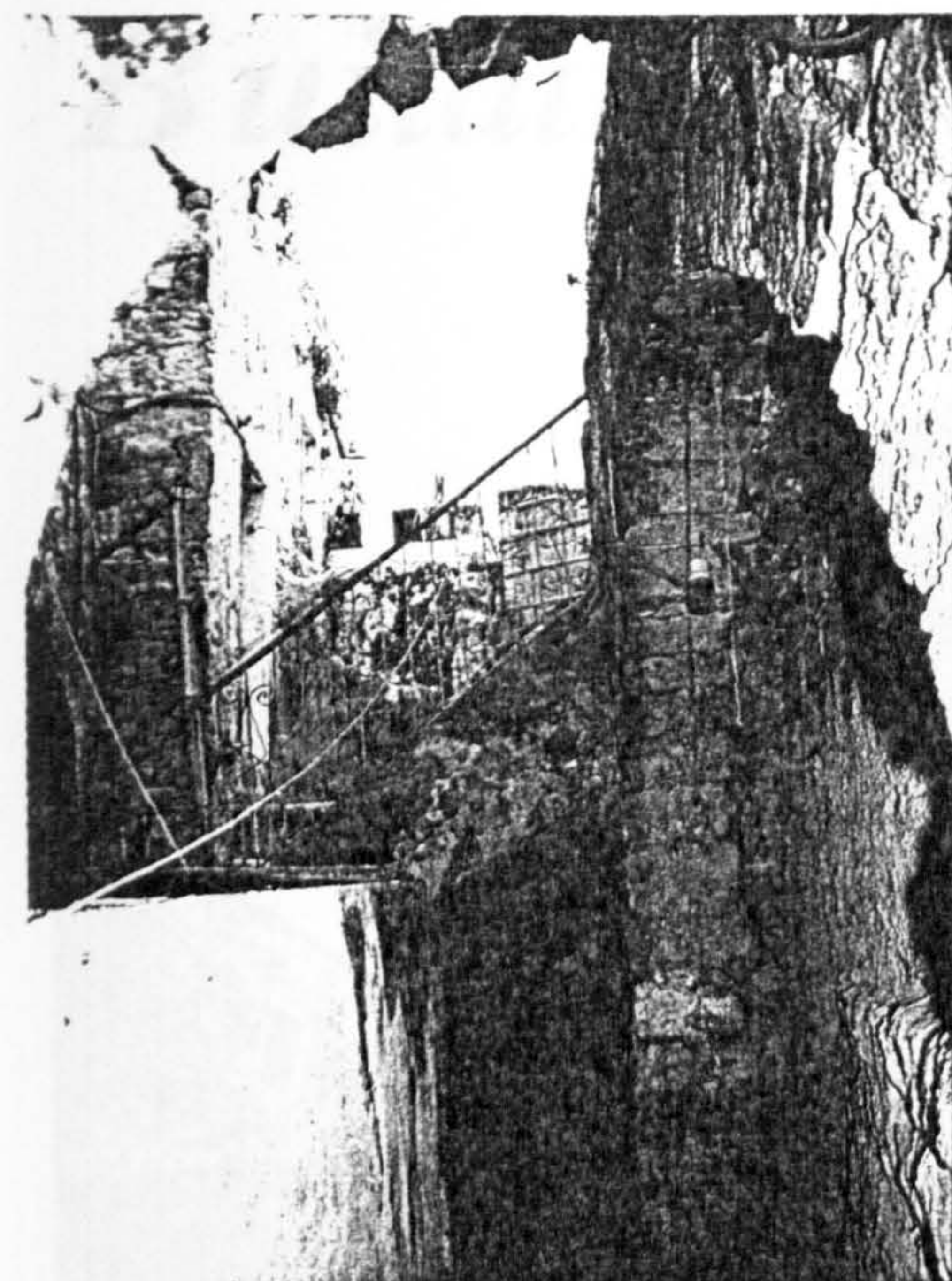


Plate (5.16): Approaching the stair which leads up to the first floor part of flat (5.GF2).

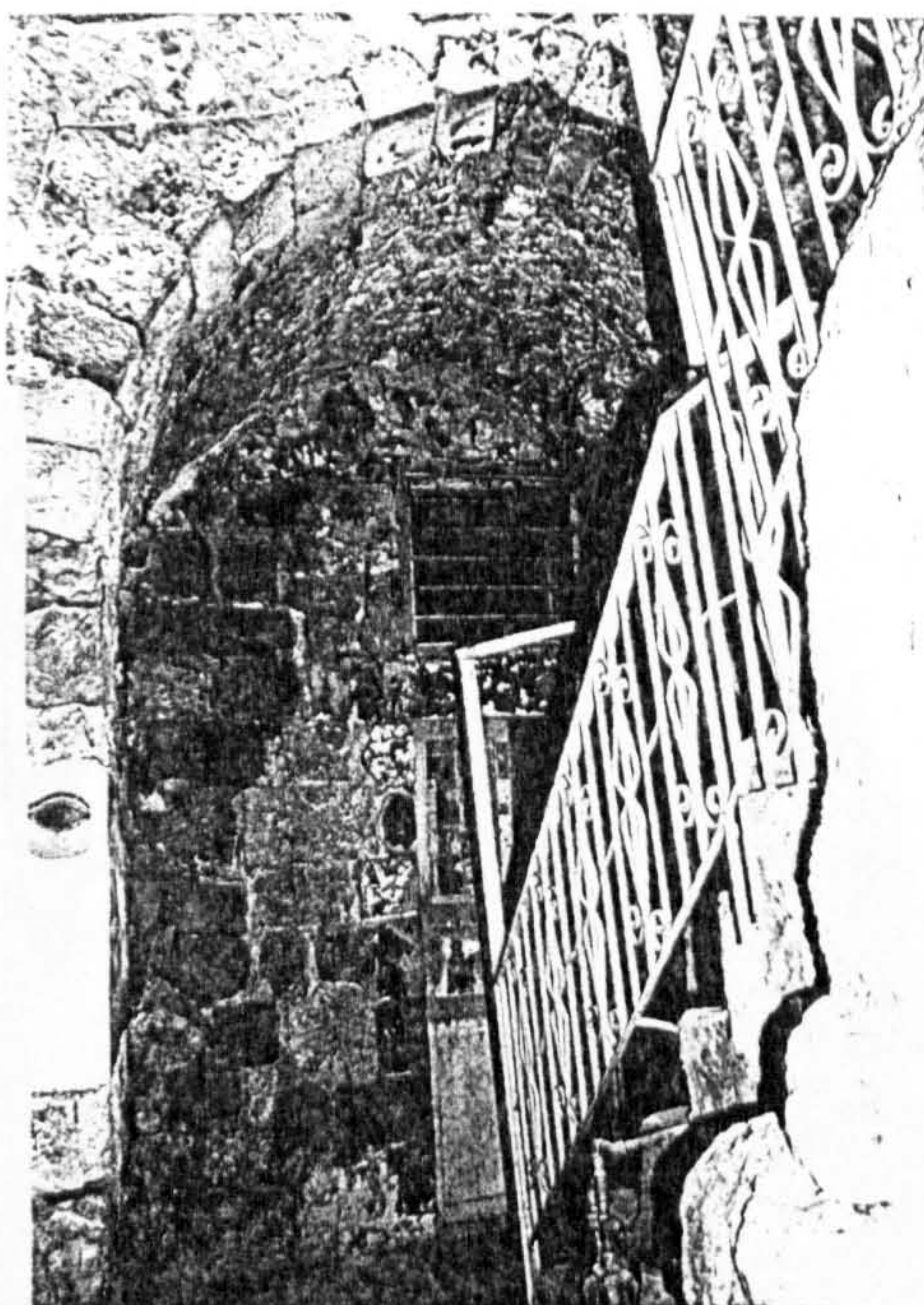


Plate (5.17): A deserted room on the ground floor within the same flat (5.GF2).



Plate (5.18): A closer look to the deserted room floor.

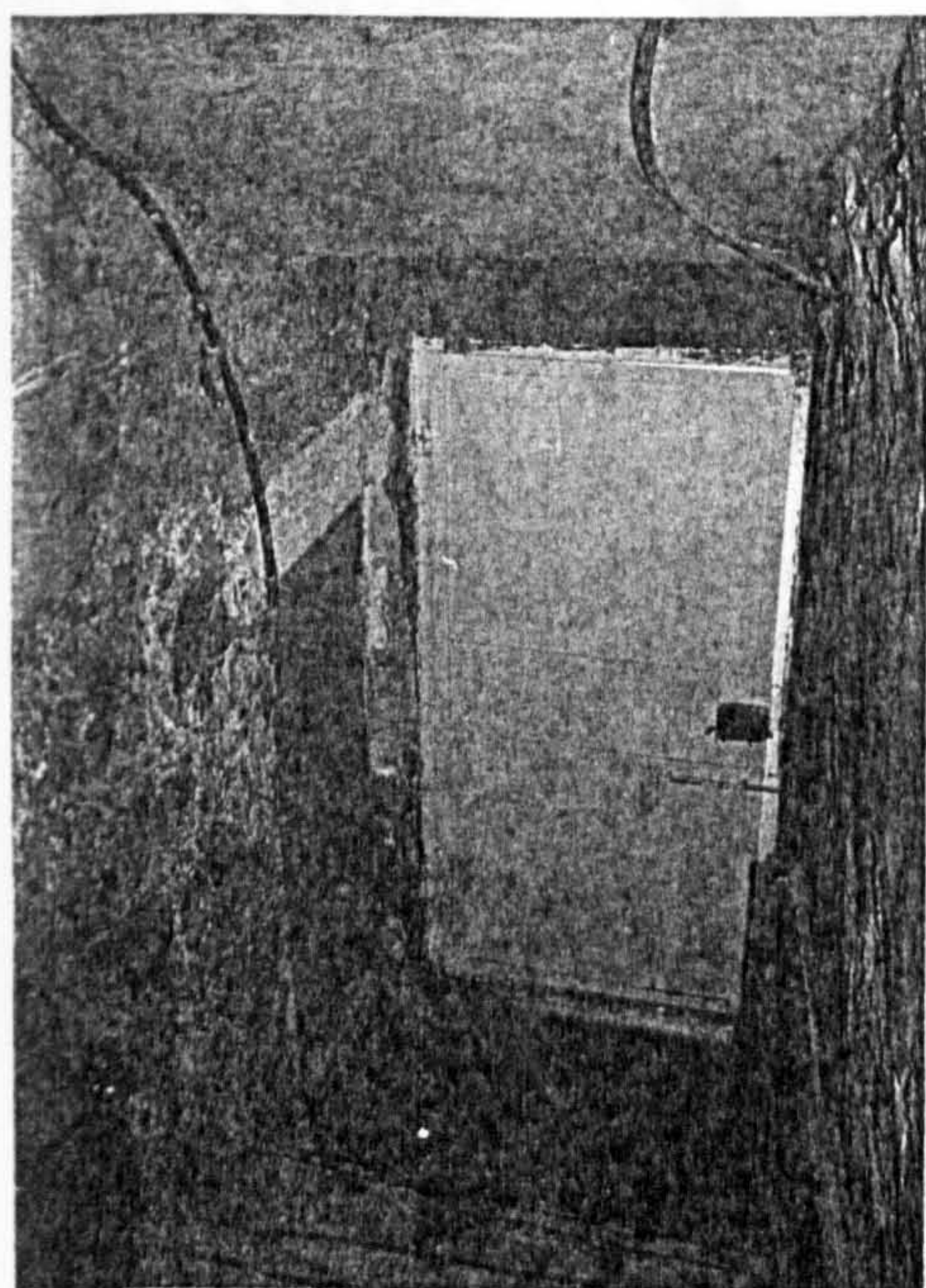


Plate (5.19): The covered part of the same stair leading to the first floor of the flat (5.GF2).



Plate (5.20): The kitchen of flat (5.GF2) at the end of this open court.



Plate (5.21): First floor main room of the same flat (5.GF2).

Figure (8.28): Building no. 5, Existing Condition (3).

*Figure (8.29):
Buildings no.6 and 7*

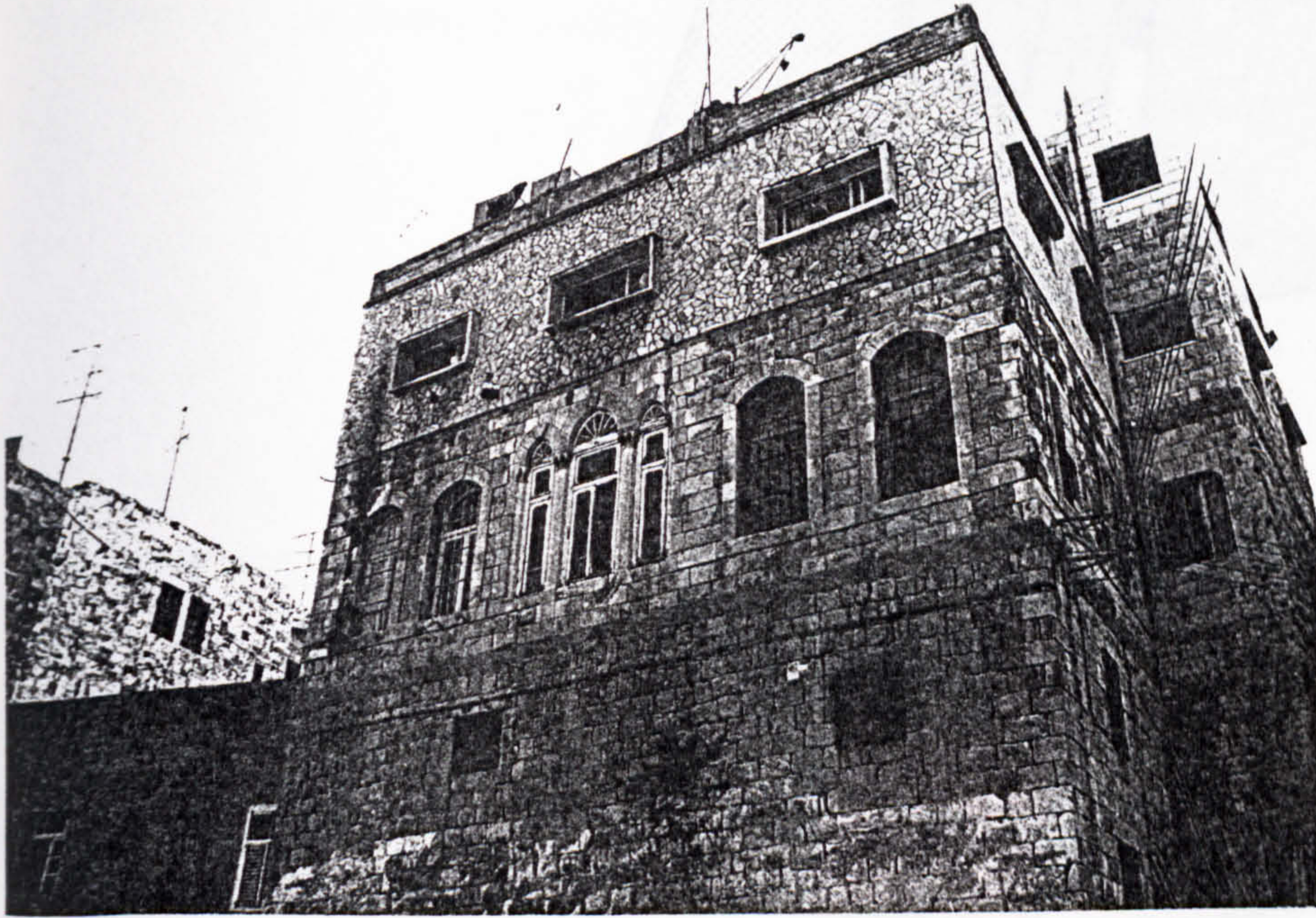
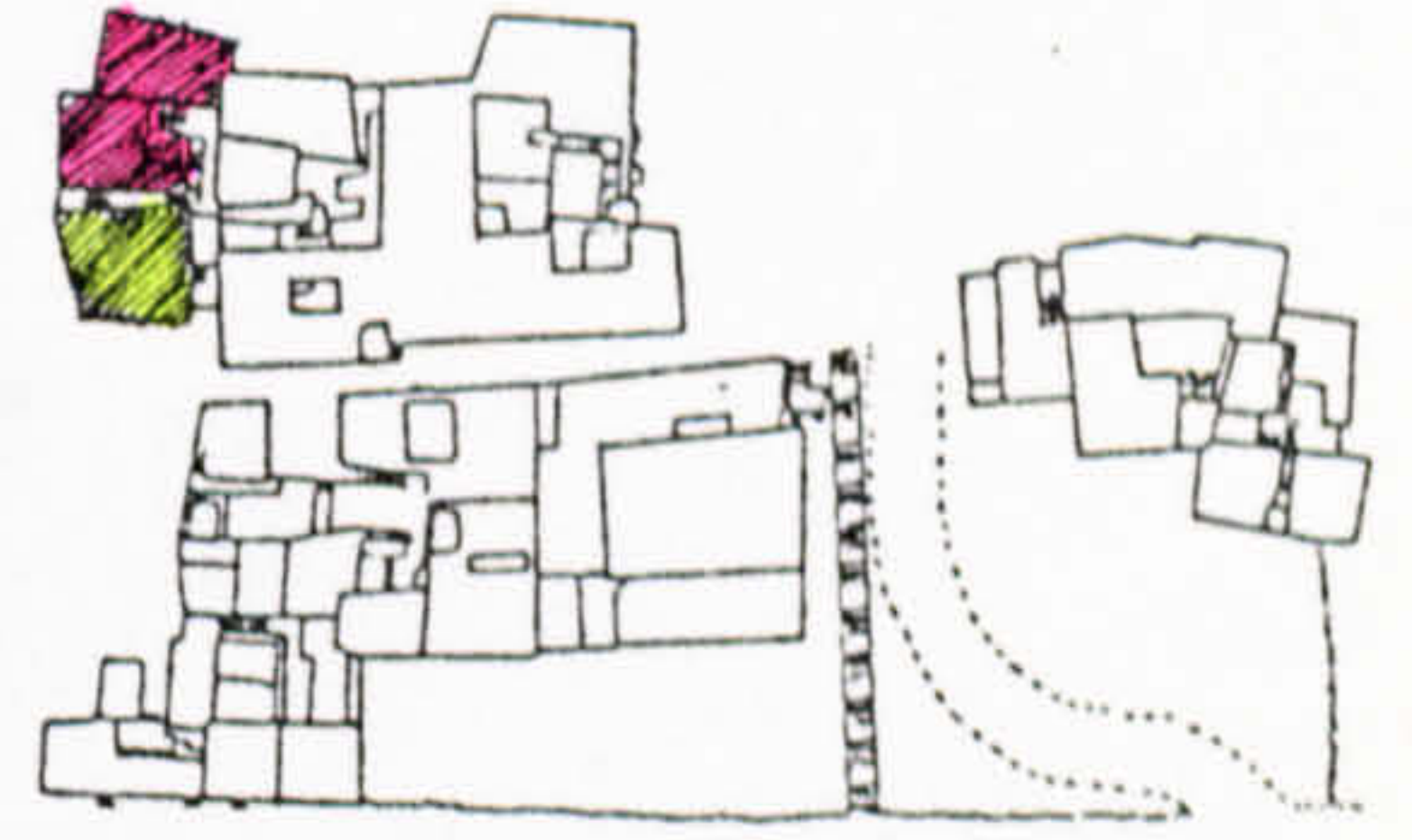


Plate (6.1): North elevation of building no.6.



Location within the site.

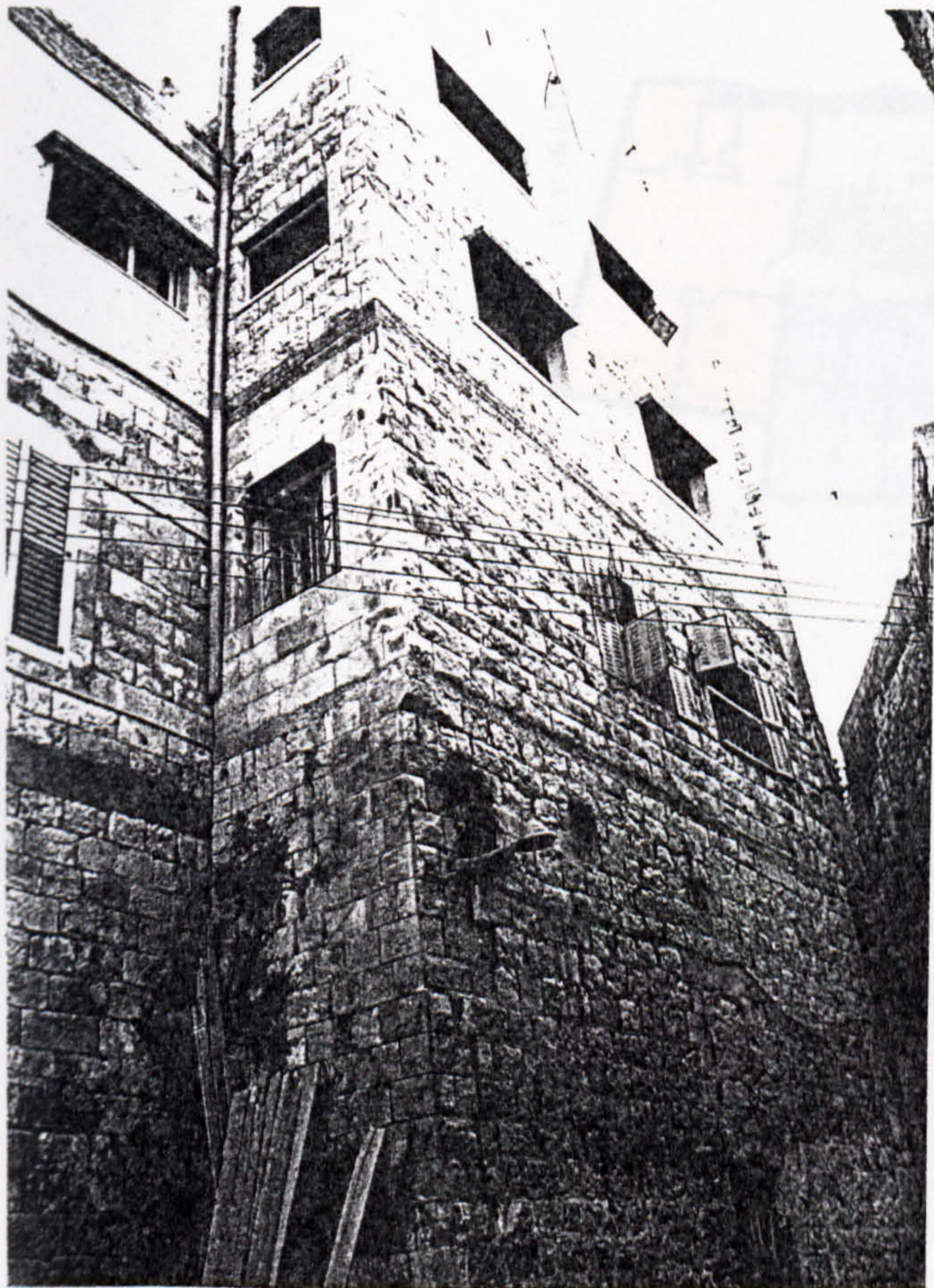


Plate (6.2): West elevation of building no.6.

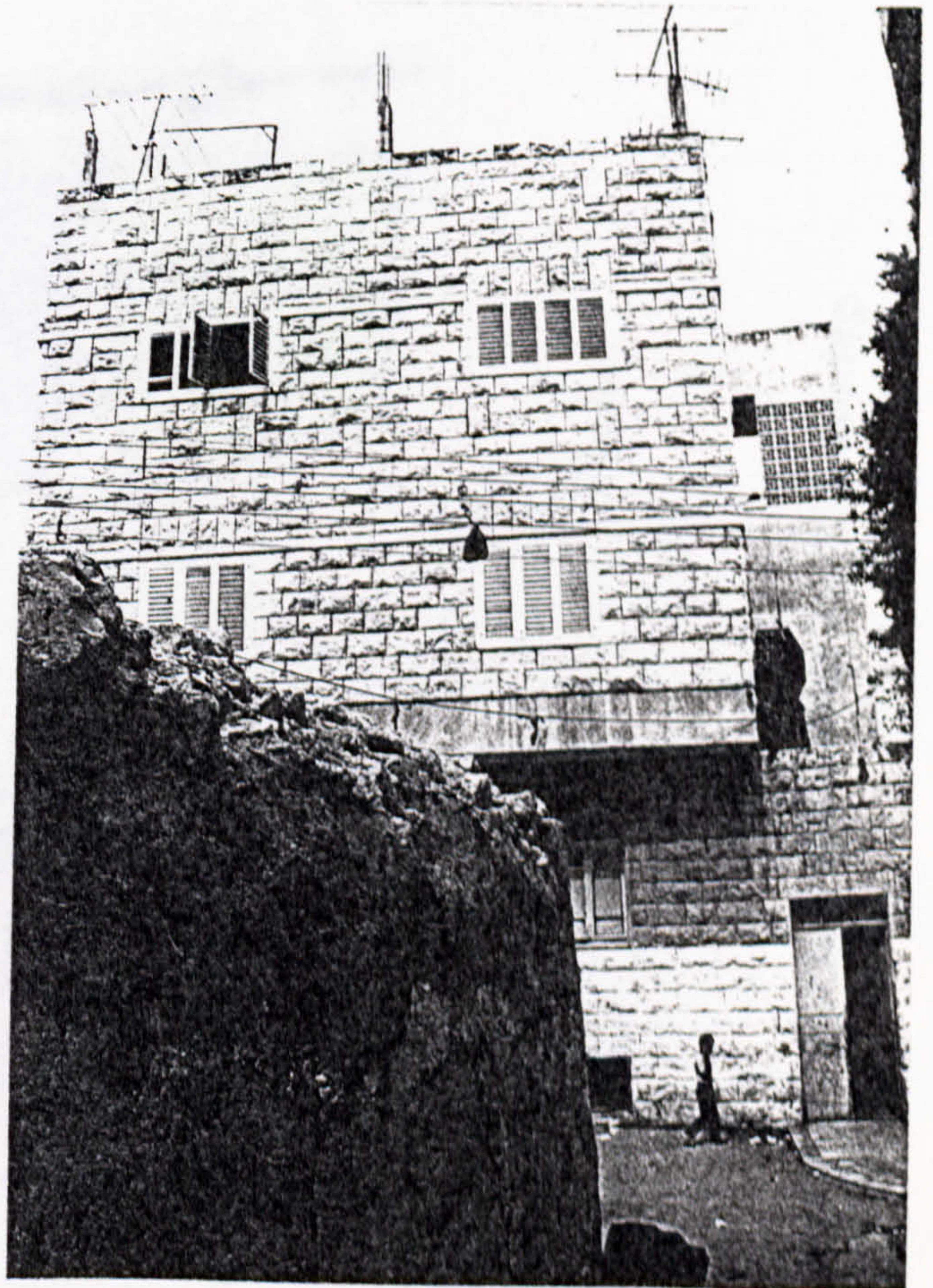


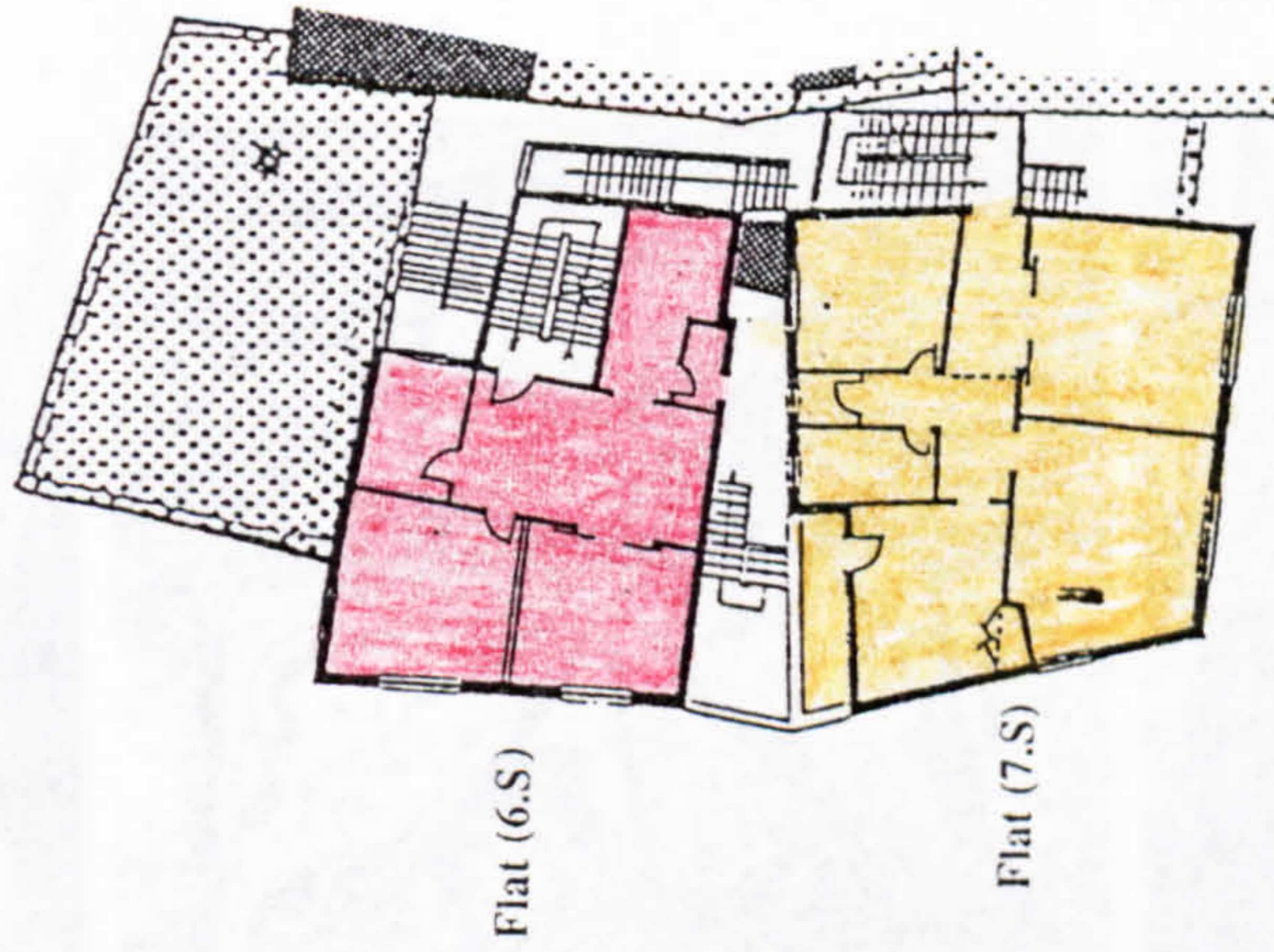
Plate (6.3): South elevation of building no.7.



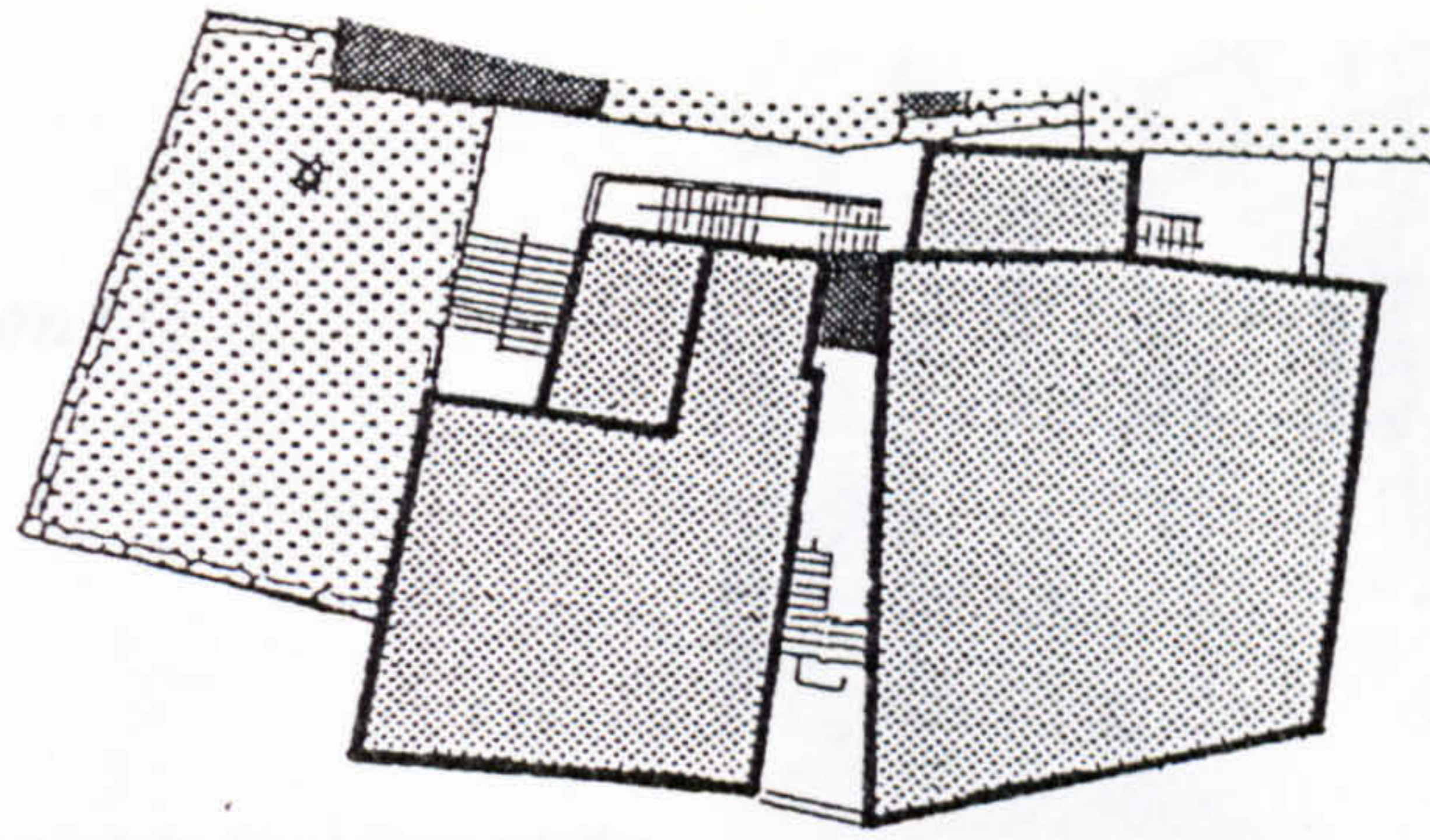
Ground floor.



First floor.



Second floor.



Roof plan.



Figure (8.30): Plans of Buildings 6 & 7, as existing.

*Figure (8.31):
Building no. 6, Existing Condition (1).*

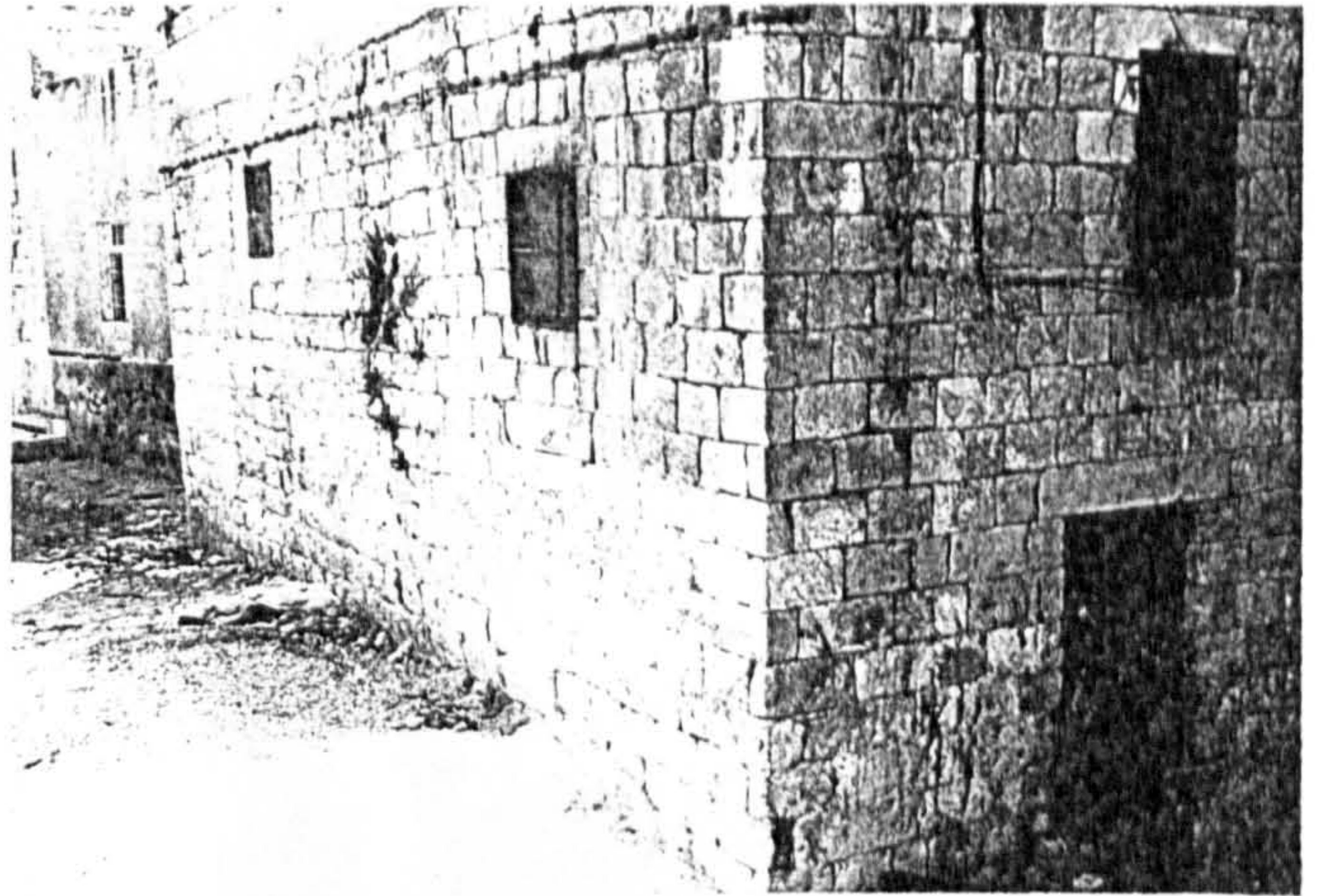


Plate (6.4): The bakery exterior



Plate (6.5): The west elevation of the southern part of building no.6; which has a store place on the basement.



Plate (6.6): A detailed view of a decorated stone near the bakery entrance.

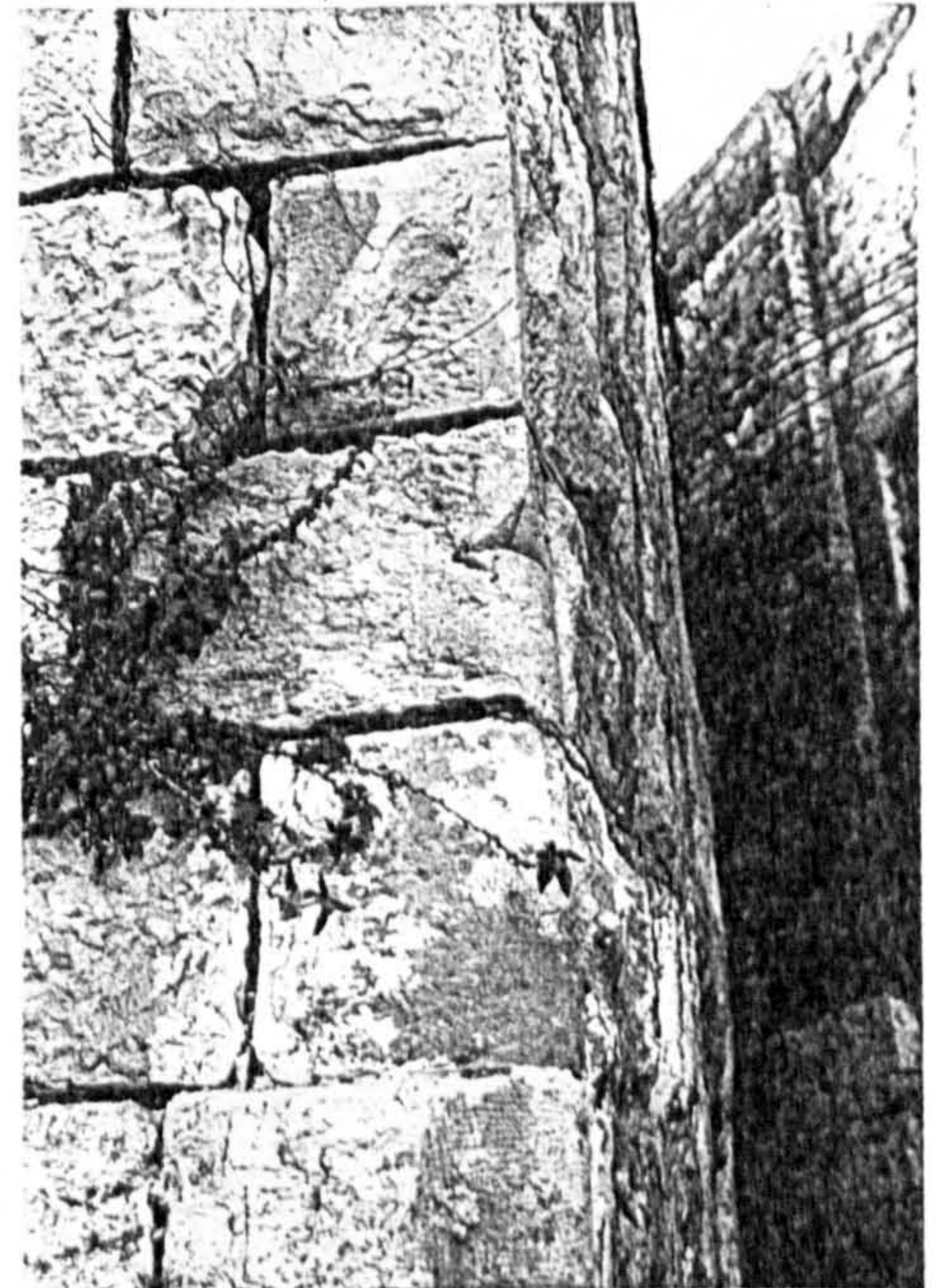


Plate (6.7): Stone structure in bad condition; notice the vanished mortar and the growing plants.

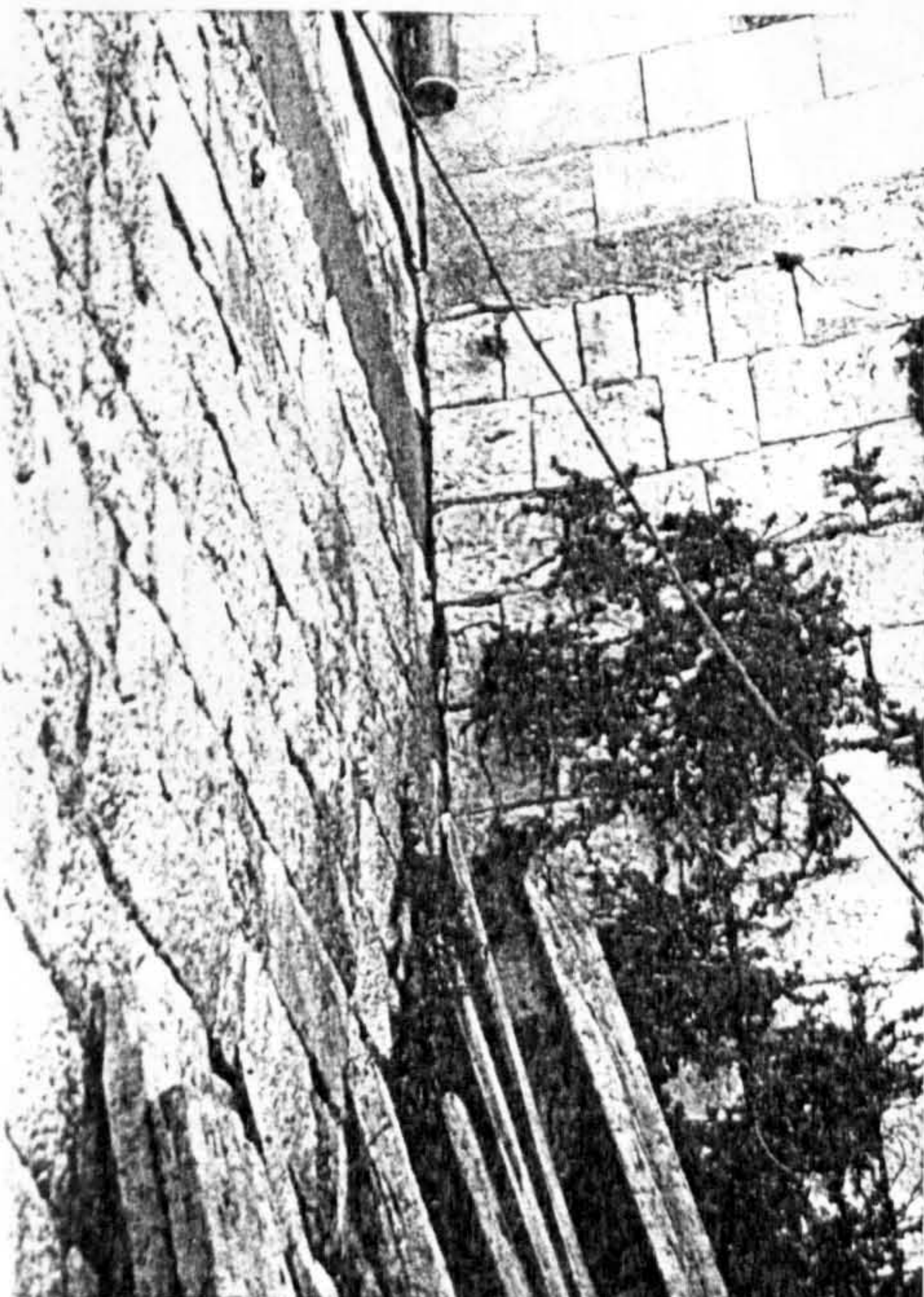


Plate (6.8): The north-west corner where both parts of building no.6 joined.

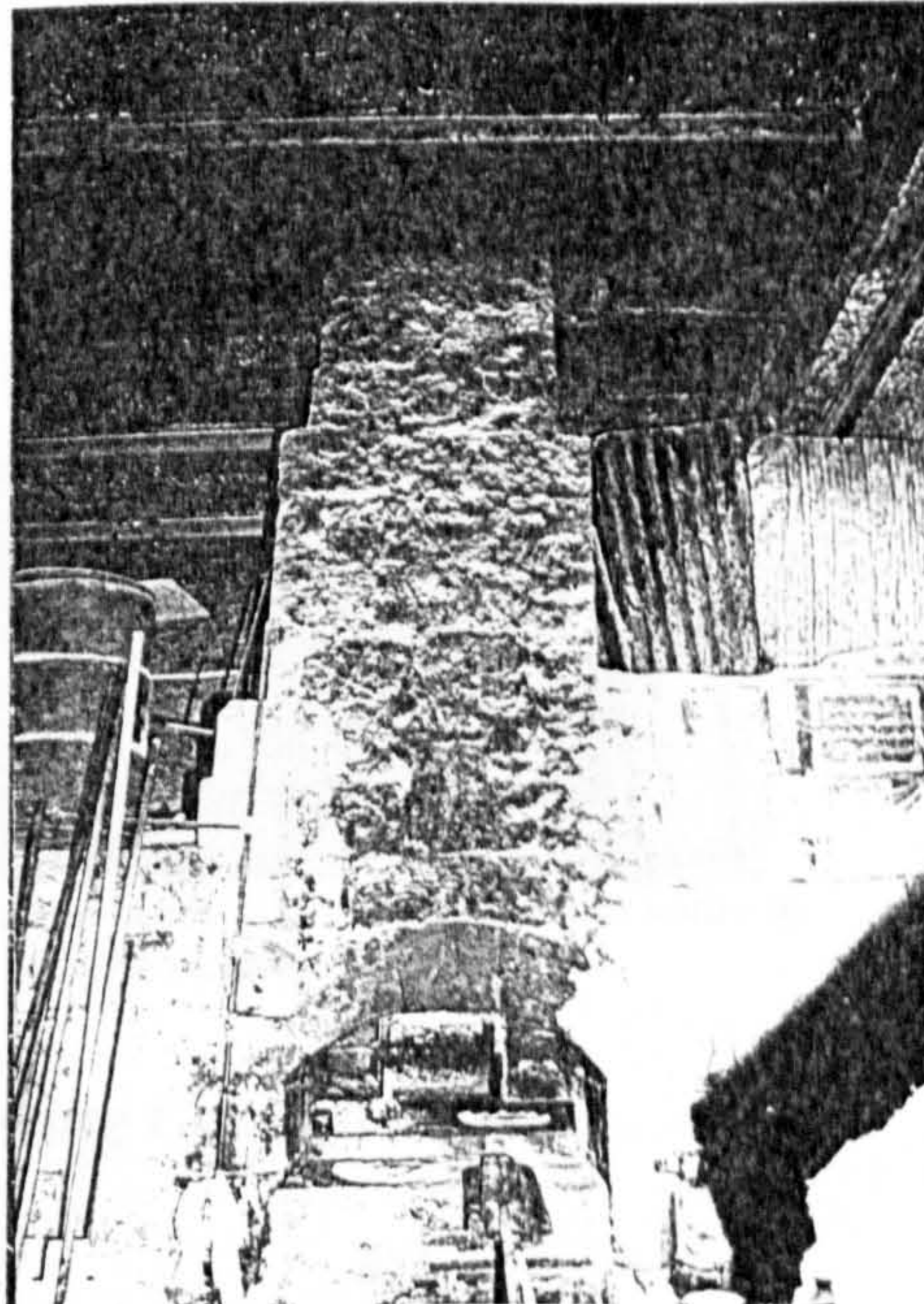


Plate (6.9): The oven place of the bakery.



Plate (6.10): The baker in action.



Plate (6.11): The passage way to the flats of building no.6.

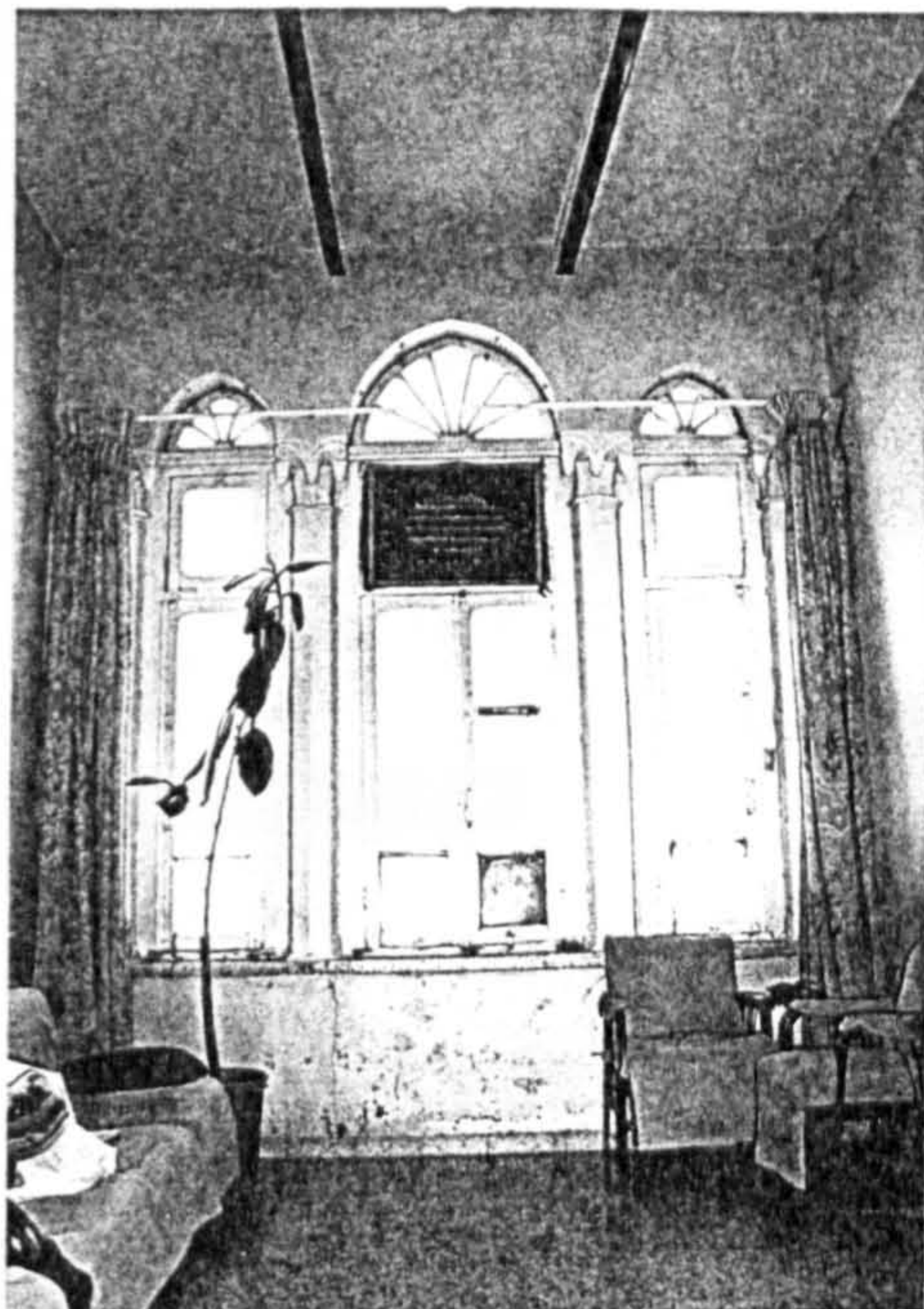


Plate (6.12): Main hall of flat (6.G.1).

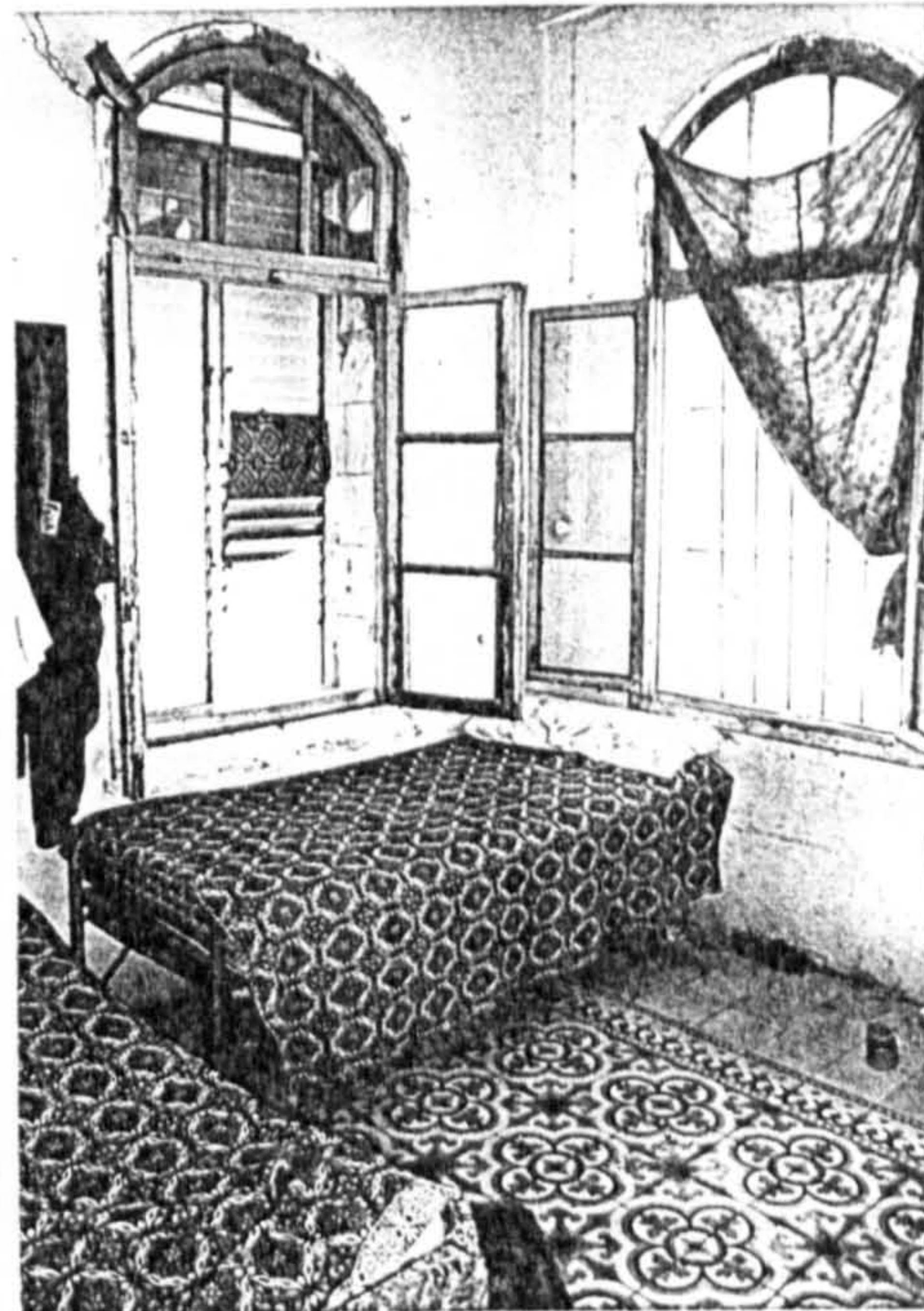


Plate (6.13) Inside a bedroom within flat (6.G2).

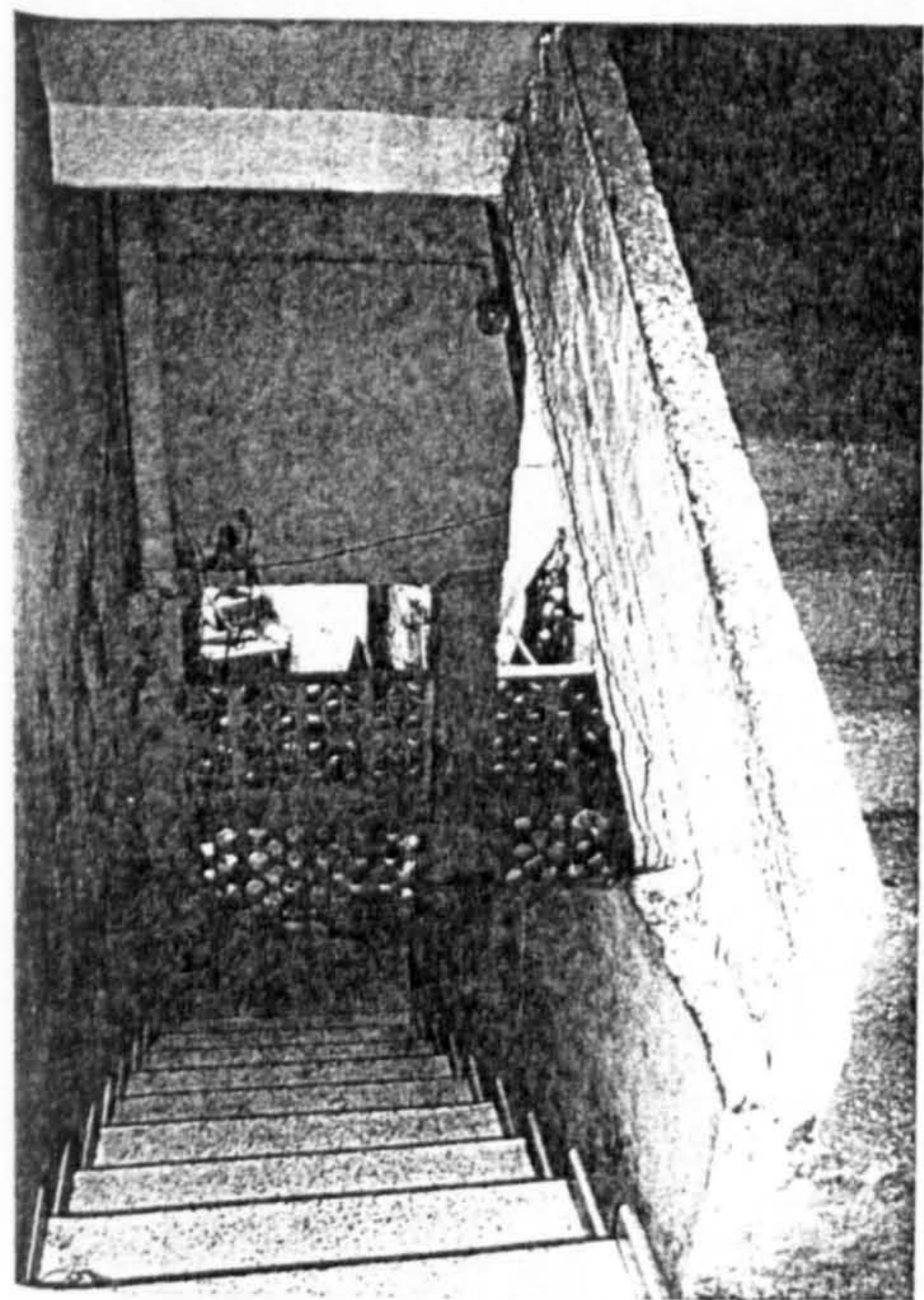


Plate (6.14): Stair case leading to flat (6.F1).

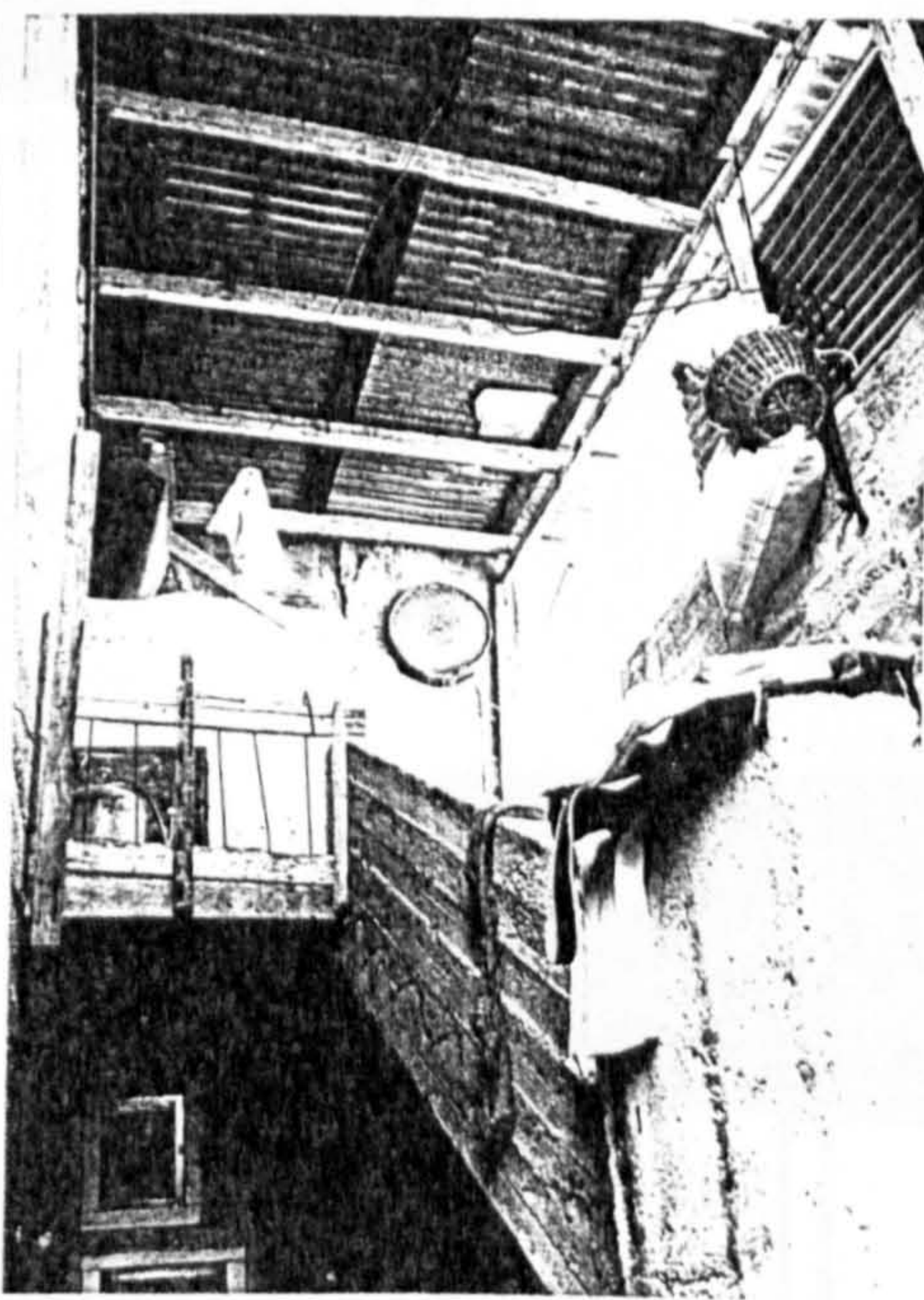


Plate (6.15): Top of the stair case; notice its building materials.



Plate (6.16): The chimney of the bakery inside the bathroom of flat (6.F1).

Figure (8.32): Building no. 6, Existing Condition (2).

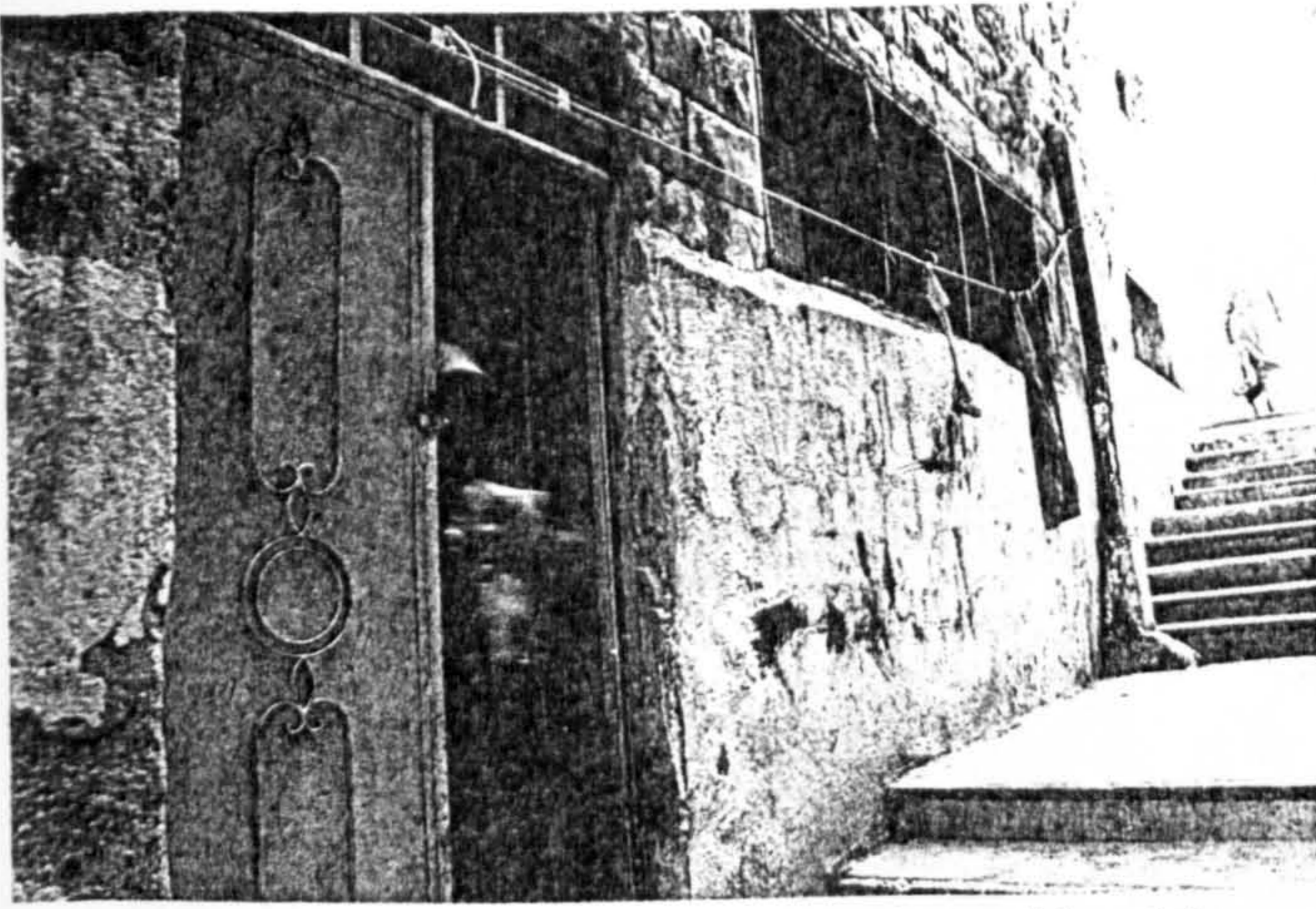


Plate (7.1): Flat (7.B) main entrance; notice the condition of the exterior plaster.



Plate (7.2): Inside the setting room of flat (7.B).

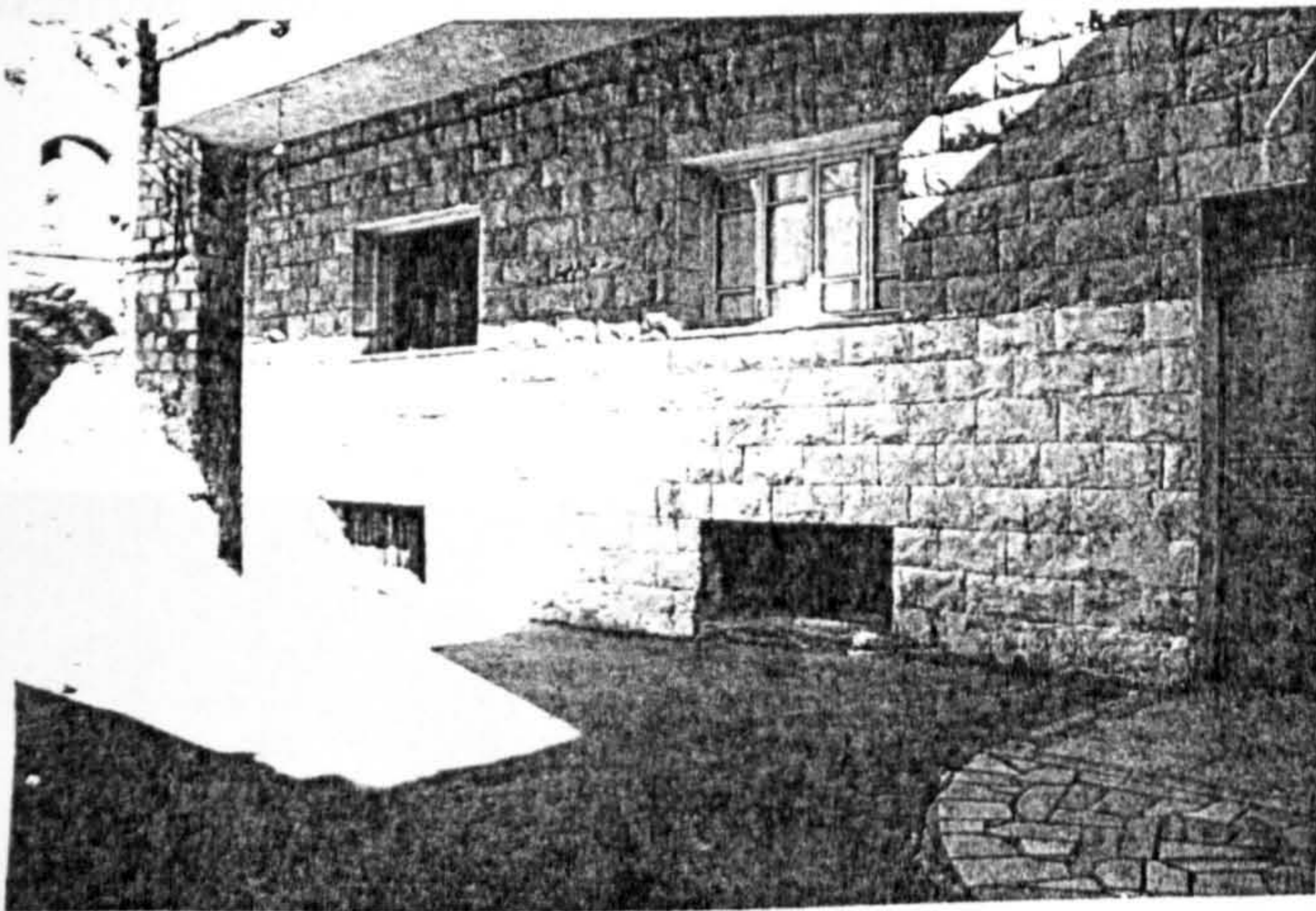


Plate (7.3): South elevation of building no.7; showing the low windows of flat (7.B).



Plate (7.4): The stairs leading to the upper flats of building no.7.

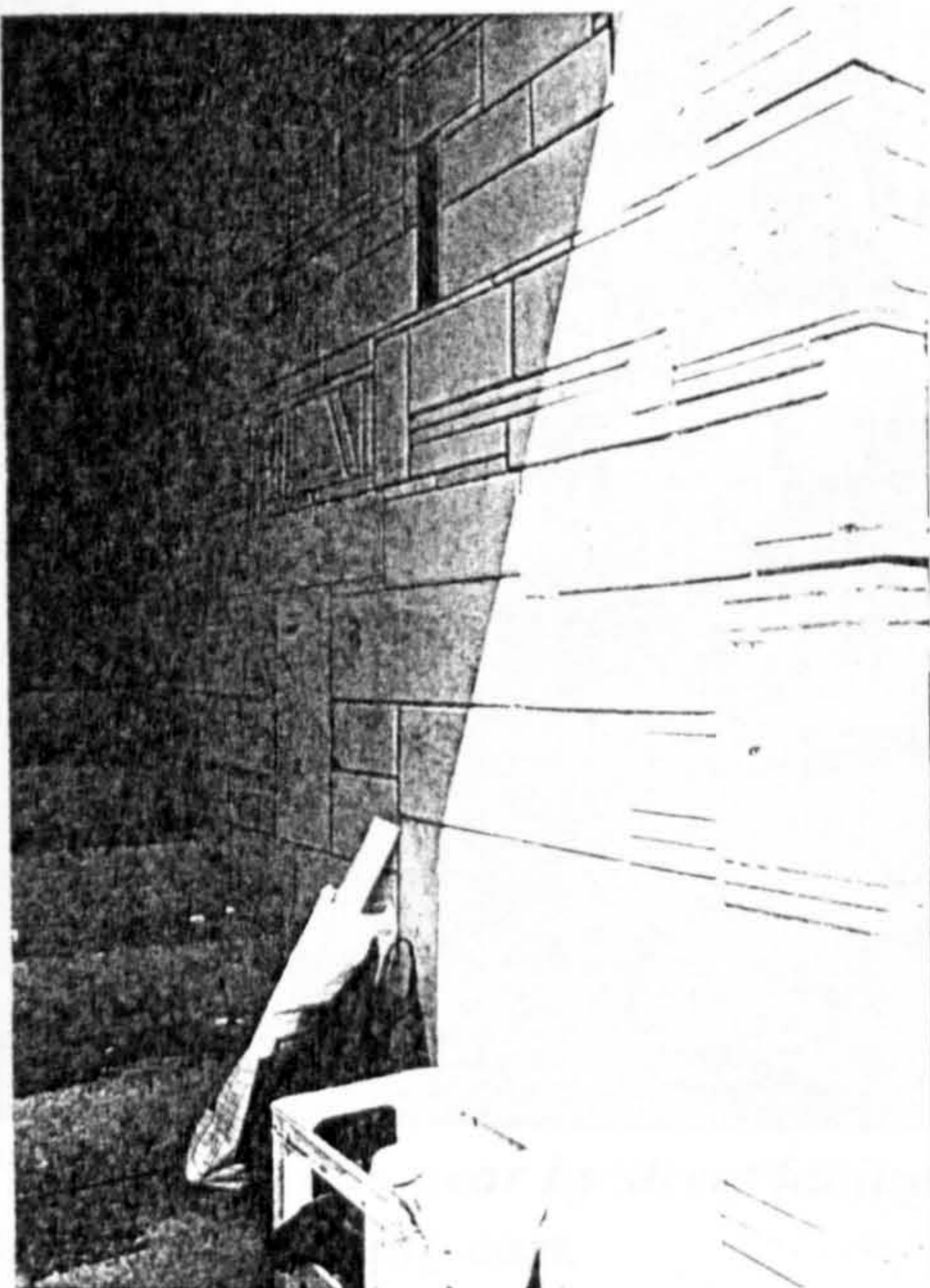


Plate (7.5): The stone work within staircase of building no.7.

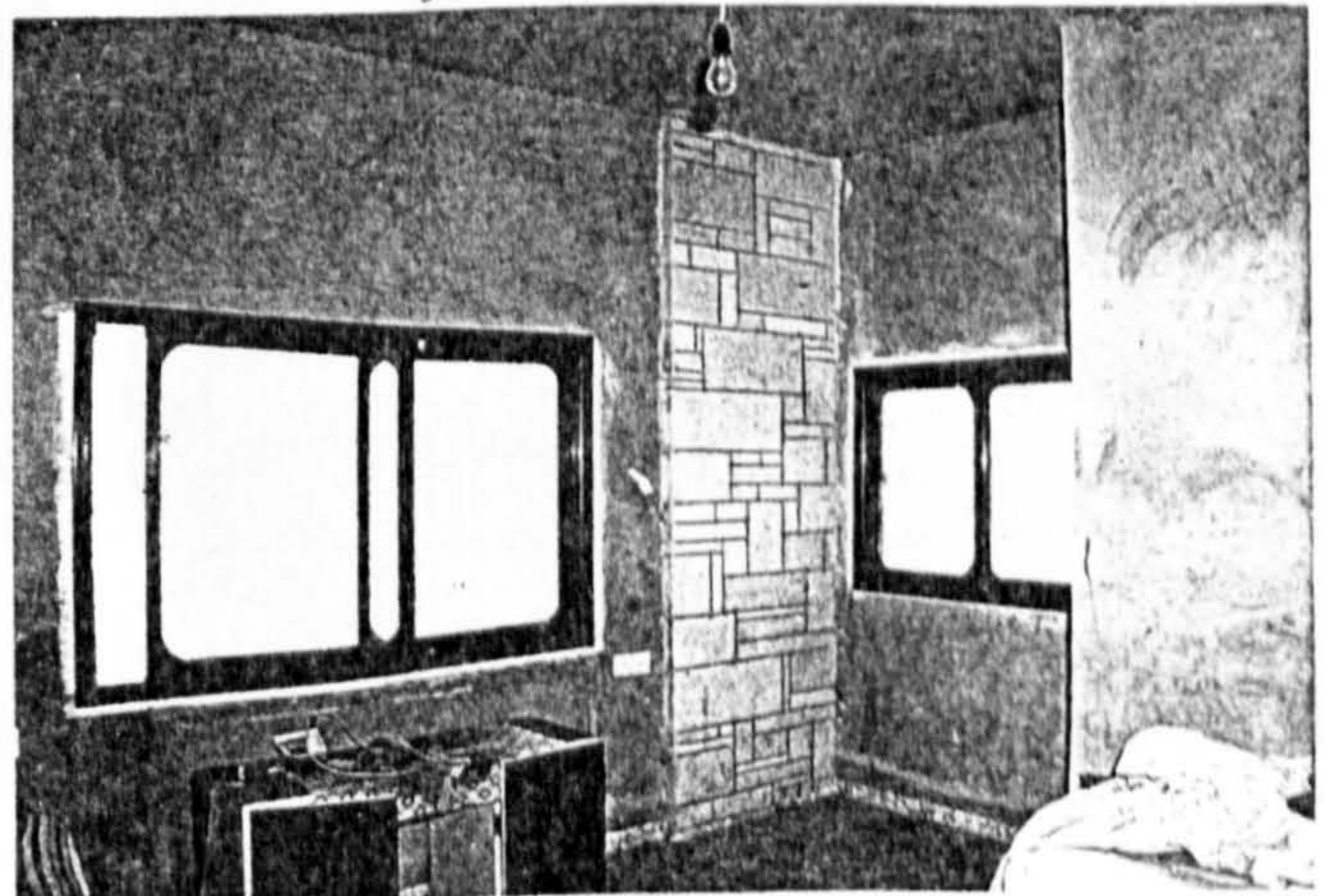
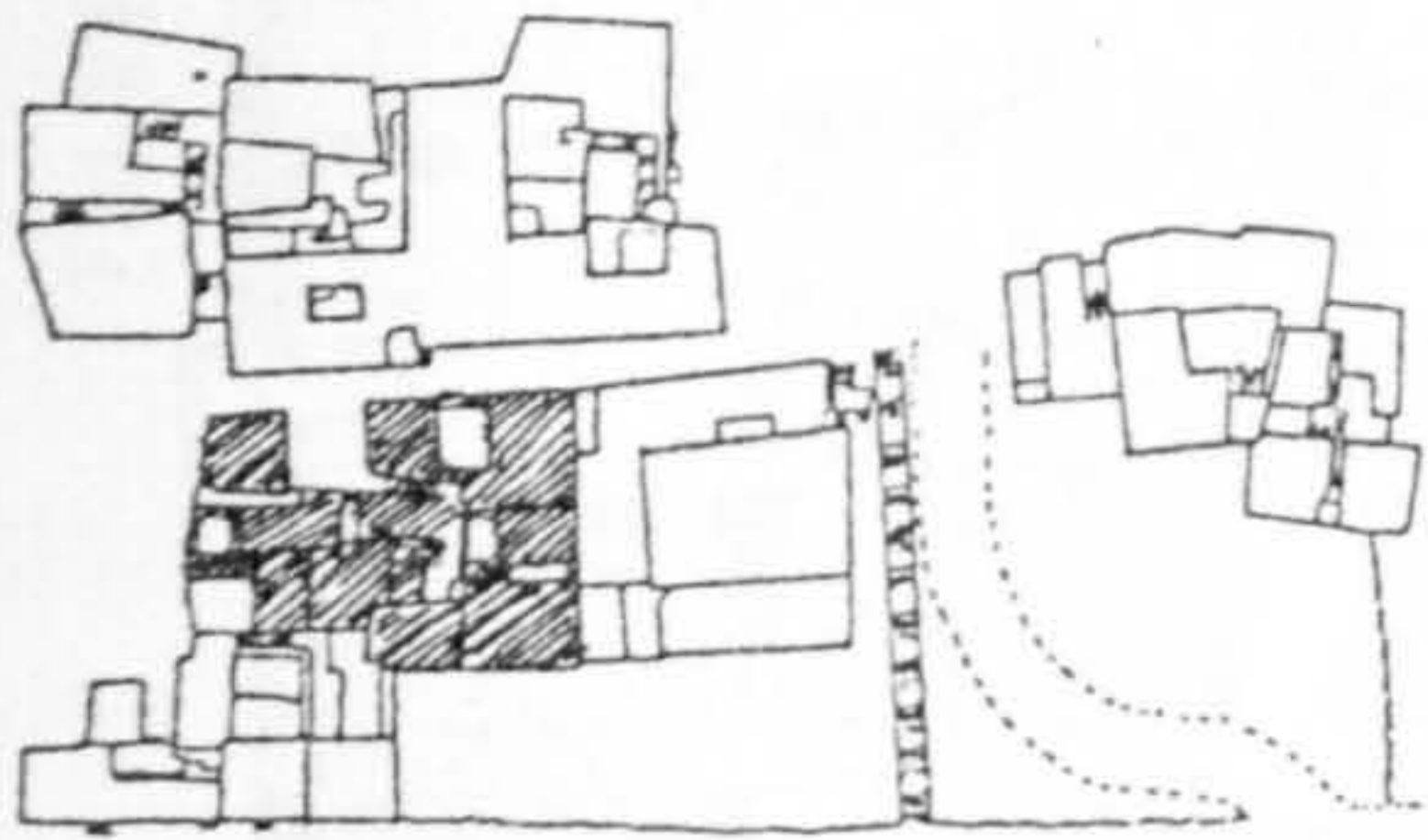


Plate (6.17): Interior stone work within a bedroom of flat (6.F.2); notice the modern style Aluminium windows.

Figure (8.22): Building no. 7, Existing Condition.

*Figure (8.34):
Building no. 8.*



Location within the site.



Plate (8.1): South elevation; notice the ignored garden.

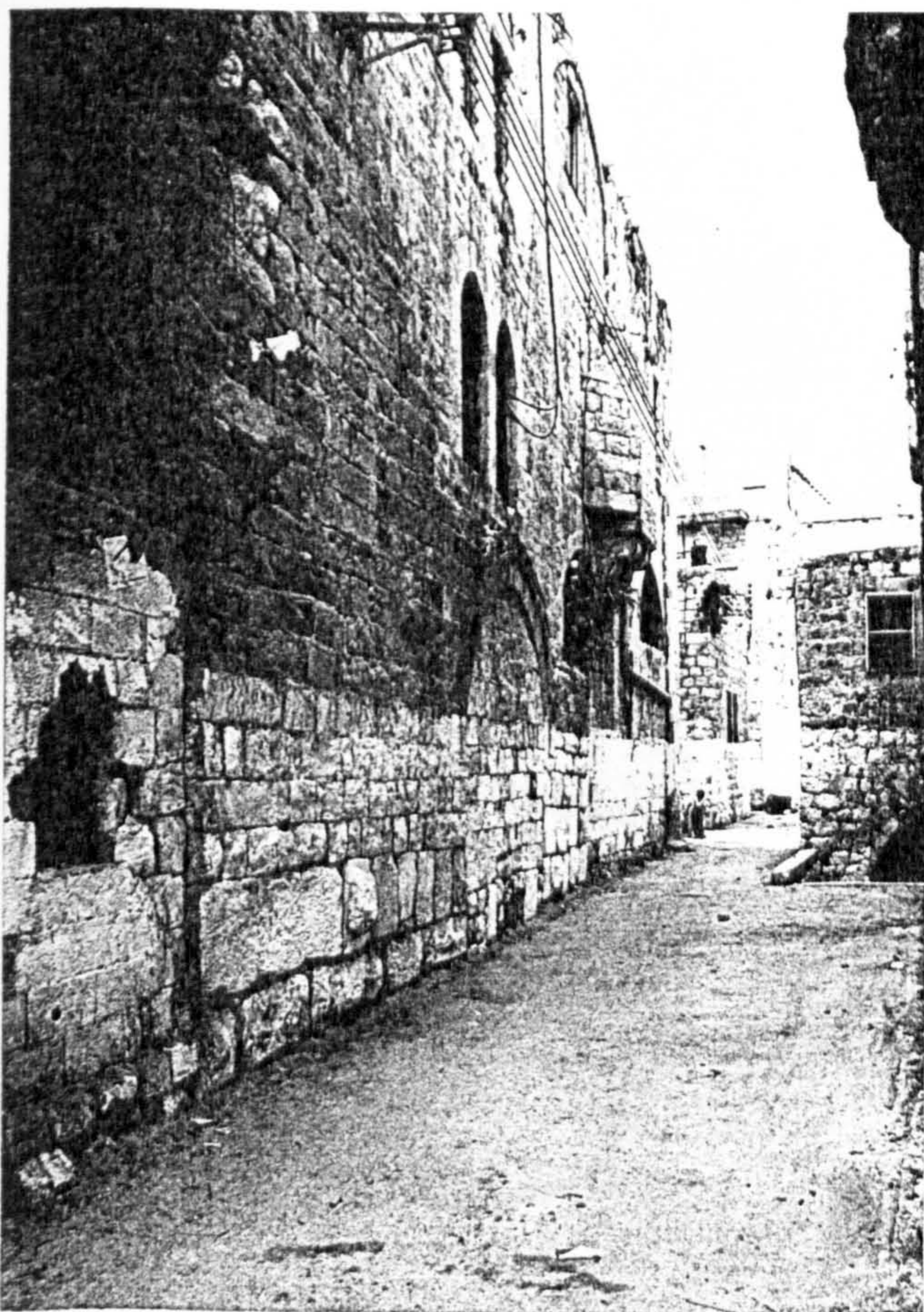


Plate (8.2): The near by street facing the north elevation; looking east.

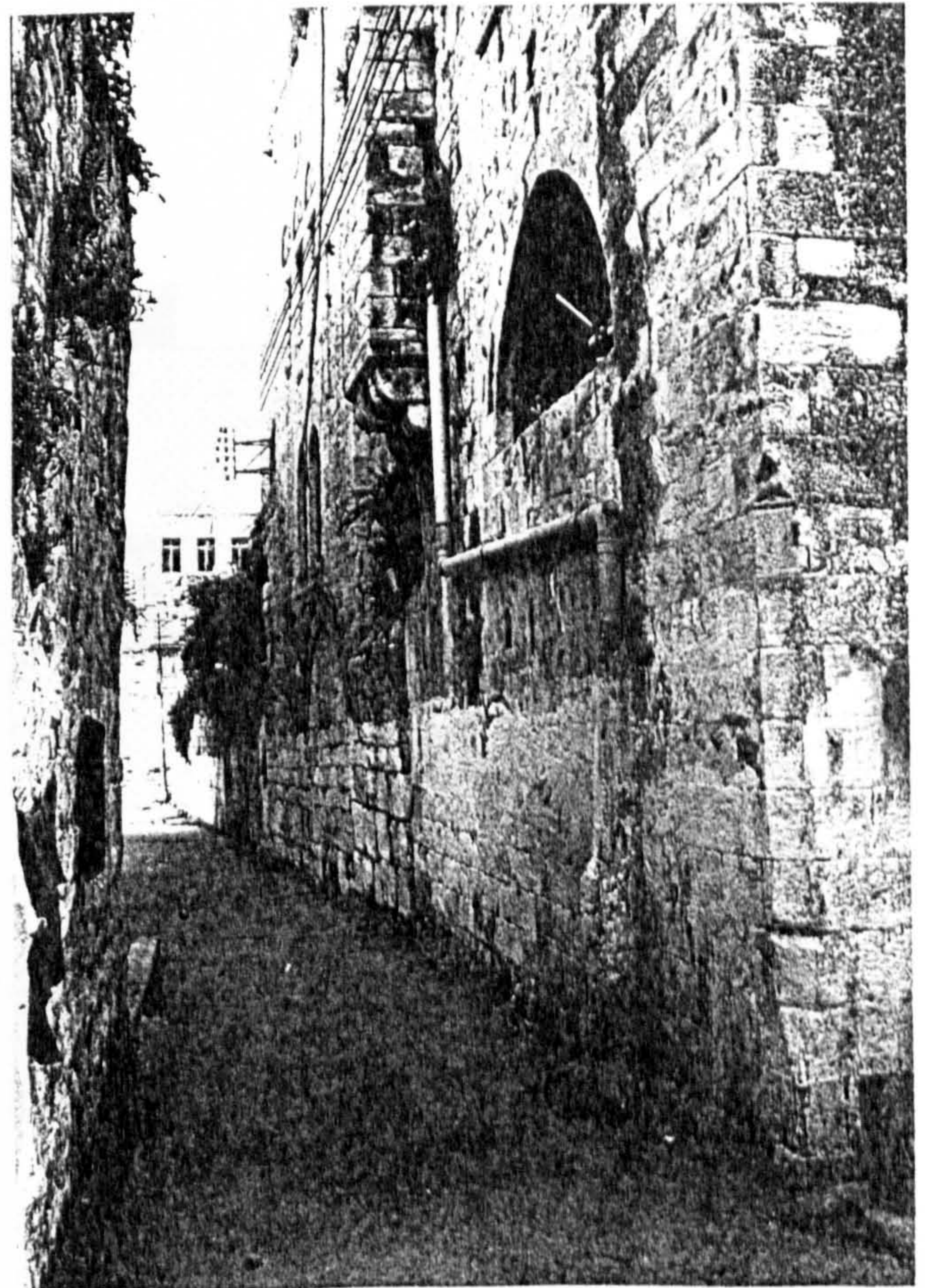
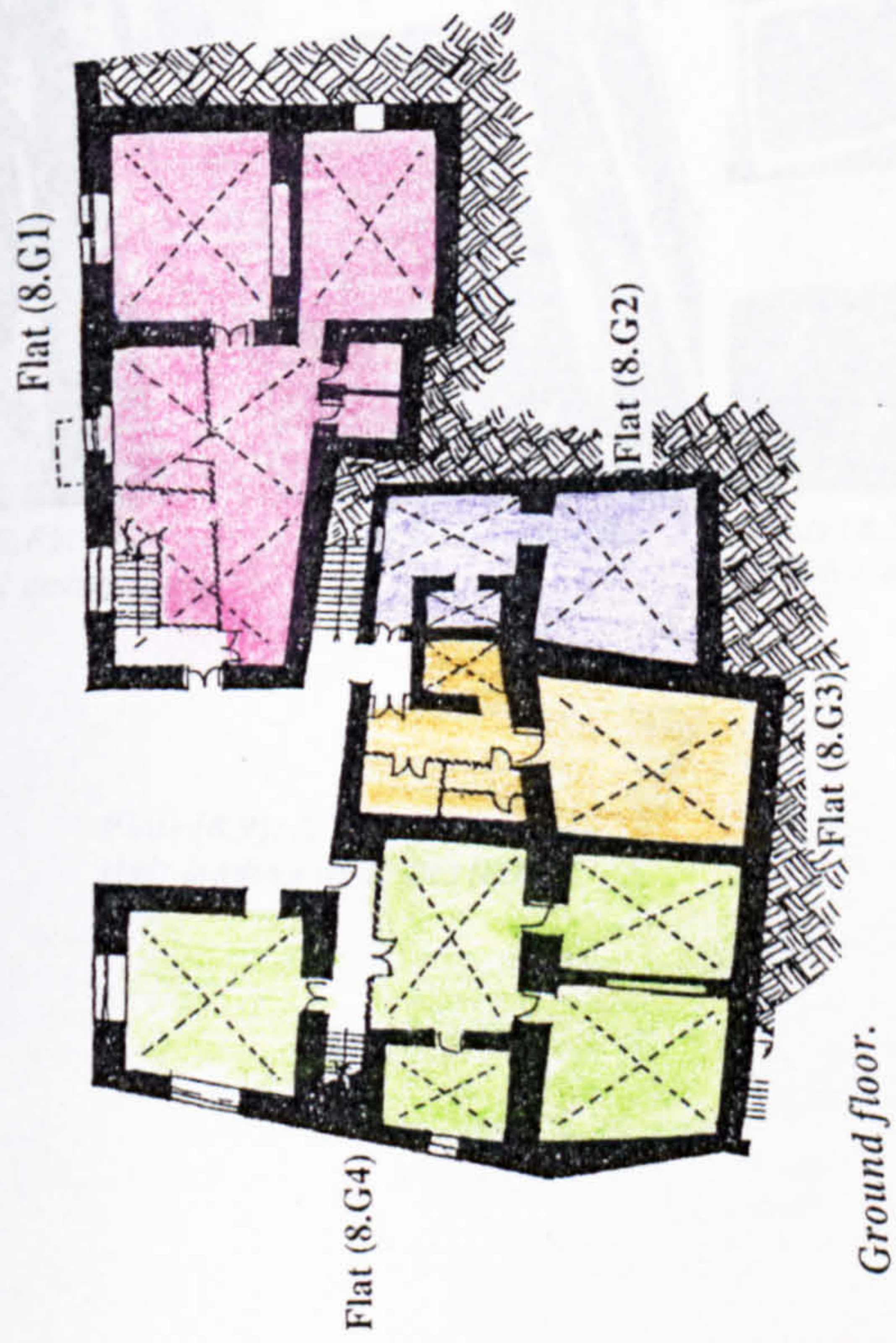


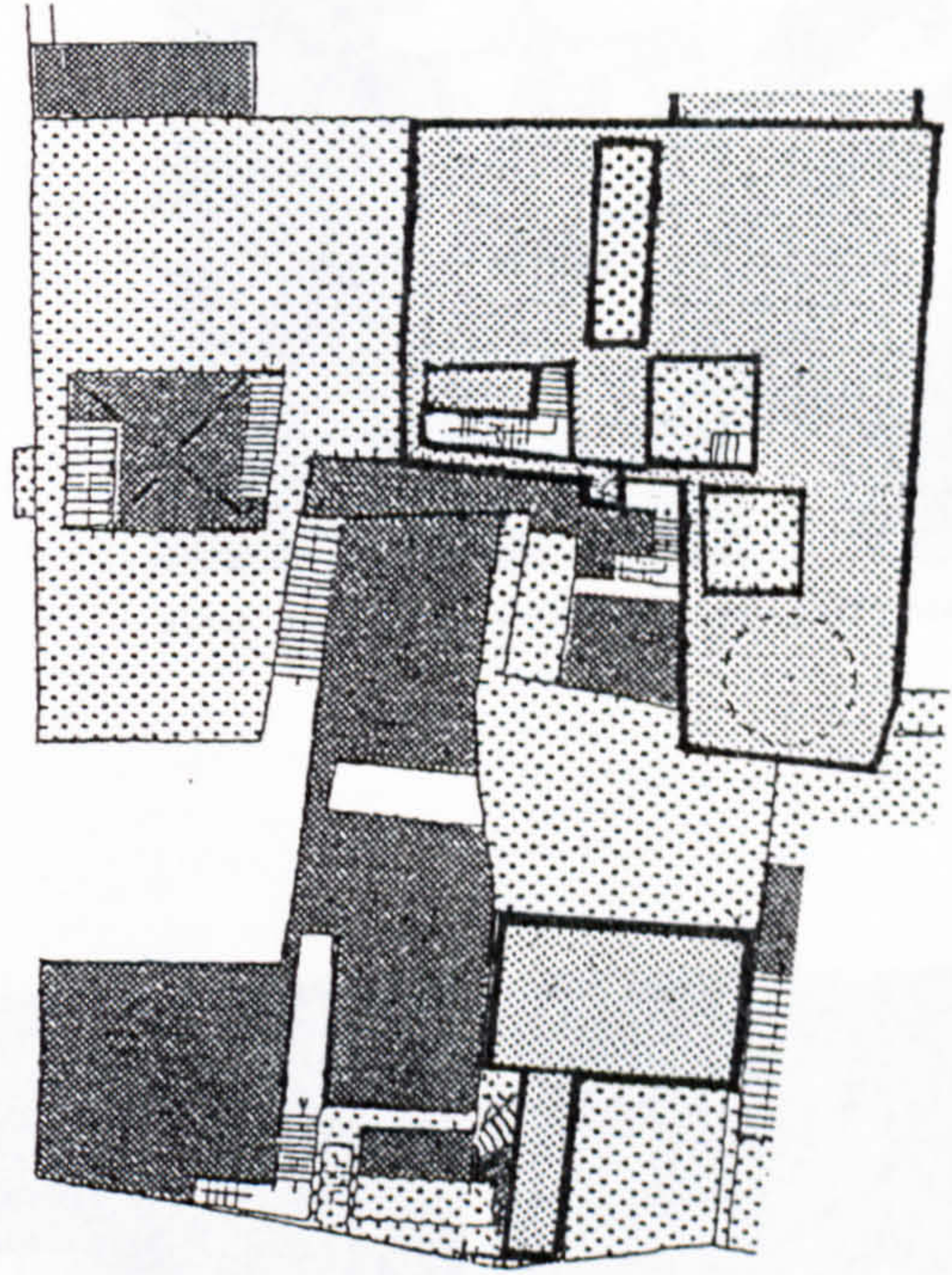
Plate (8.3): The near by street facing the north elevation; looking west.



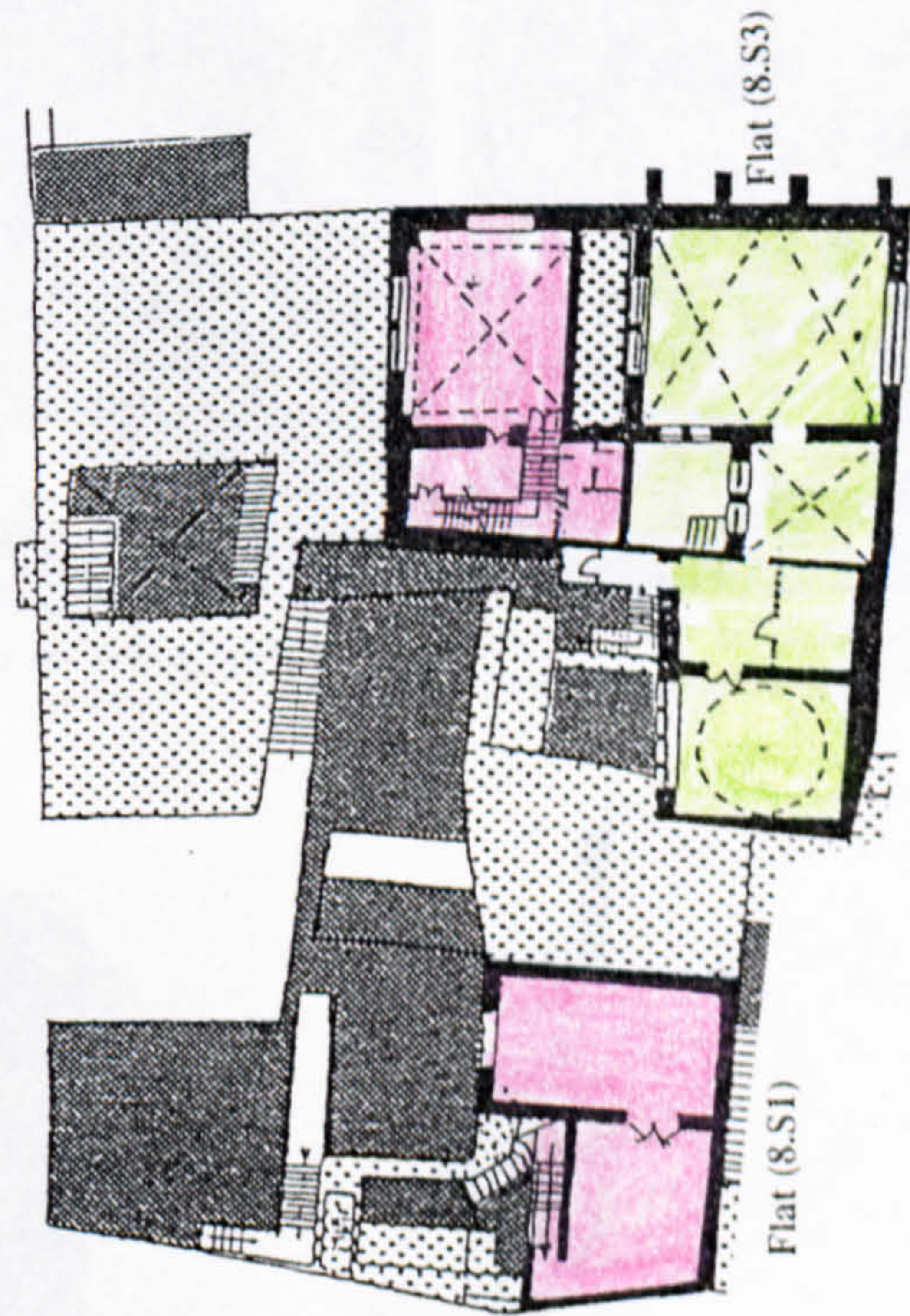
First floor.



Ground floor.



Roof plan.



Second floor.



Figure (8.35): Plans of Building 8, as existing.

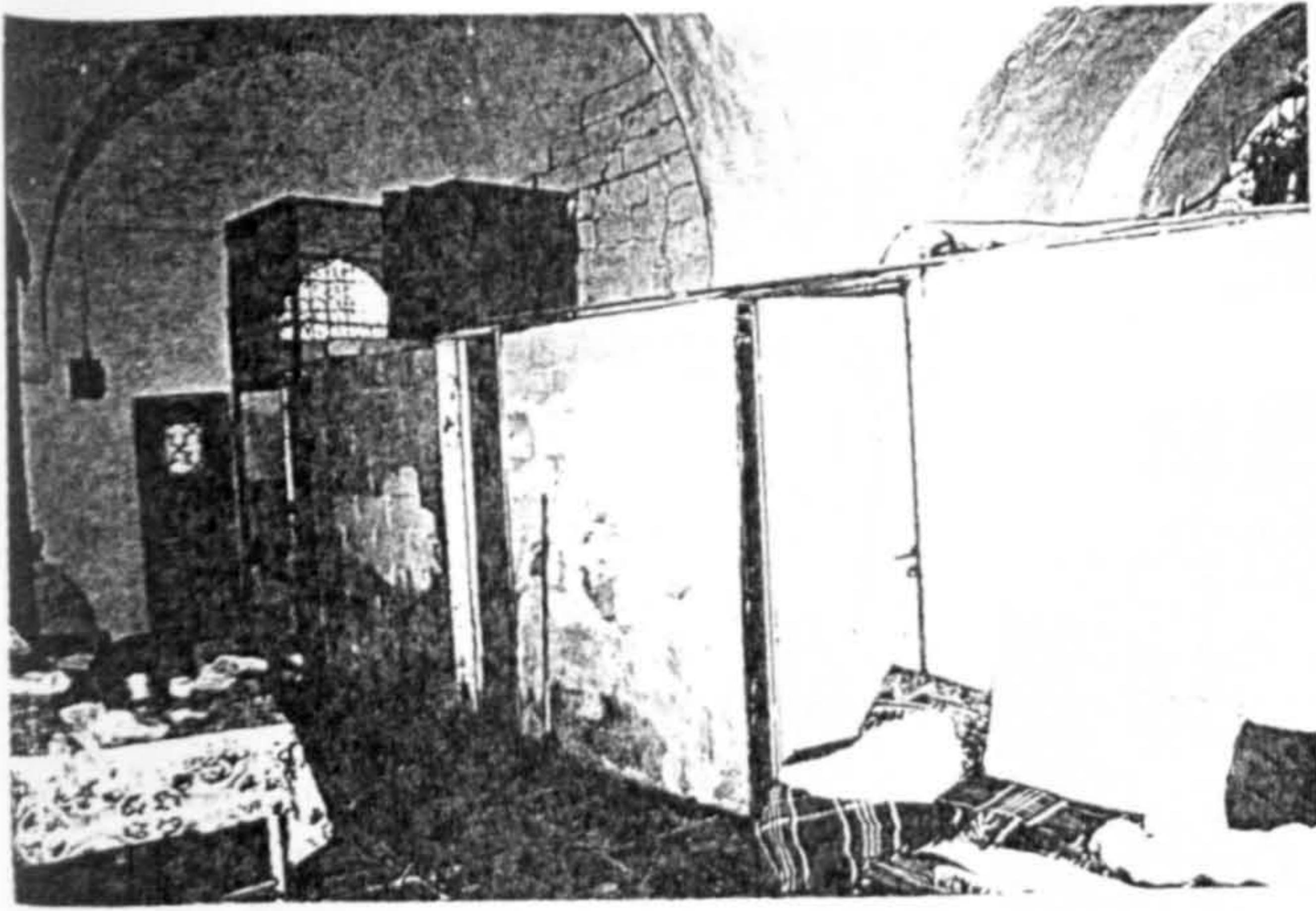


Plate (8.4): New additions within the covered court of flat (8.G1).

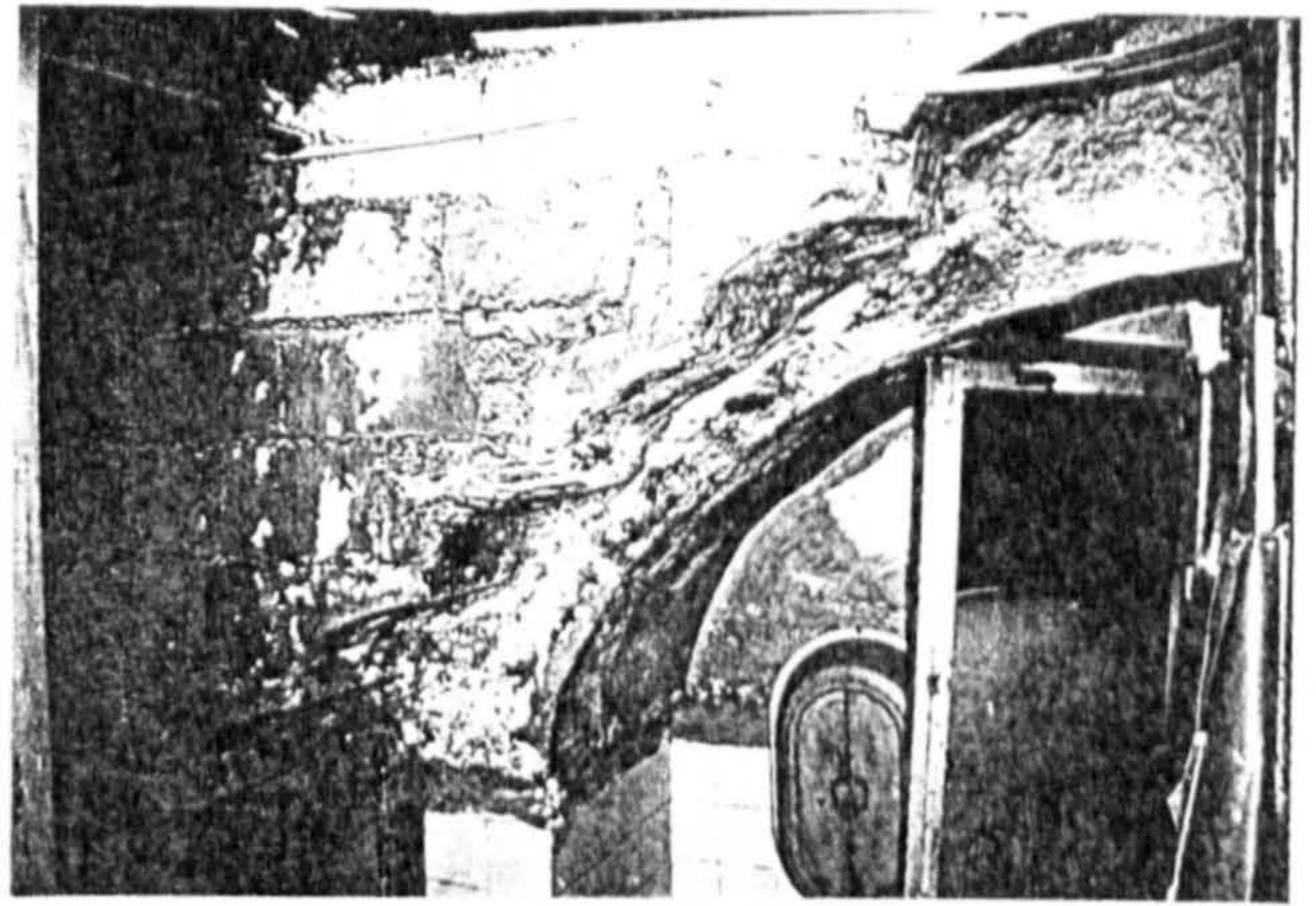


Plate (8.5): A bathroom underneath a stair within flat (8.G3).

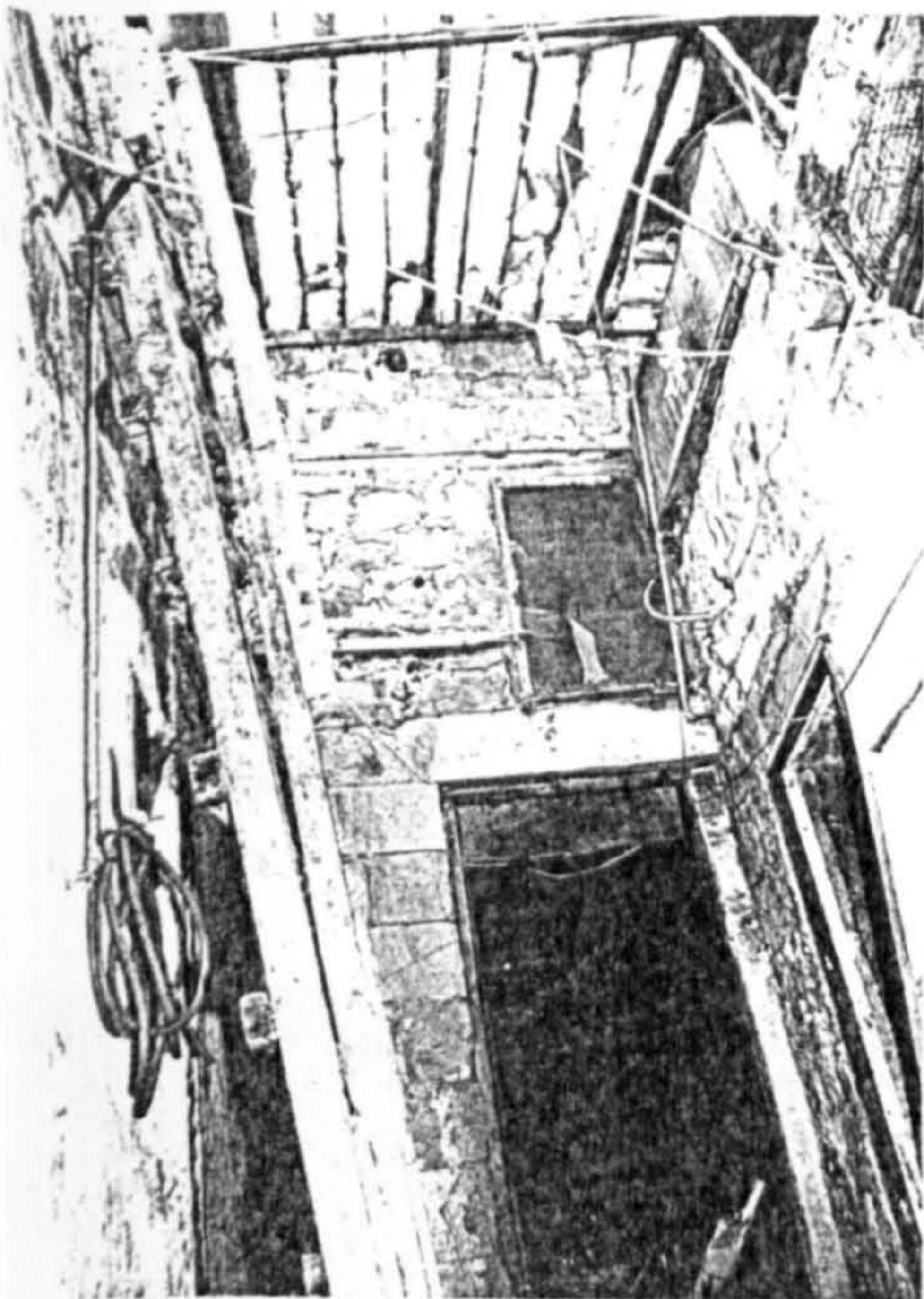


Plate (8.6): The foyer of flat (8.G3); notice the general condition.



Plate (8.7): Interior of a bed setting room in flat (8.G3); notice the vault condition.

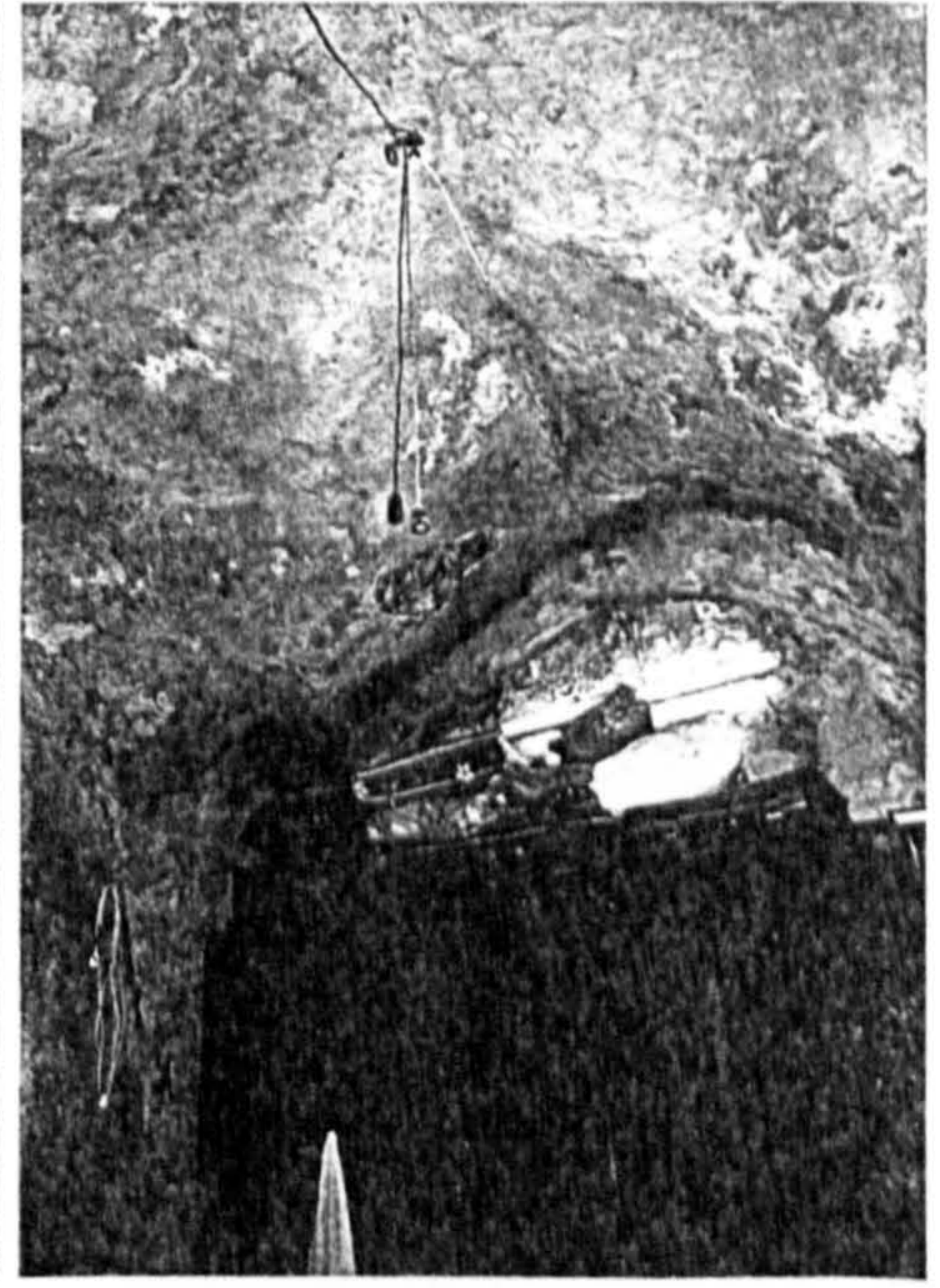


Plate (8.8): A vaulted room within flat (8.G3); notice the dampness effect on the plaster work.

Plate (8.9): A WC. on the main stair leading up to flat (8.F1).



Figure (8.36): Building no. 8, Existing Condition (1).

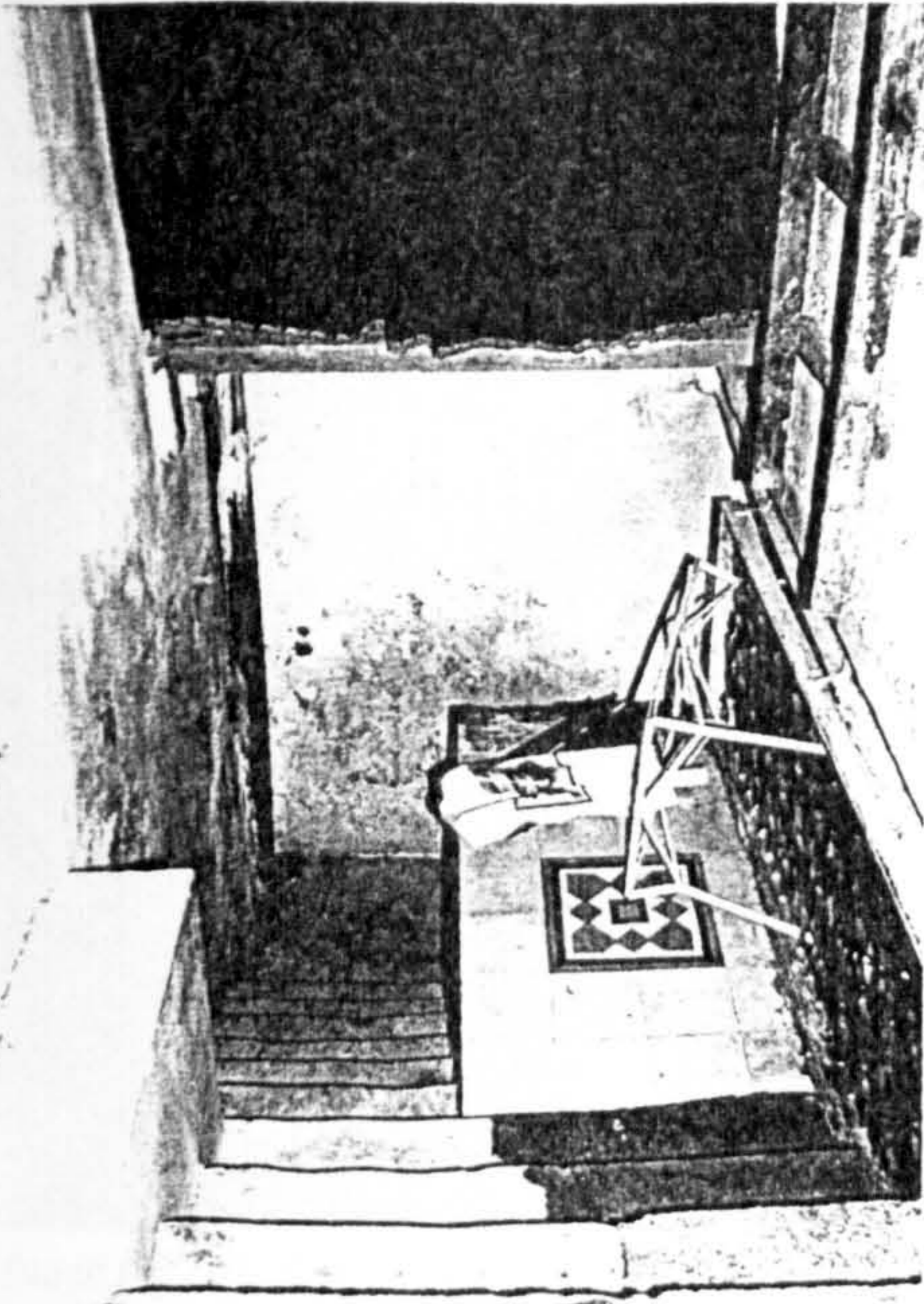


Plate (8.10): The stair case leading to flat (8.FS2).

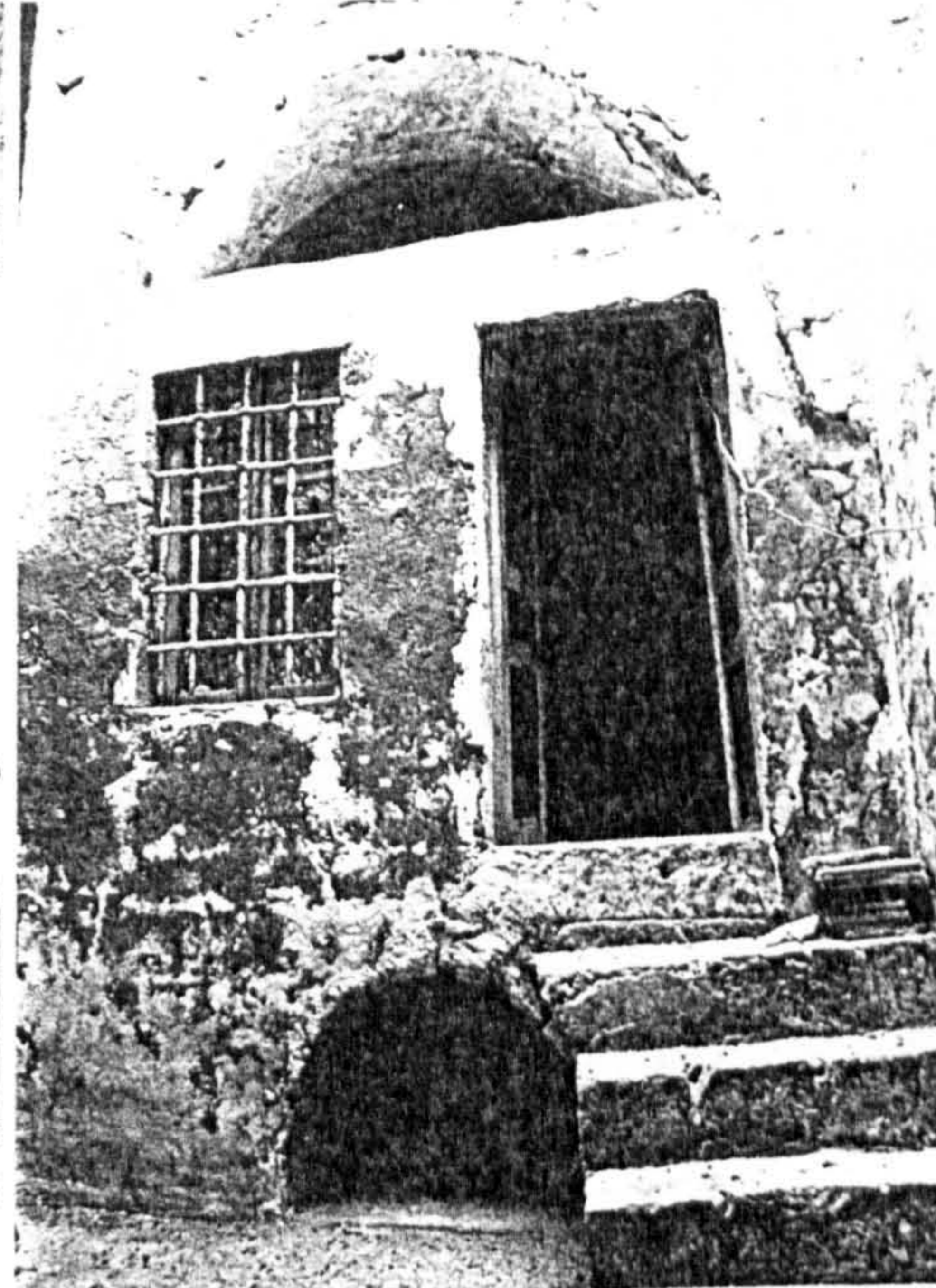


Plate (8.11): A room within flat (8.F3); notice its special design.



Plate (8.12): Looking upward from the court of flat (8.F3); notice the used building materials in closing the arch opening.

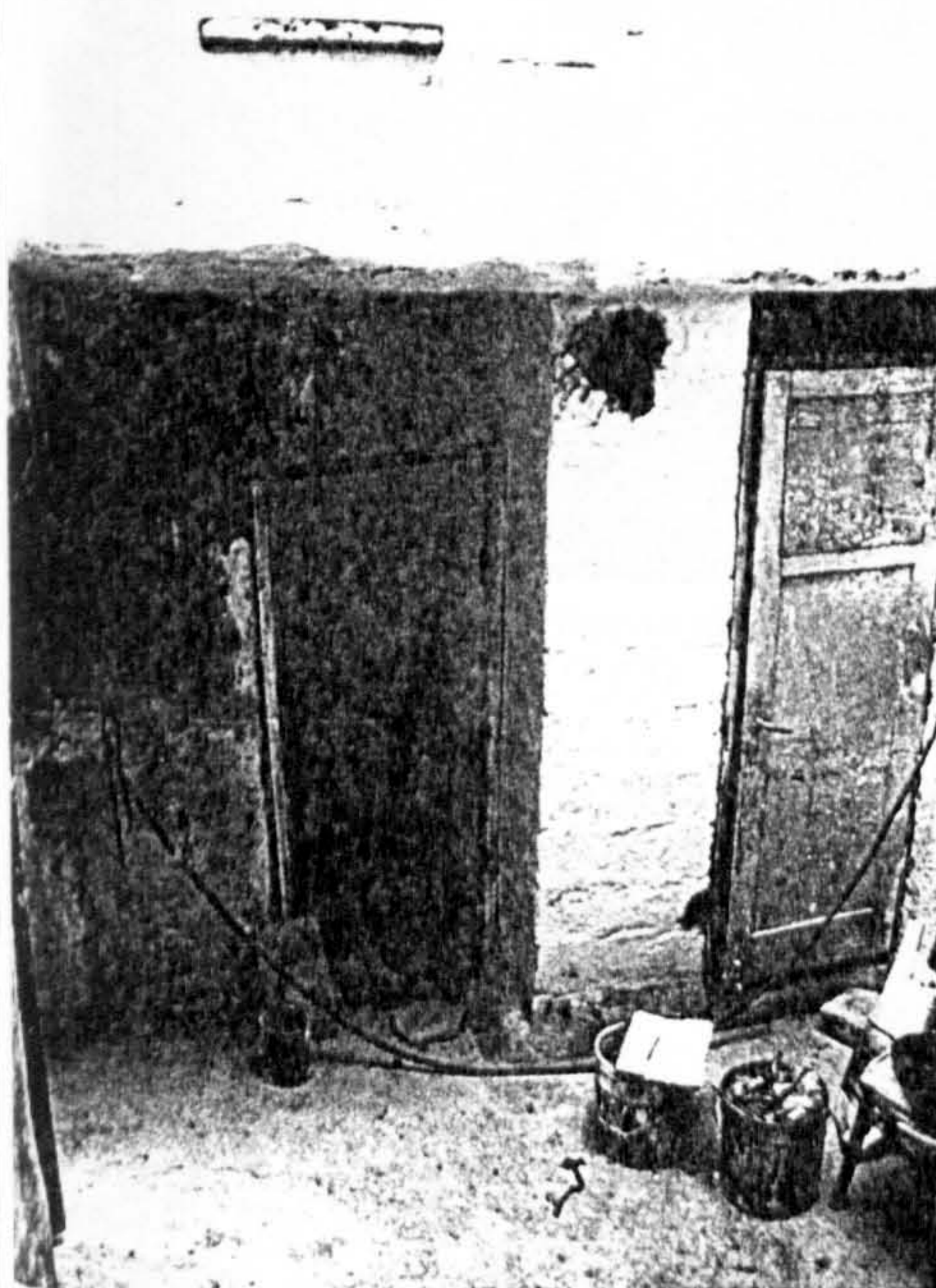


Plate (8.13): Flat (8.F3) under maintenance.



Plate (8.14): The Passage way leads to upper flats.



Plate (8.15): A room in the deserted flat (8.F5).

Figure (8.37): Building no. 8, Existing Condition (2).

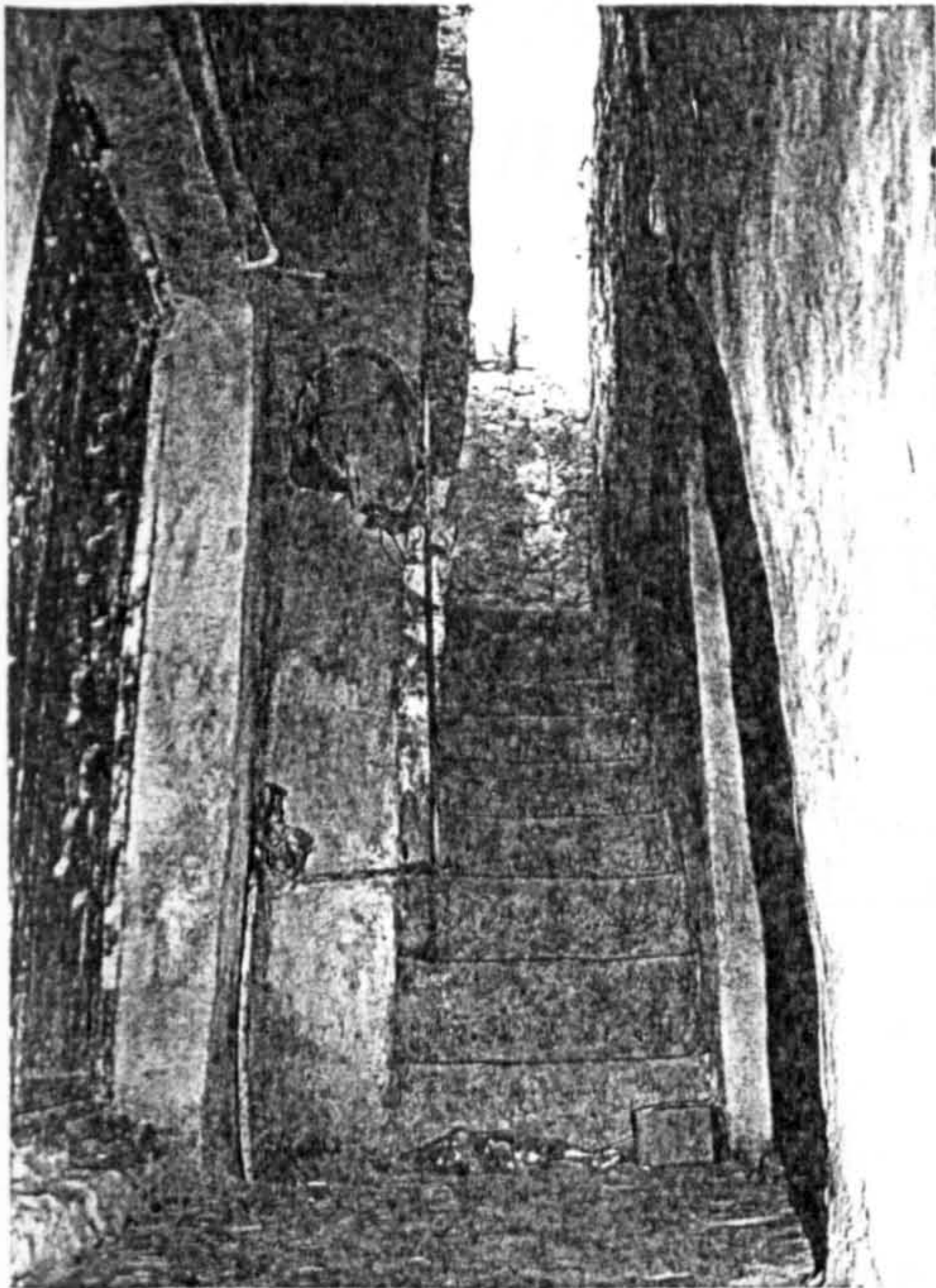


Plate (8.16): The Passage way leads to flats (8.F5) and (8.S1).

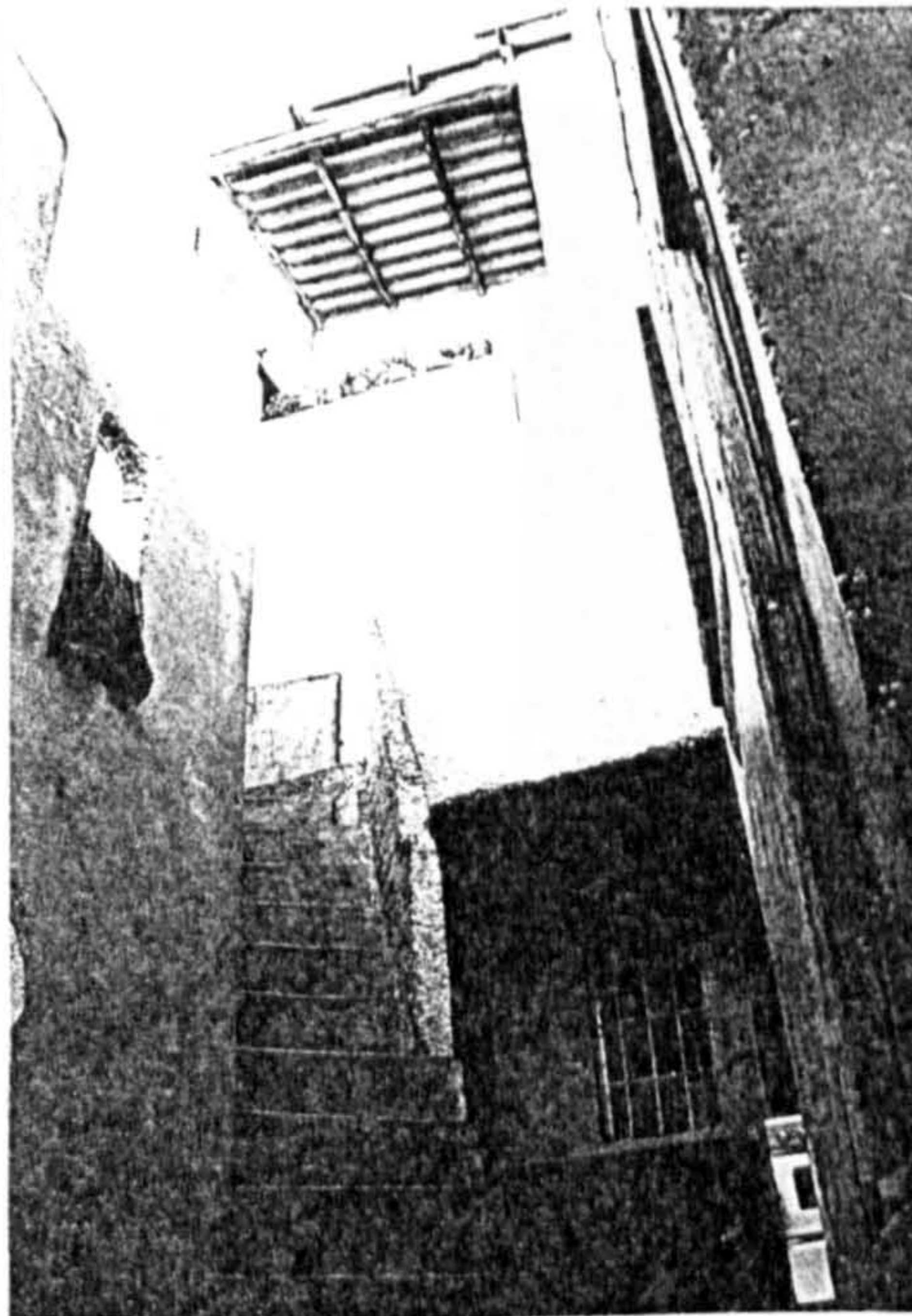


Plate (8.17): The stair leads to flat (8.S1) through flat (8.F5).



Plate (8.18): Looking down from the top of the stair, shown in plate (8.17).

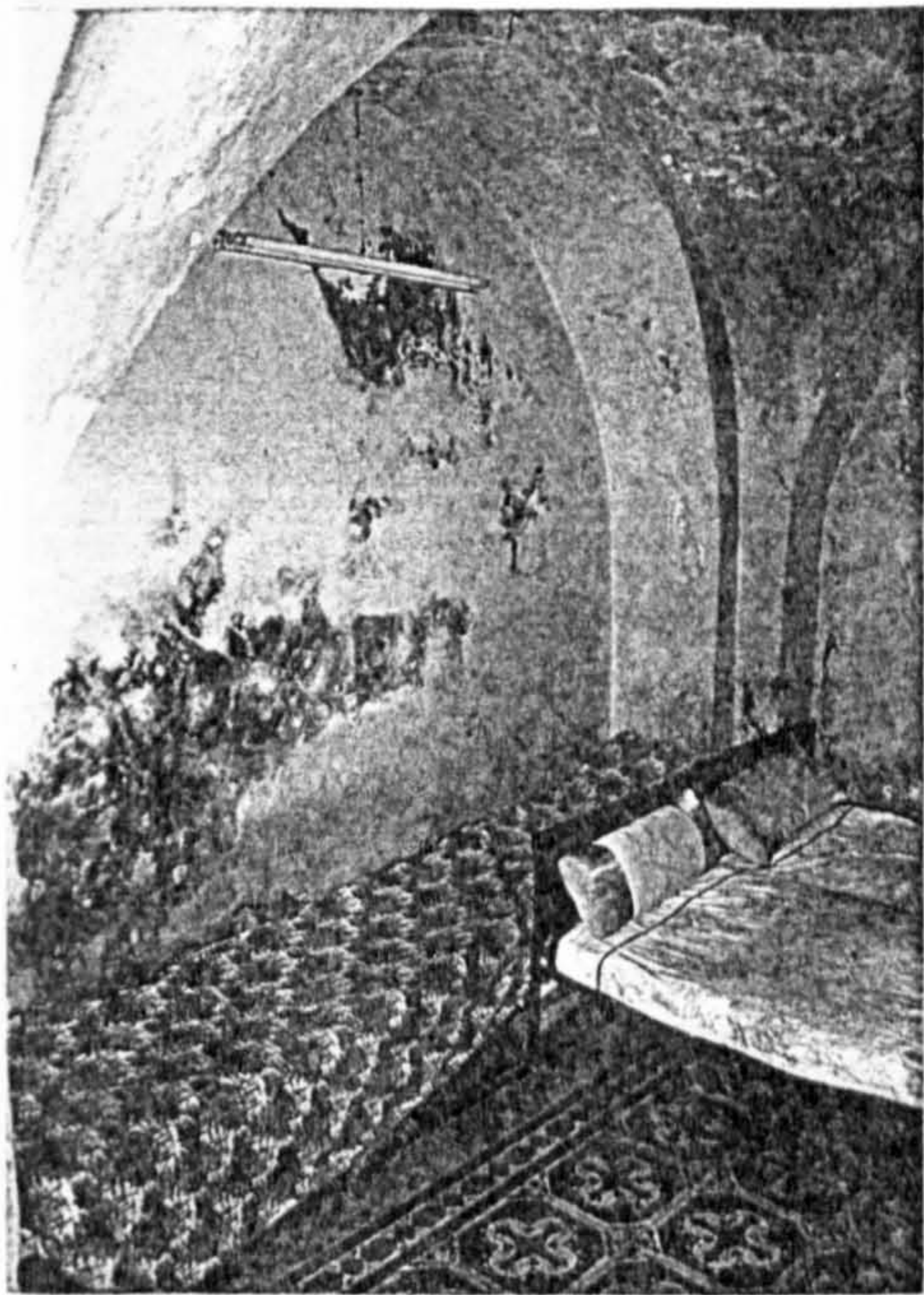


Plate (8.19): Dampness effect on the interior of a bed setting room in flat (8.F5).

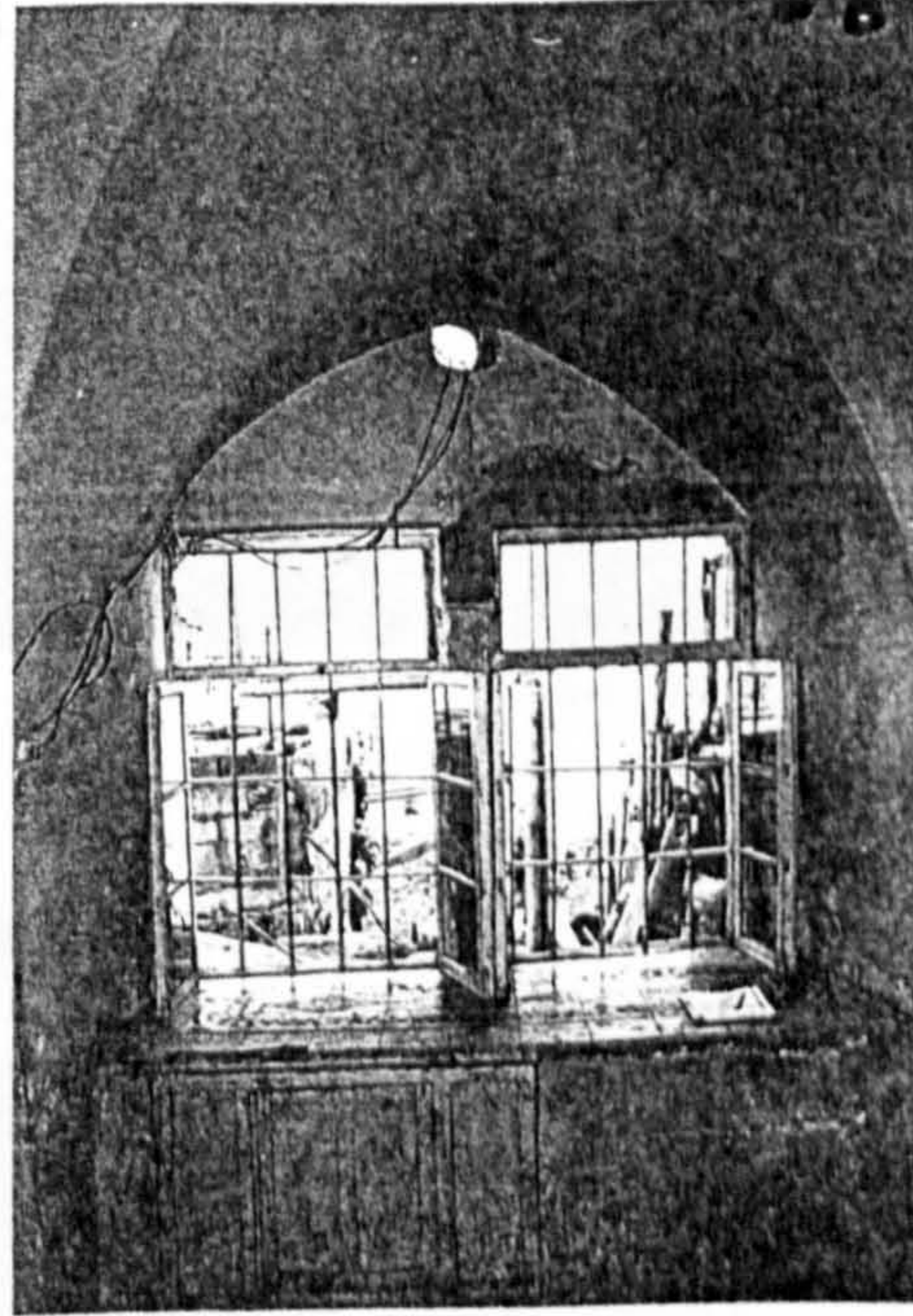


Plate (8.20): A small cupboard under the window of flat (8.F5); notice the wall thickness.



Plate (8.21): Roof cover of the stair case of flat (8.S1).

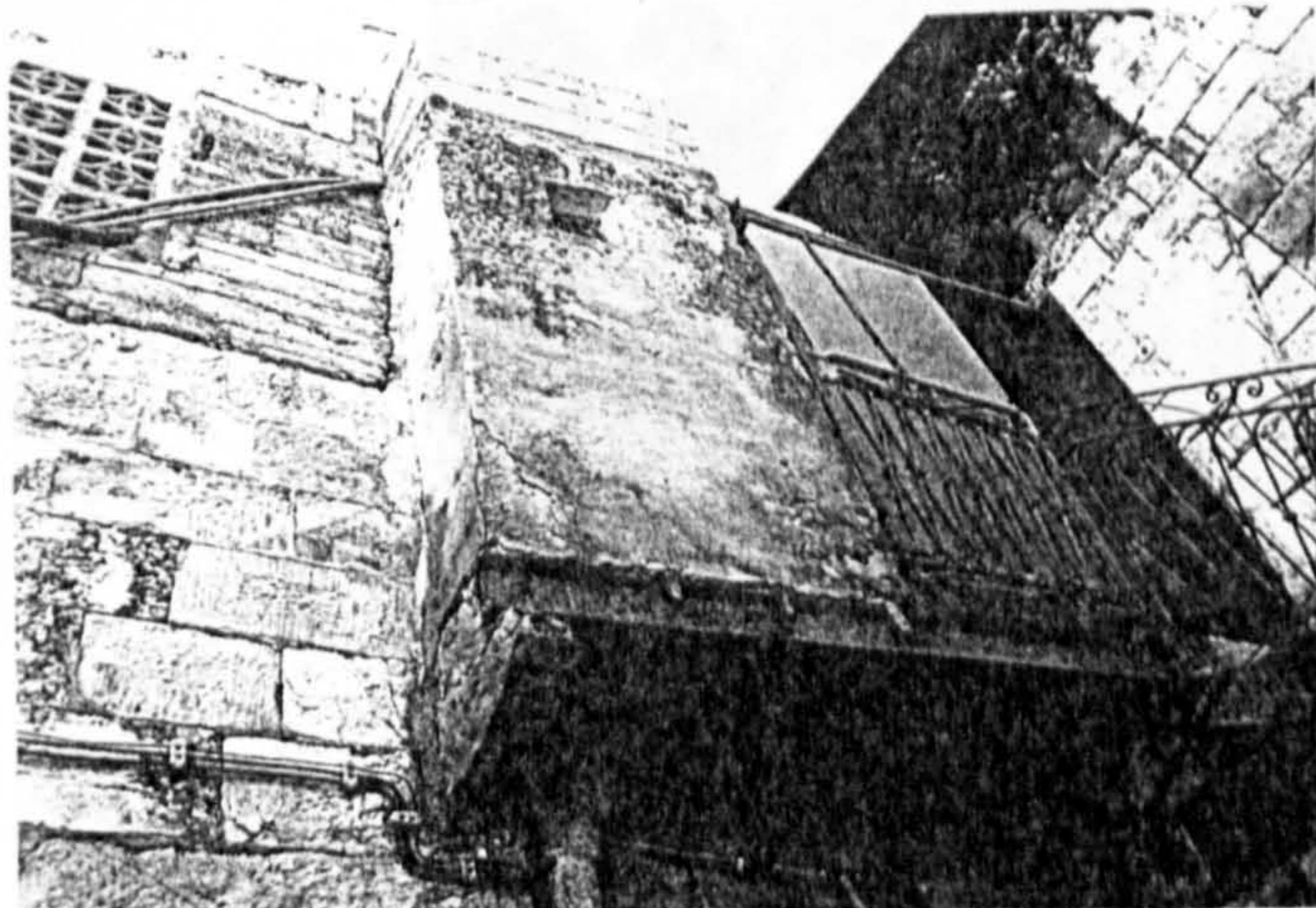


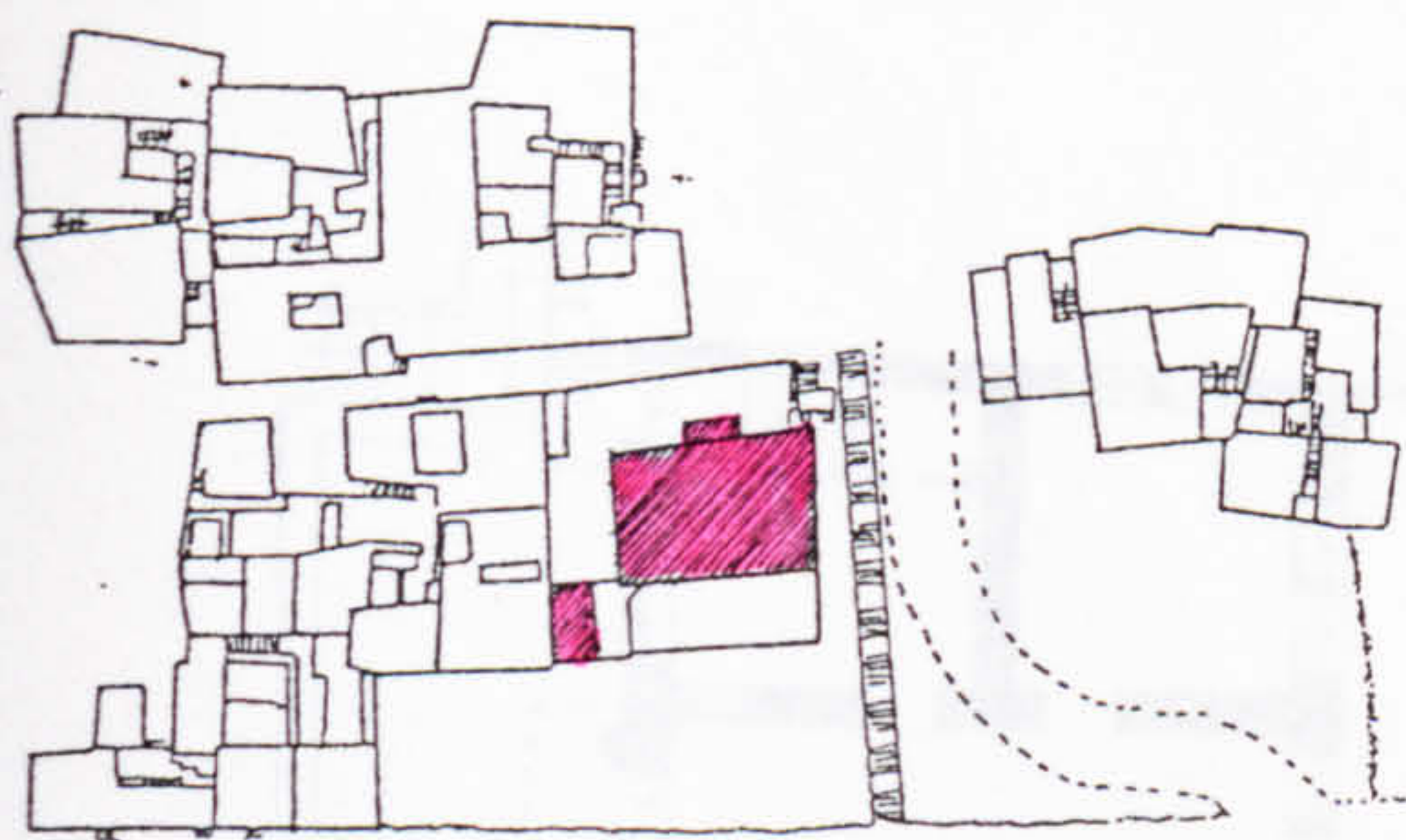
Plate (8.22): The main entrance of flat (8.S3); notice the WC block near by.



Plate (8.23): A stone wall near the entrance of flat (8.S3); notice the condition of stone units and the mortar.

Figure (8.38): Building no. 8, Existing Condition (3)

*Figure (8.39):
Building no. 9*



Location within the site.

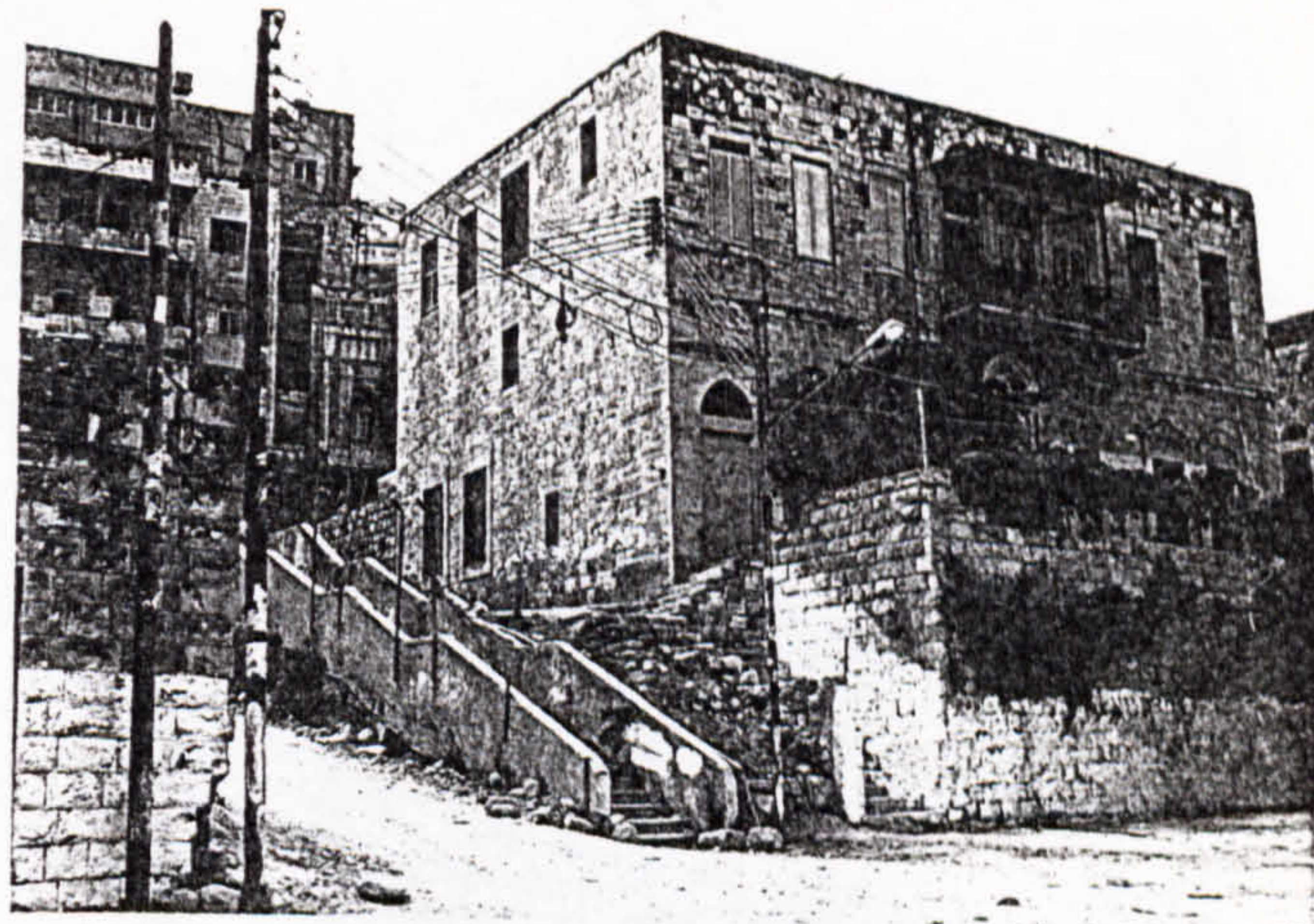


Plate (9.1): General view; notice the character of this building which is totally different from that of the traditional buildings within the Old Town, mainly in terms of the spaces between buildings .



Plate (9.2): East elevation.

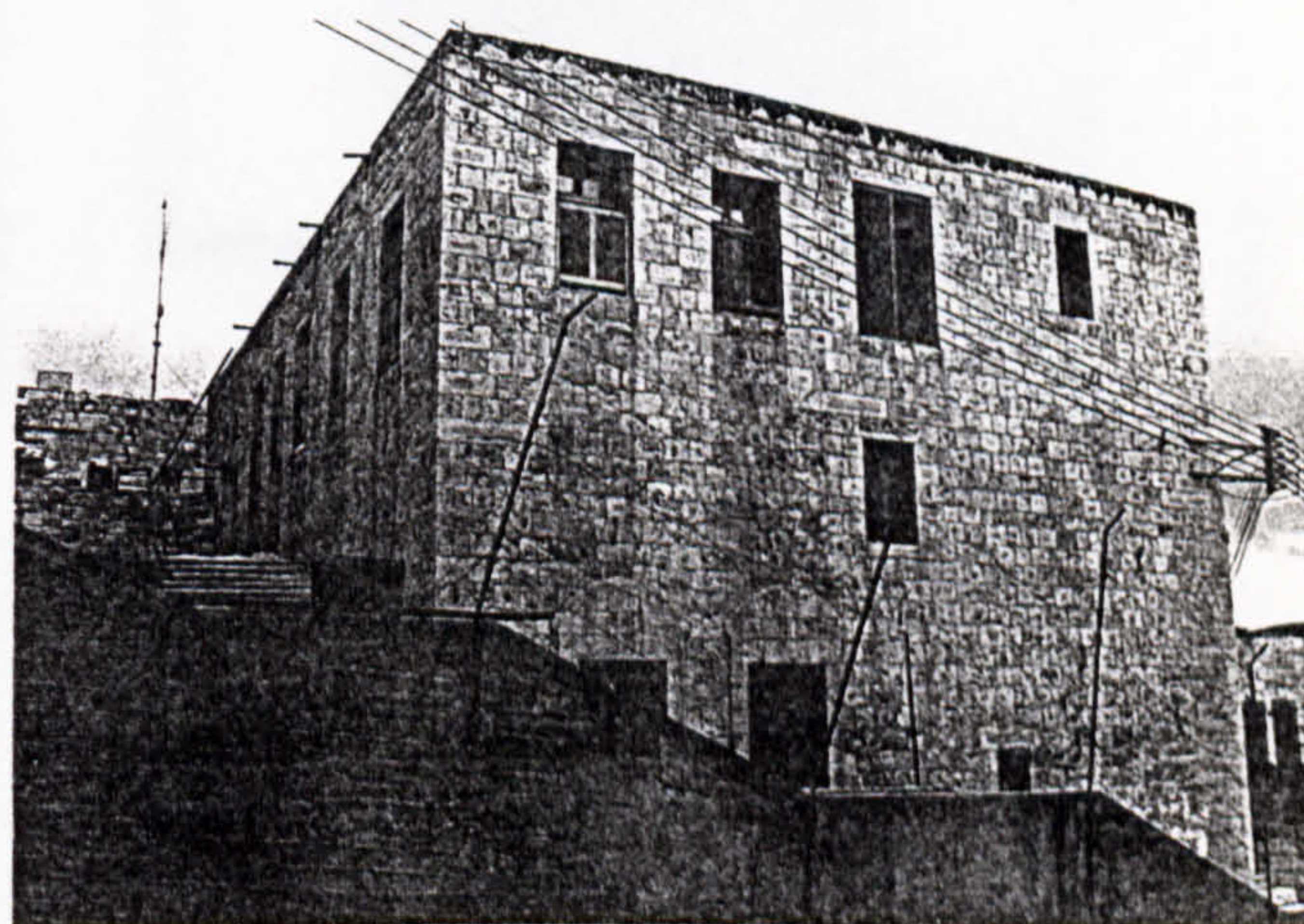


Plate (9.3): South elevation.

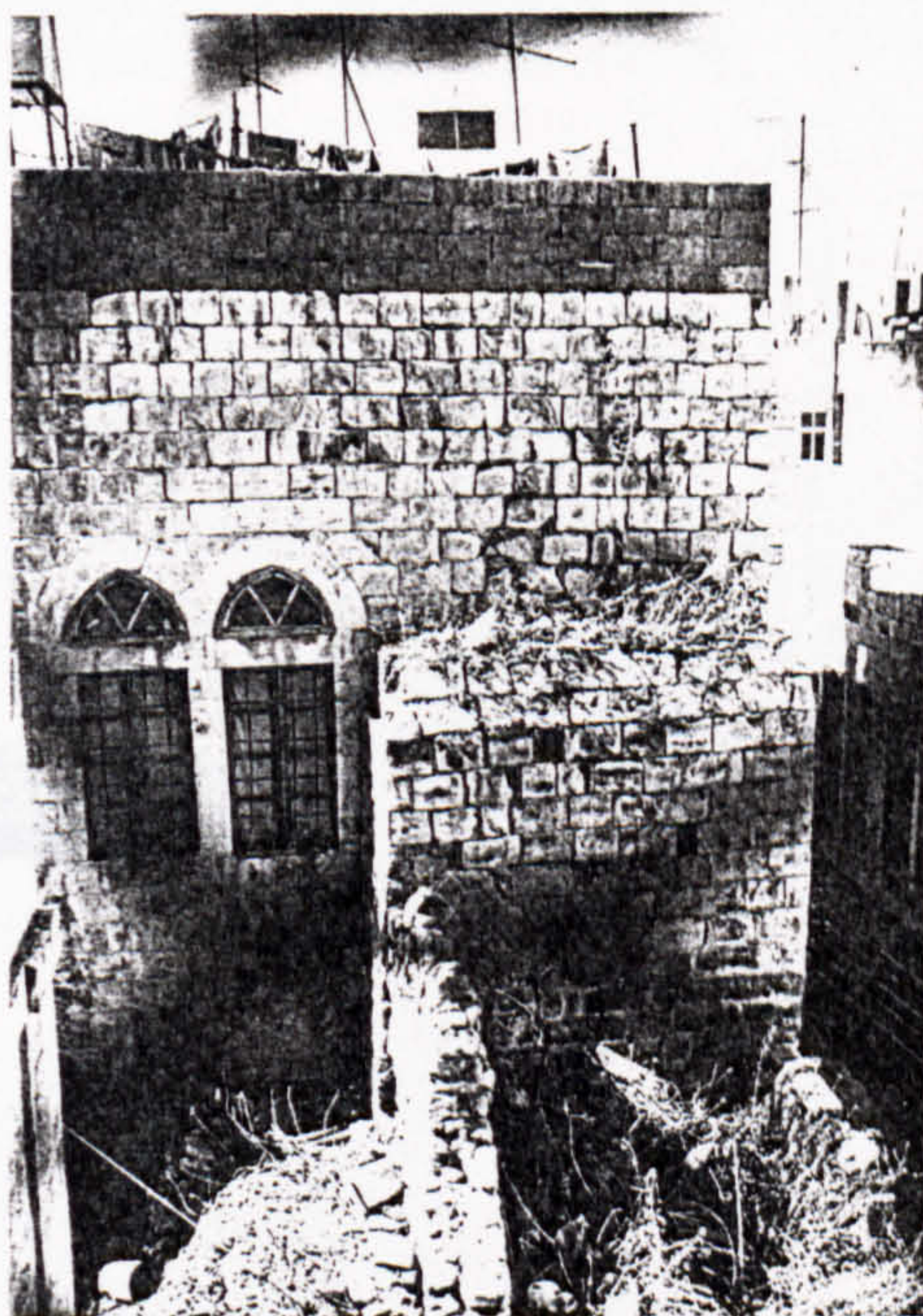


Plate (9.4): The storage space of building no.8 and other destroyed structures within the front yard of this building.

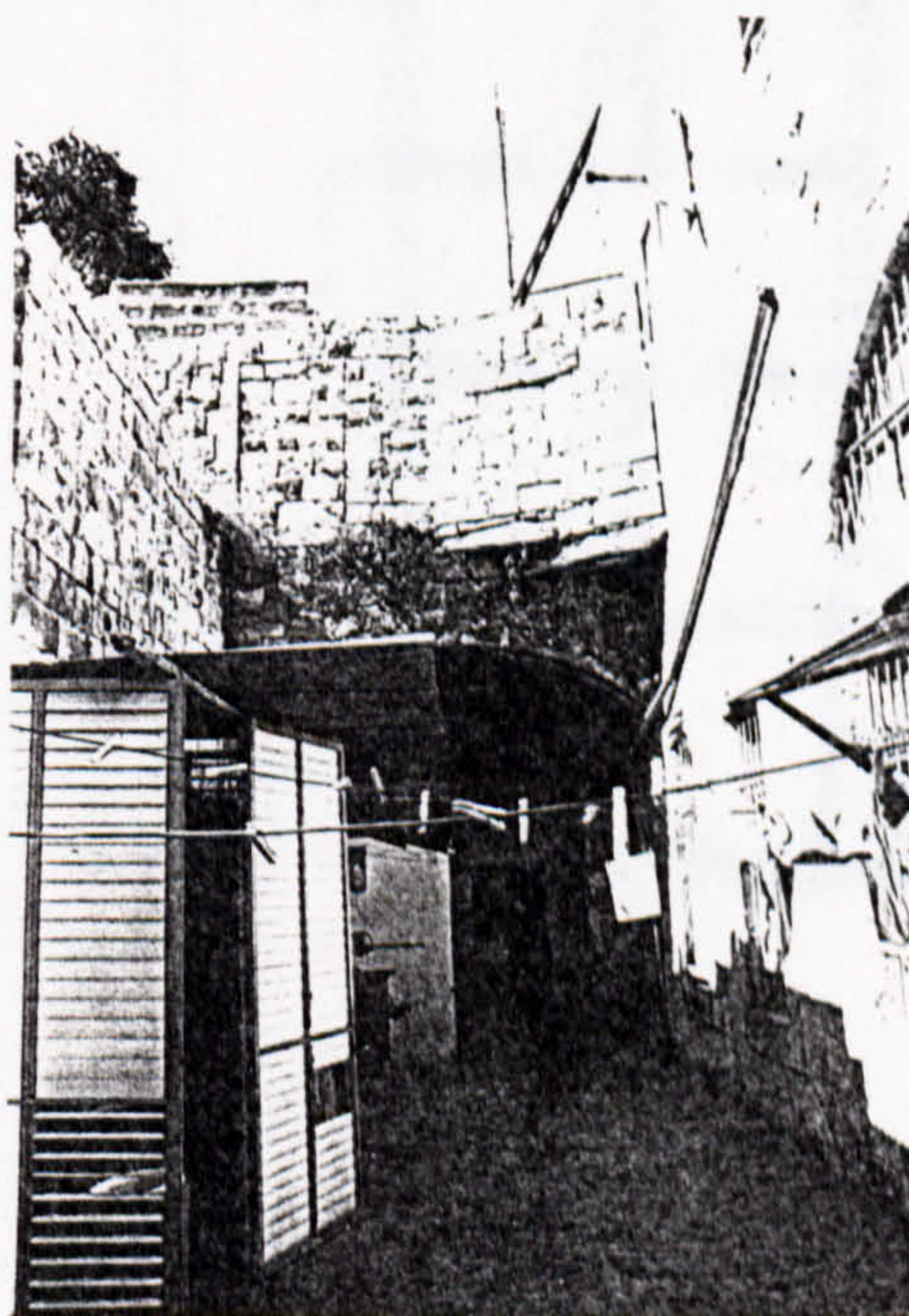
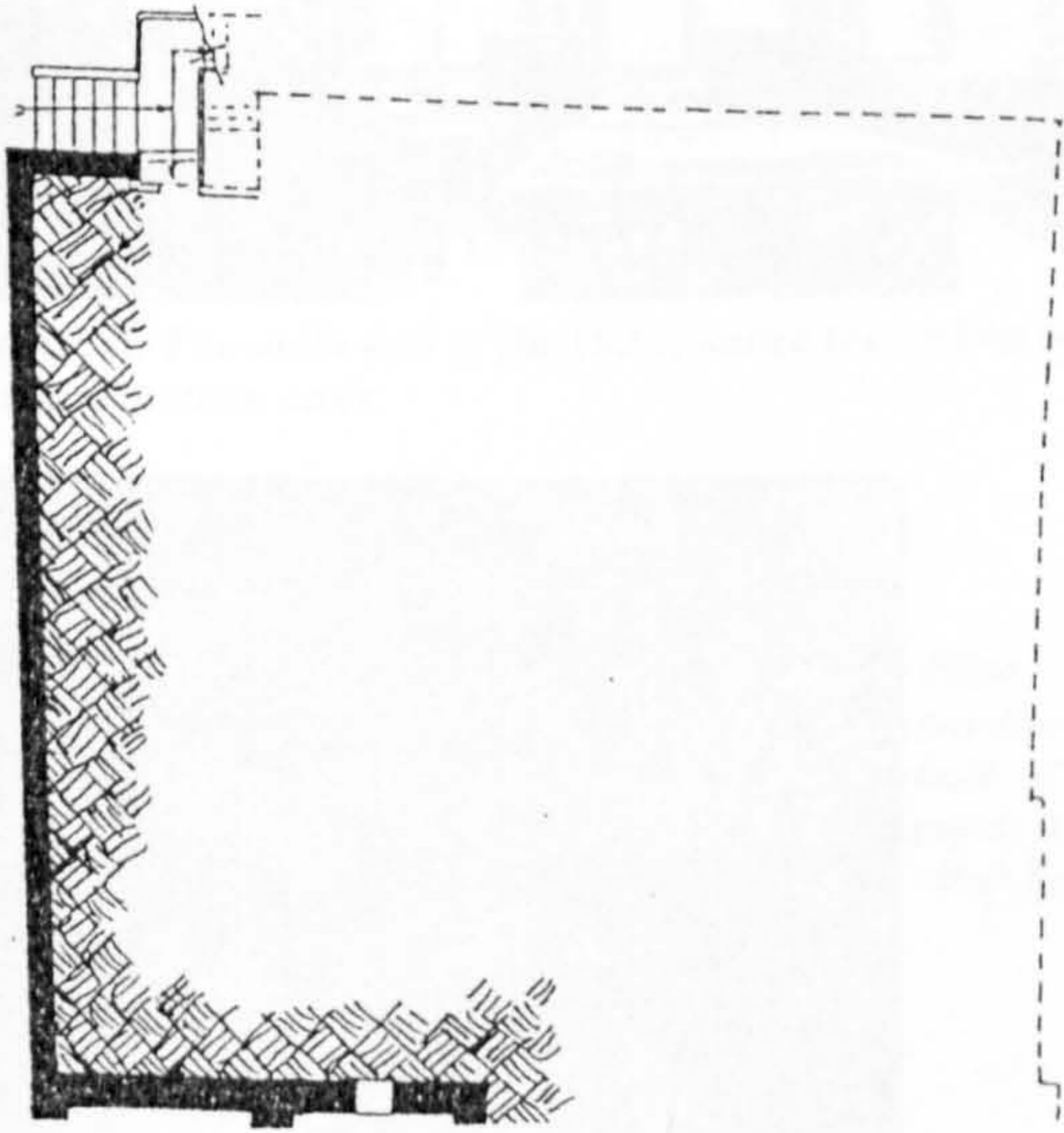
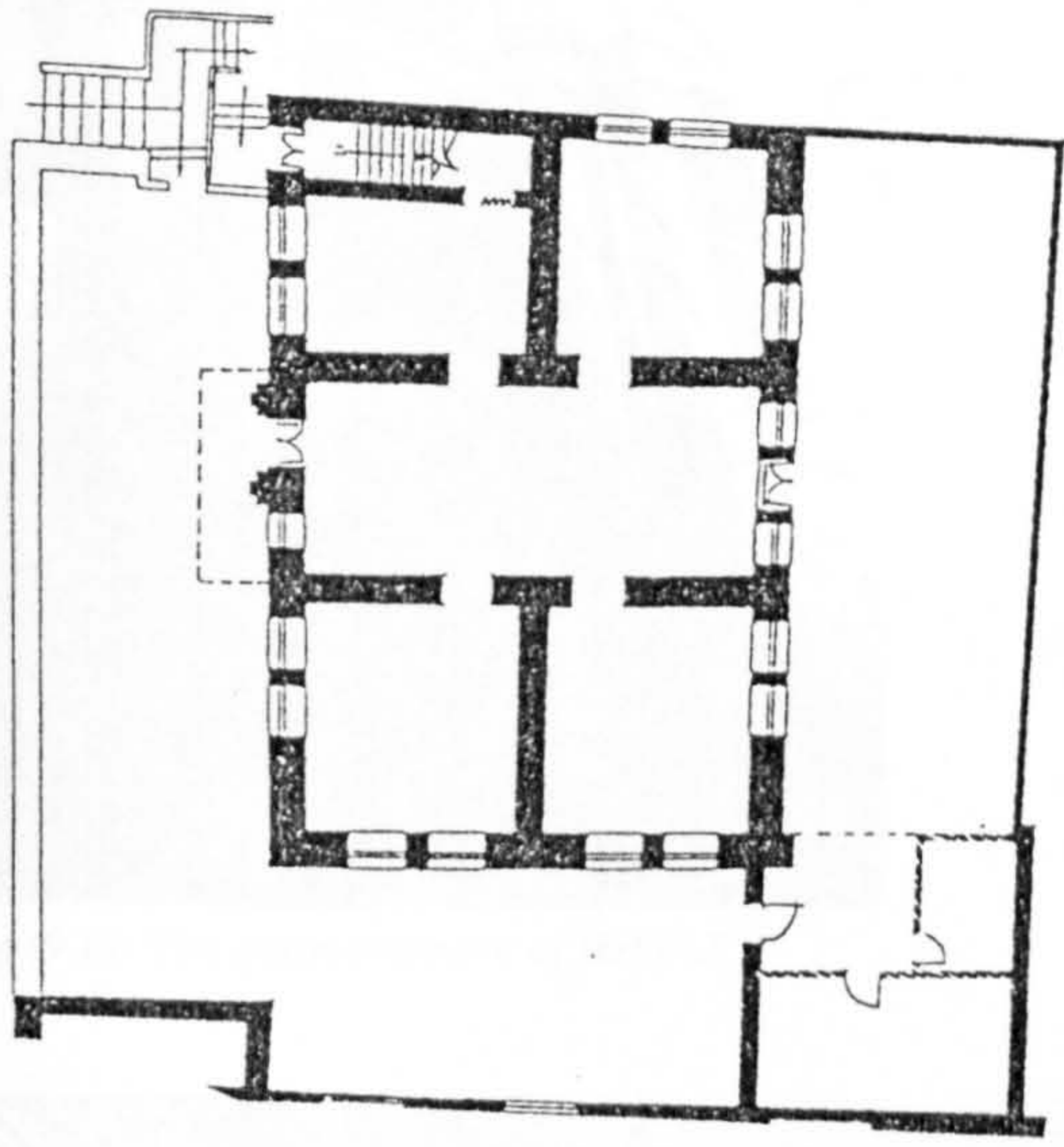


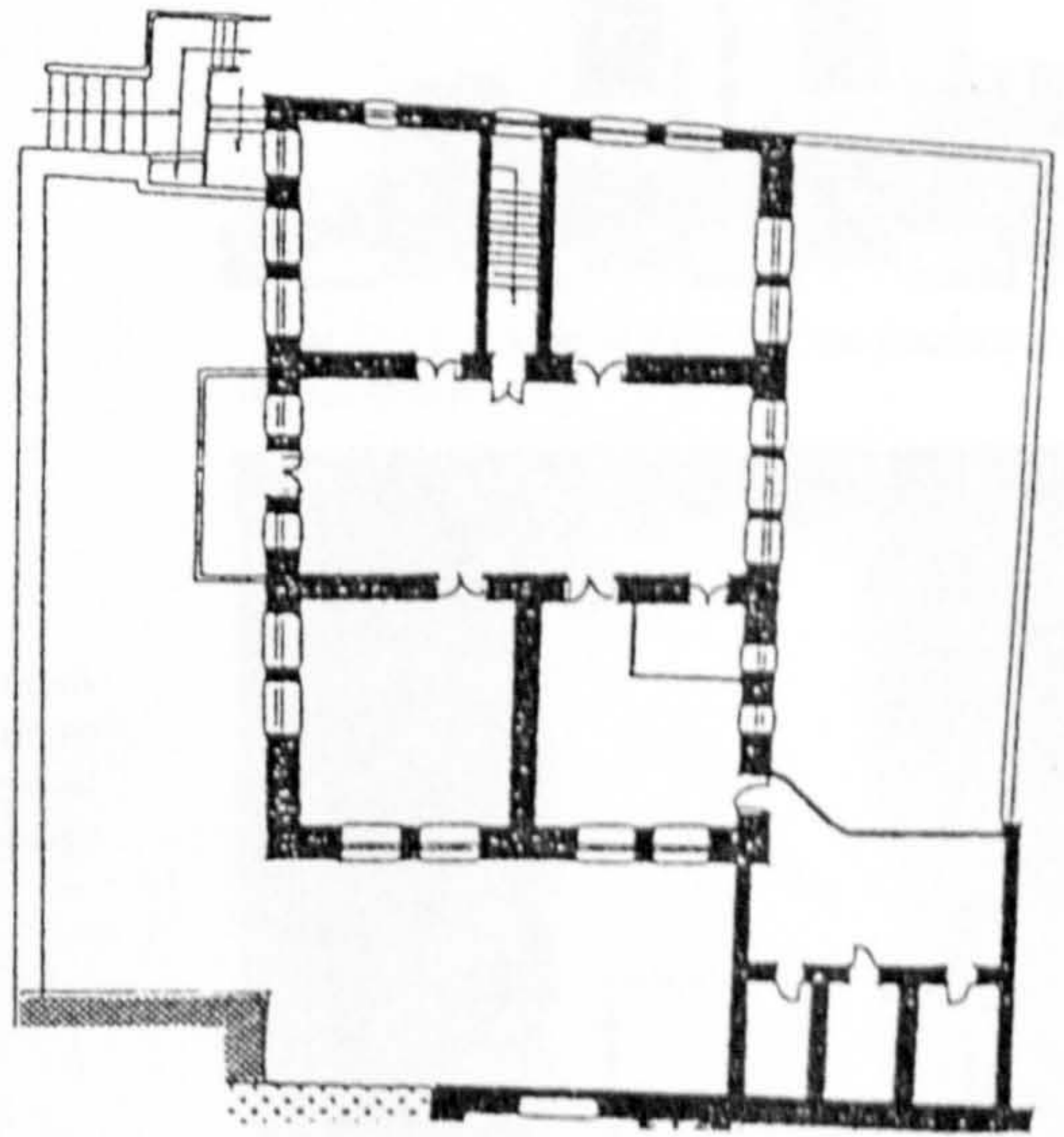
Plate (9.5): The back yard with some additions.



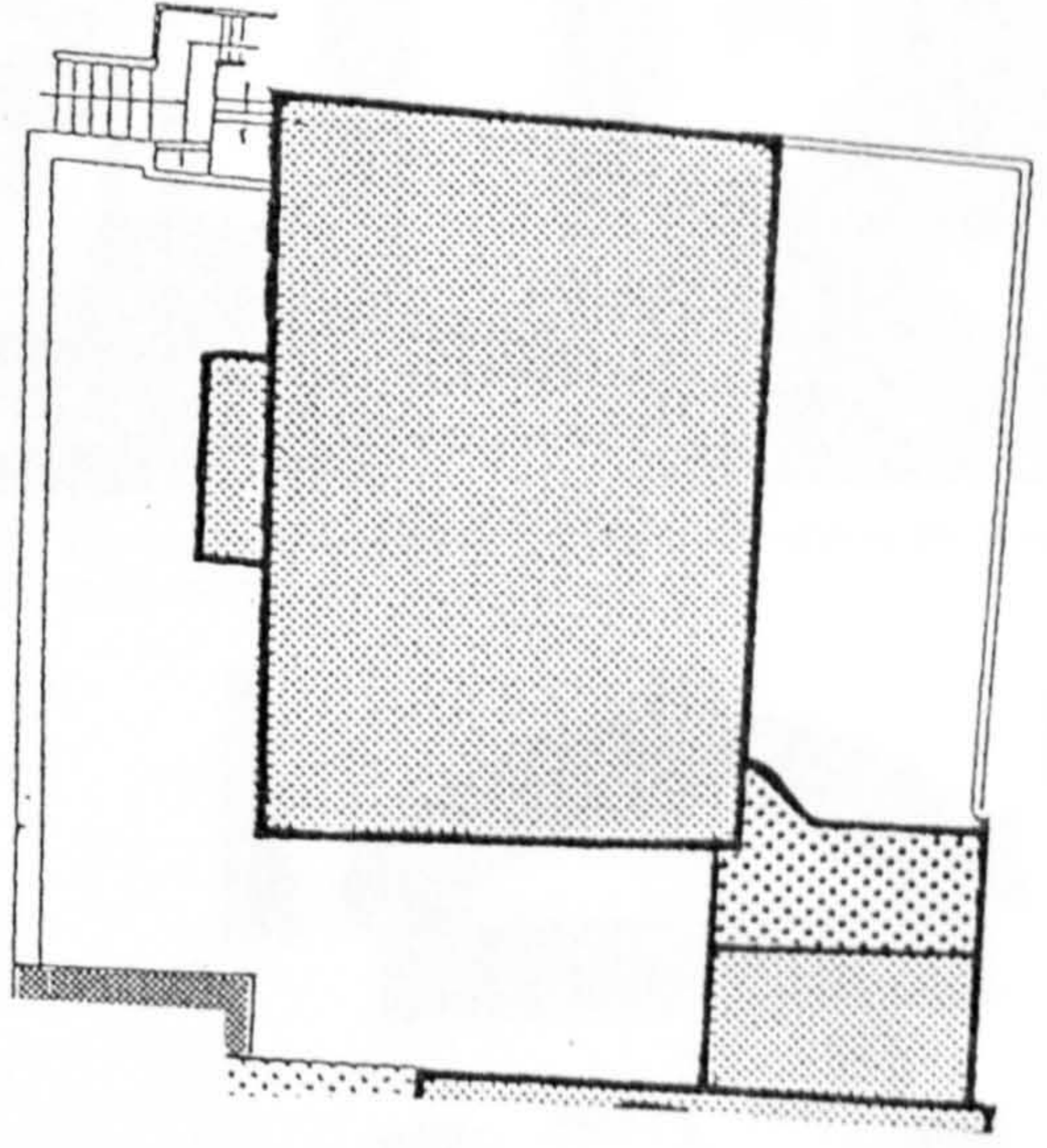
Ground floor.



Second floor - Flat (9.S).



First floor - Flat (9.F).



Roof plan.



Figure (8.40): Plans of Building 9, as existing.

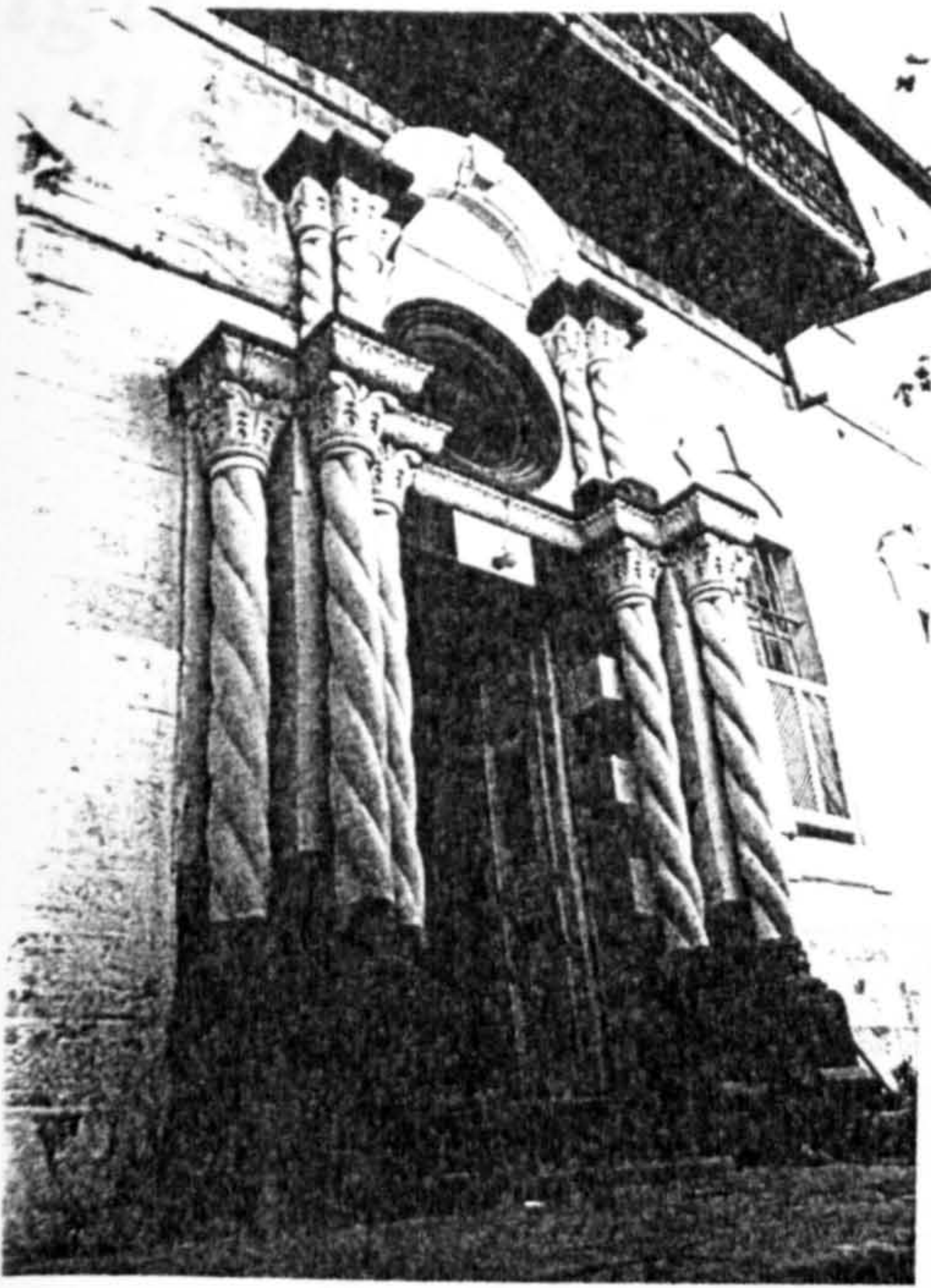


Plate (9.6): The main entrance of flat (9.F).

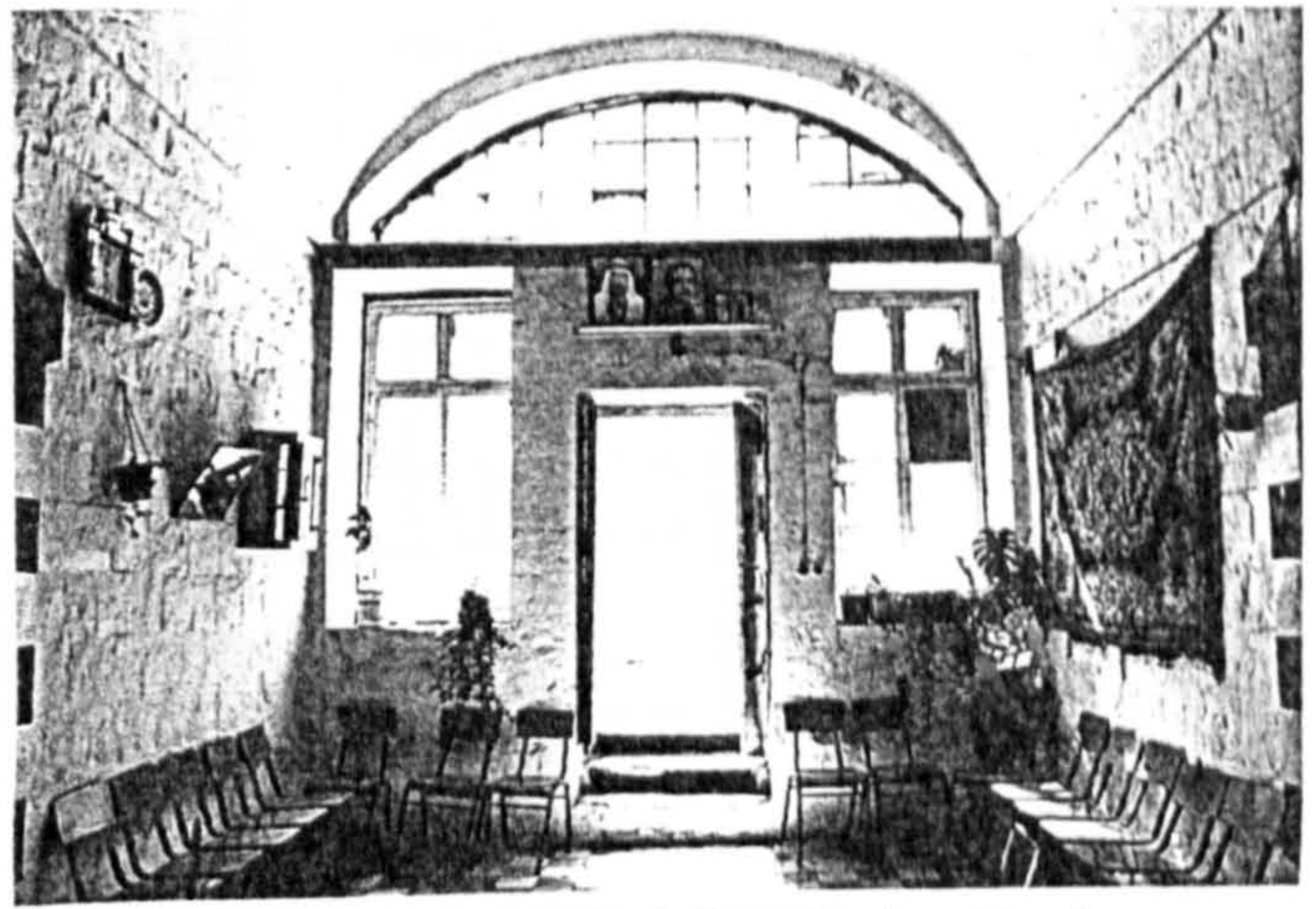


Plate (9.7): The main hall of flat (9.F); notice the ceiling form and the interior stone walls.



Plate (9.8): The main hall of flat (9.S); notice the ceiling form and the interior stone walls.

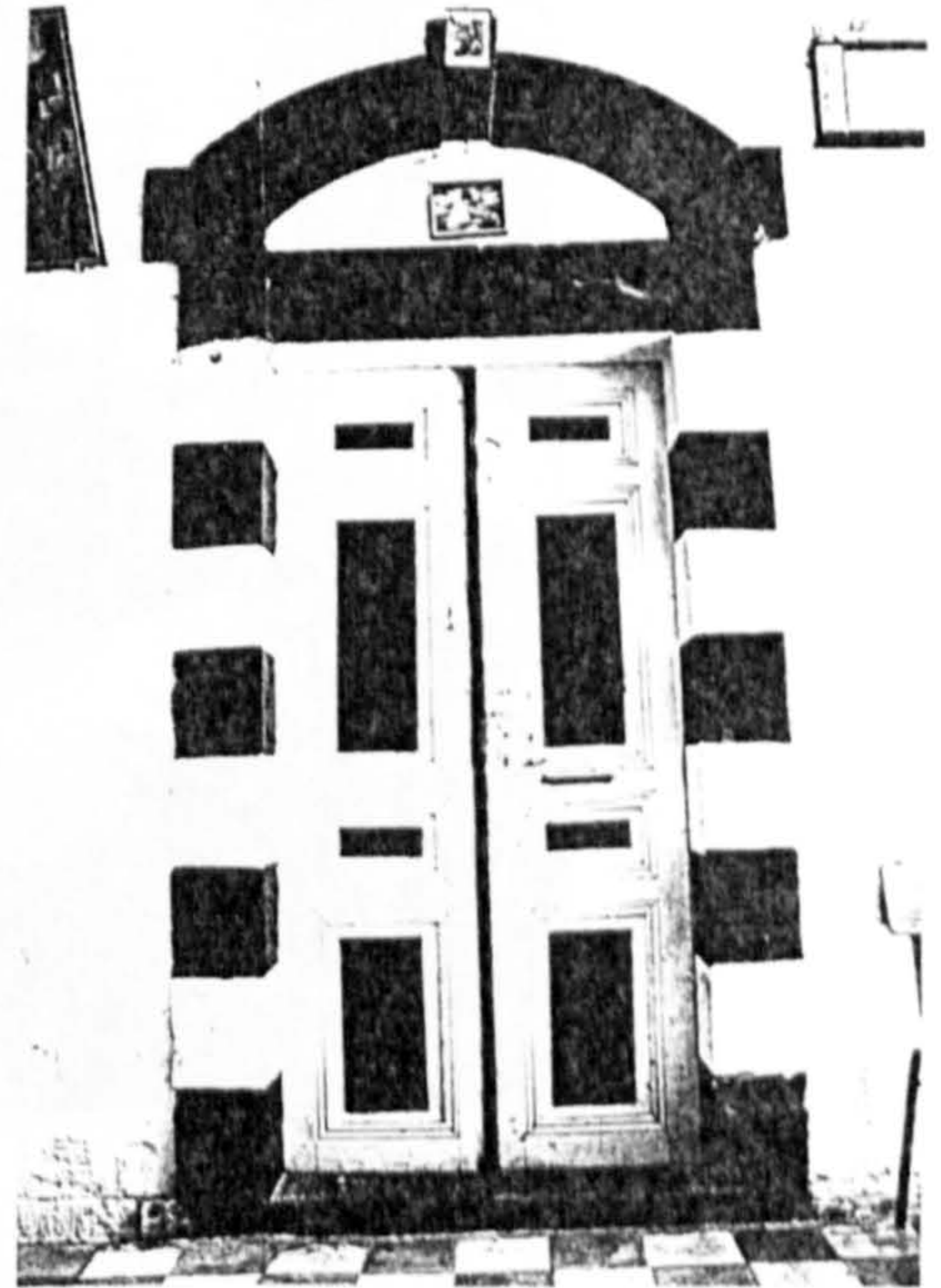


Plate (9.9): A detailed view of an interior door in flat (9.F).

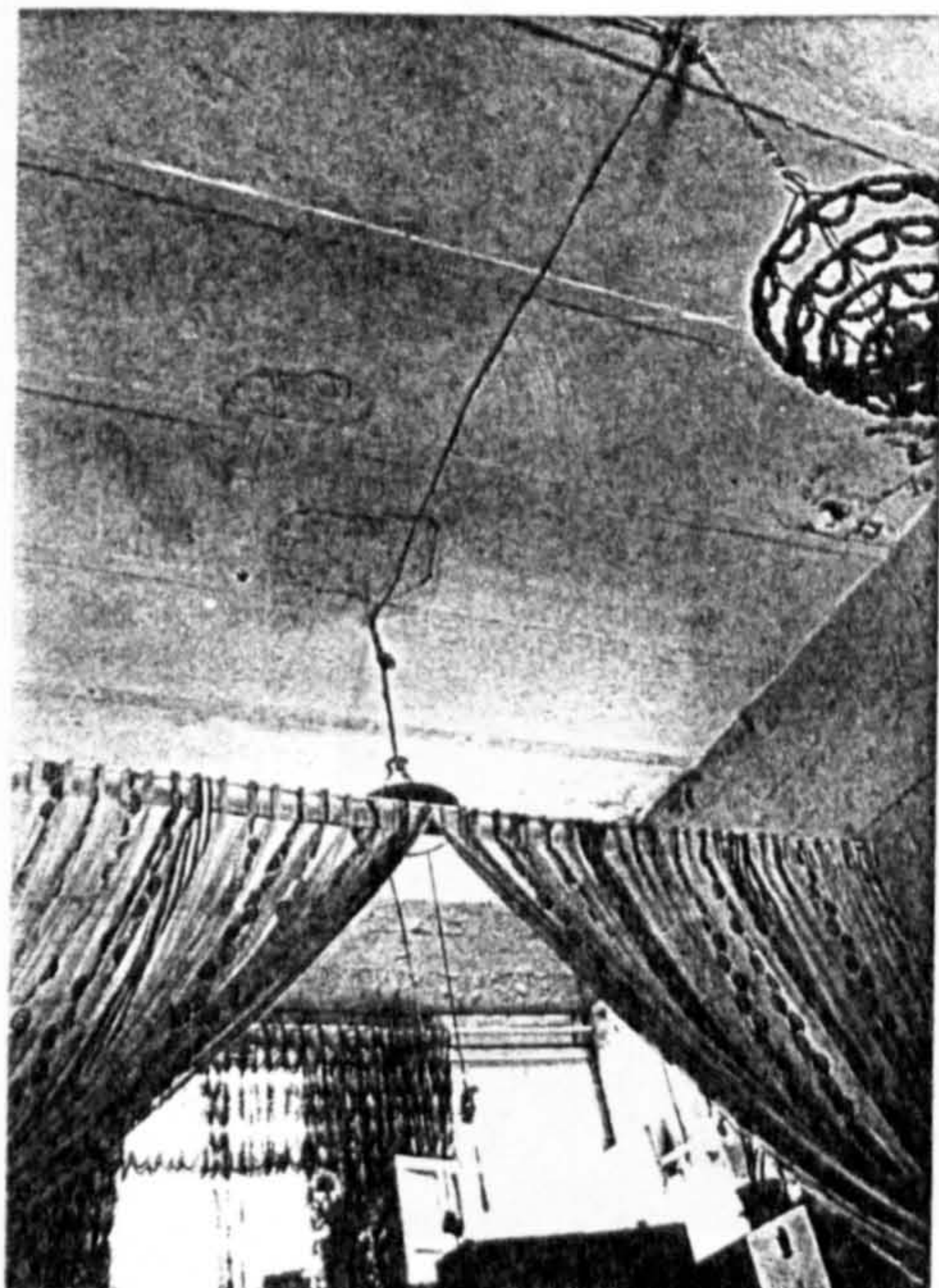


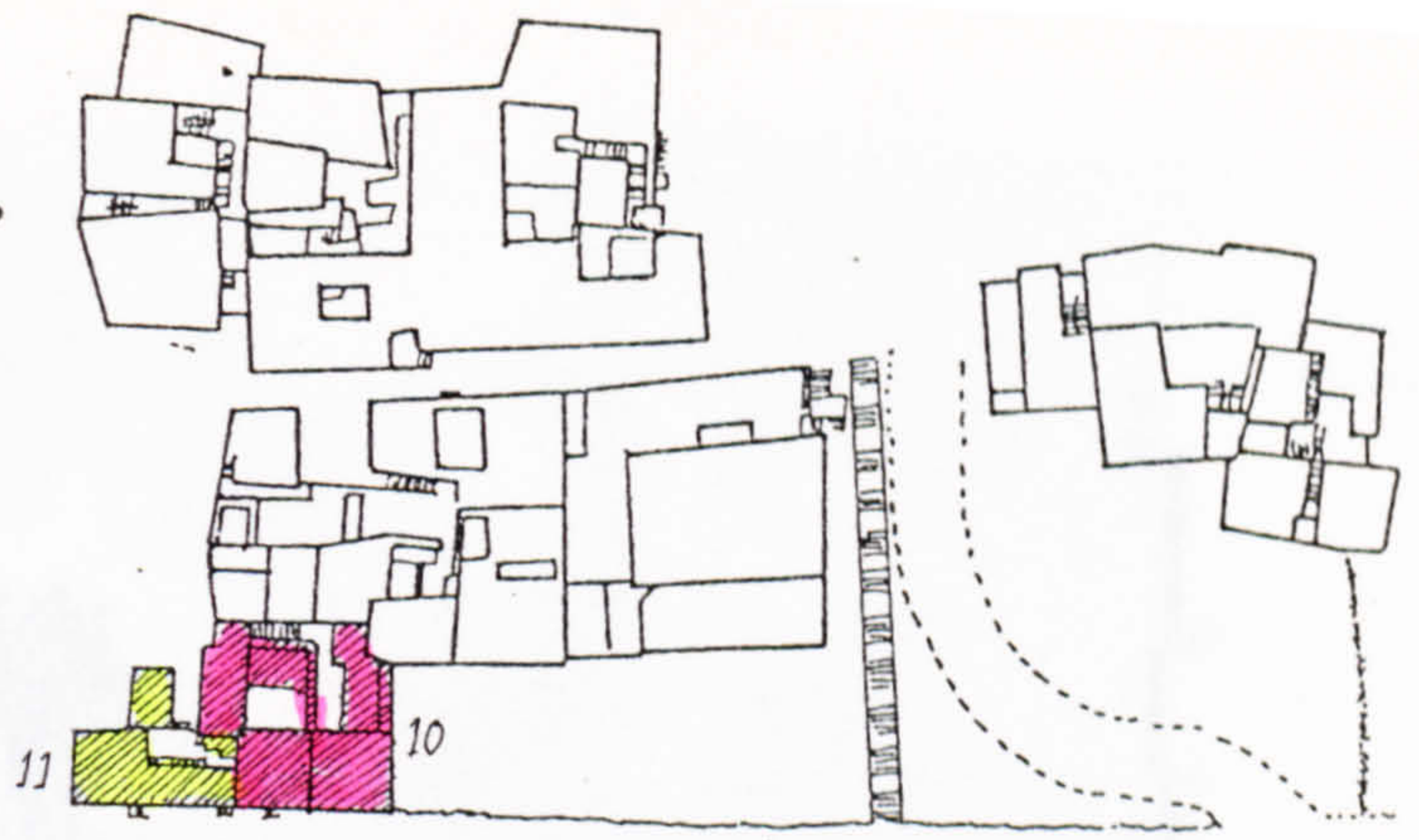
Plate (9.10): A cloth partition divides the main hall of flat (9.S) into two parts; one for guests and the other for the family.



Plate (9.11): The stair case leads up to flat (9.S).

Figure (8.41): Building no. 9, Existing Condition.

*Figure (8.42):
Buildings no. 10 & 11.*



Location within the site.

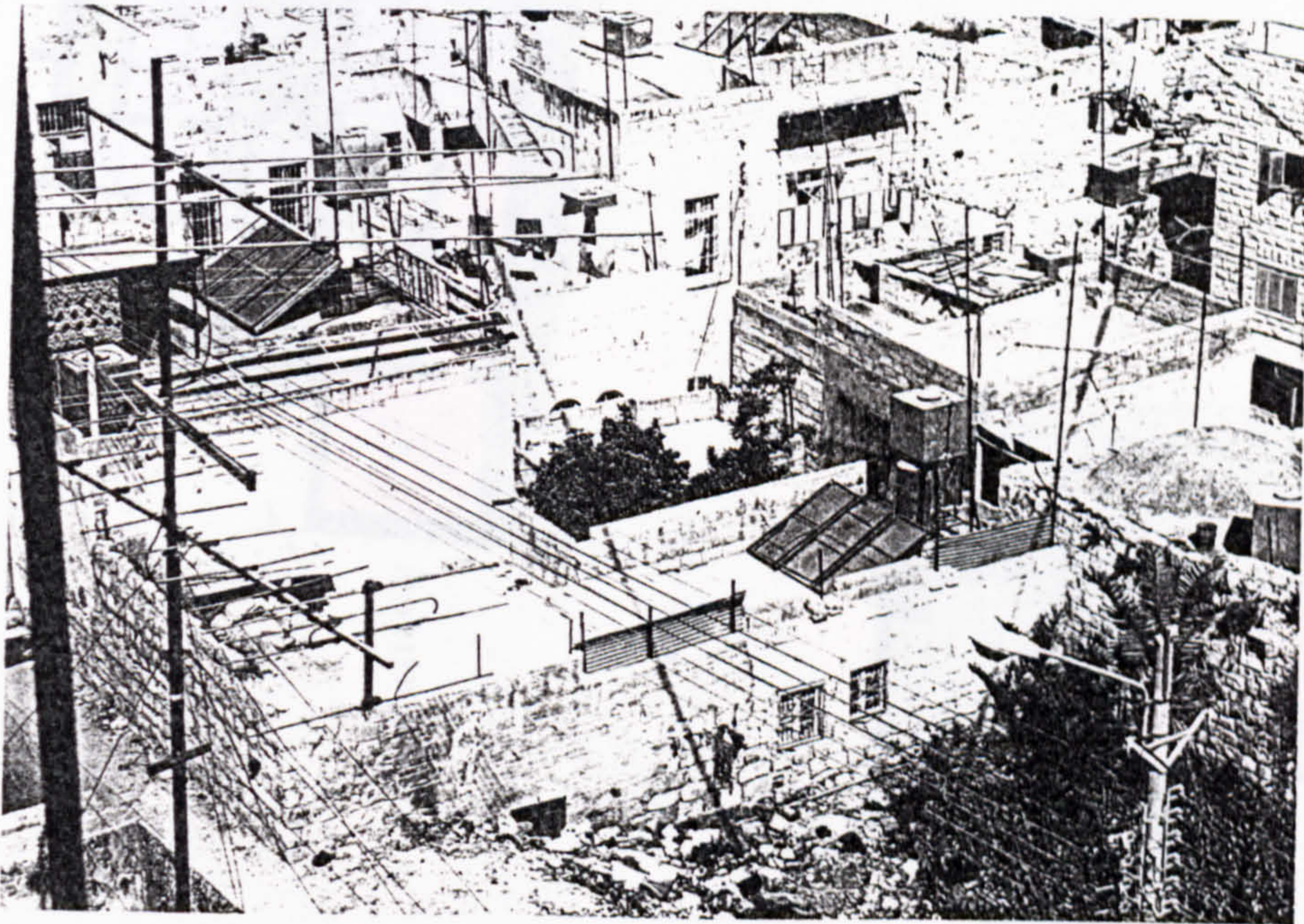


Plate (10.1): General roof view.



Plate (10.2): South elevation.



Figure (8.43): Plans of Buildings 10 & 11, as existing.

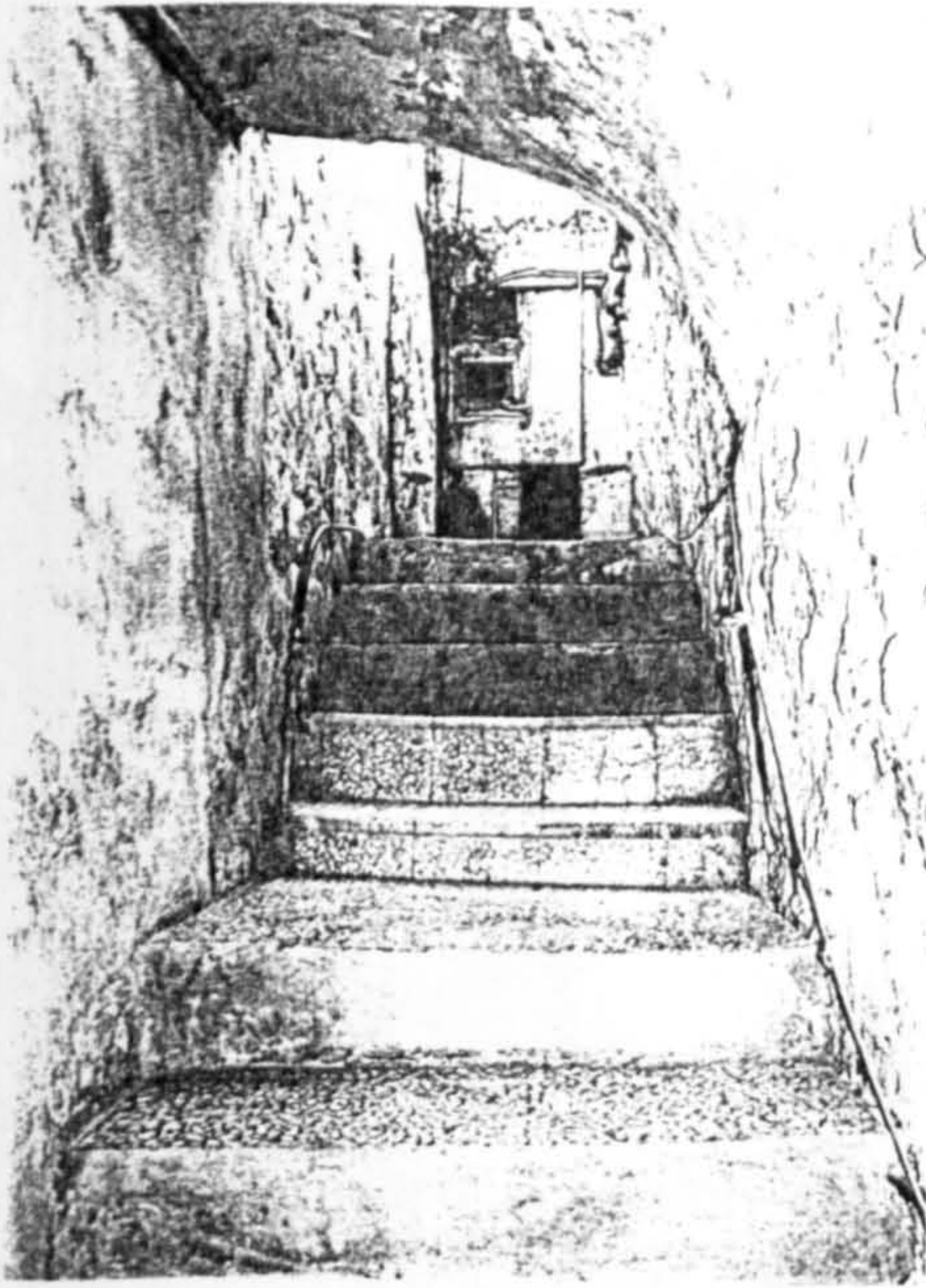


Plate (10.3): The passage way leads to flat (10.F1).

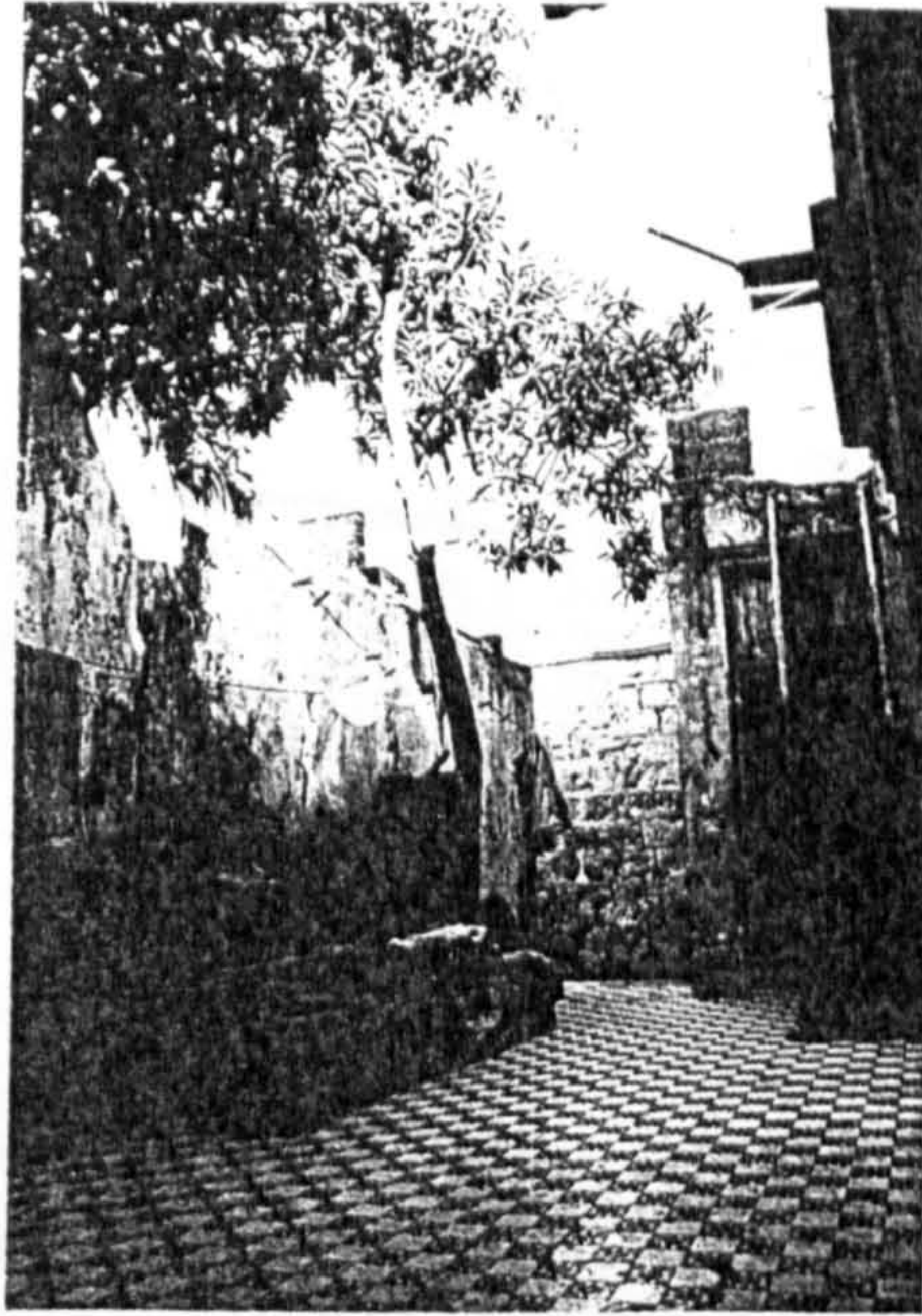


Plate (10.4): The open court of flat (10.F1).

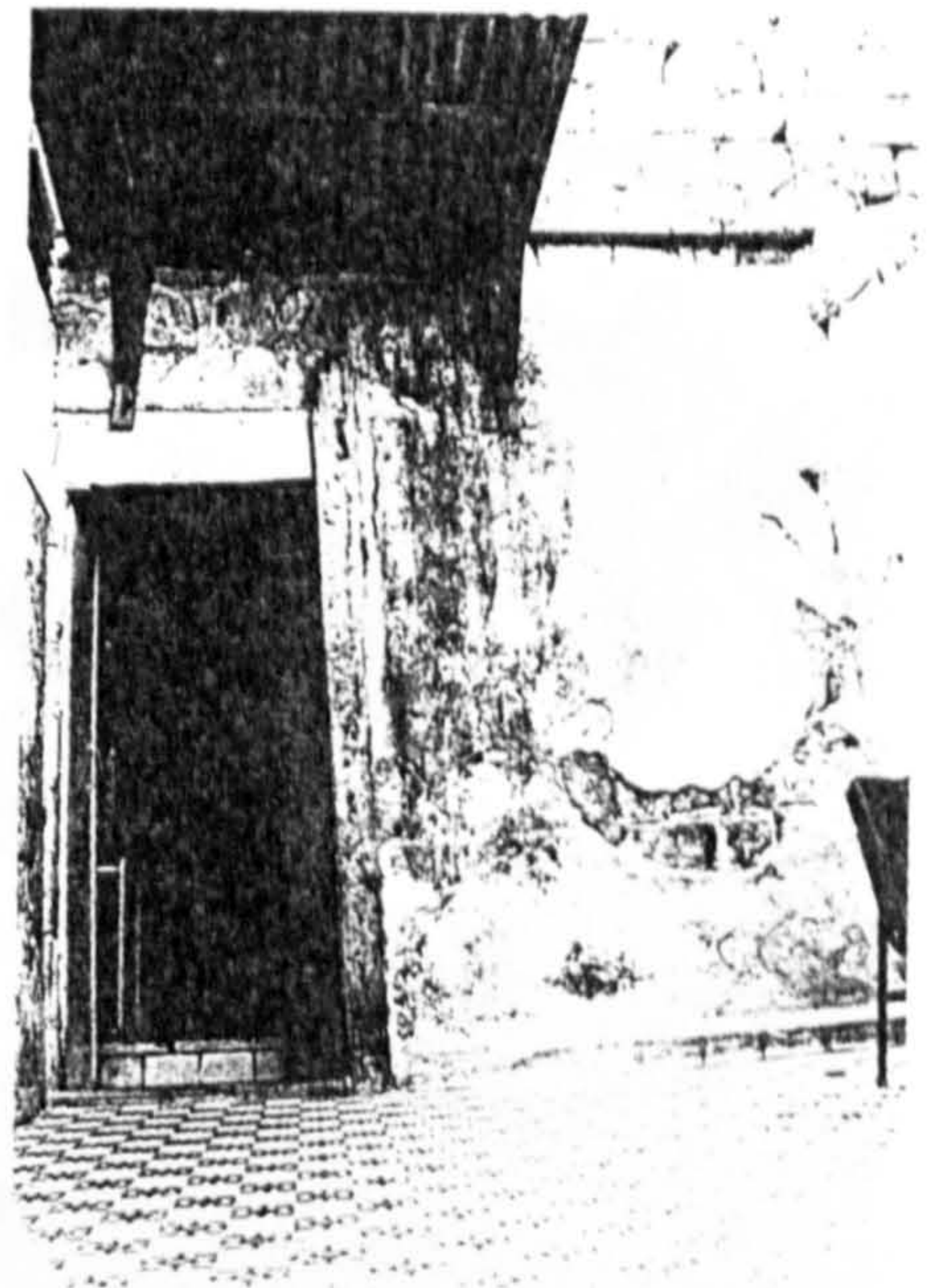


Plate (10.5): External wall of within flat (10.F1) court; notice the condition of the plastered stone wall.



Plate (10.6): An upper window in flat (10.F1).



Plate (10.7): A traditional doorway within flat (10.F2).



Plate (10.8): One corner inside a bed-setting room within flat (10.F2); notice the dampness effects on the walls and vault structures.

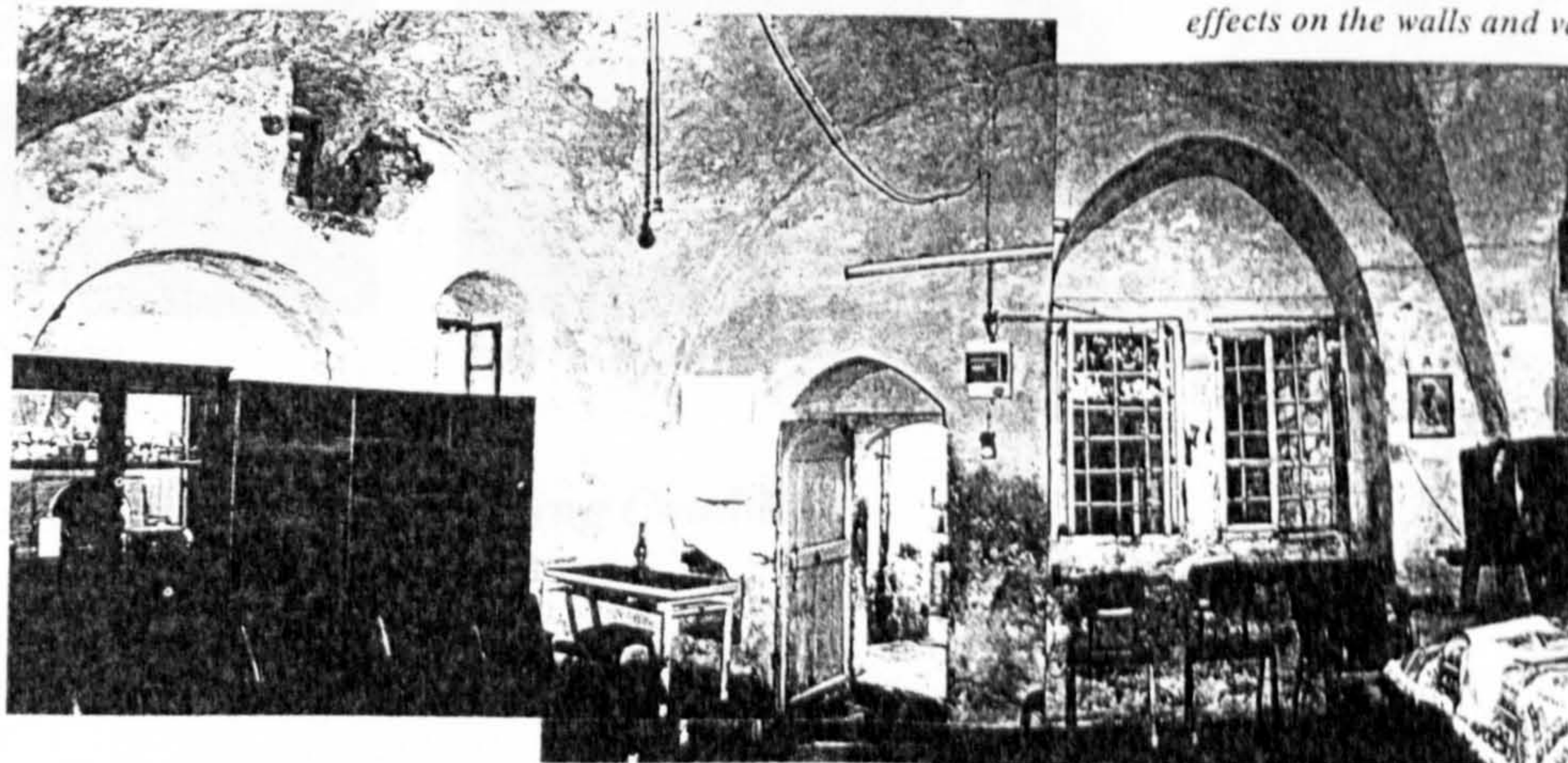


Plate (10.9): A general interior view within the bed-setting room of flat (10.F2).

Figure (8.44): Building no. 10, Existing Condition.



Plate (11.1): New additions within the open court.



Plate (11.2): North elevation.



Plate (11.3): Looking upward from the ground floor court.



Plate (11.4): Master bedroom.

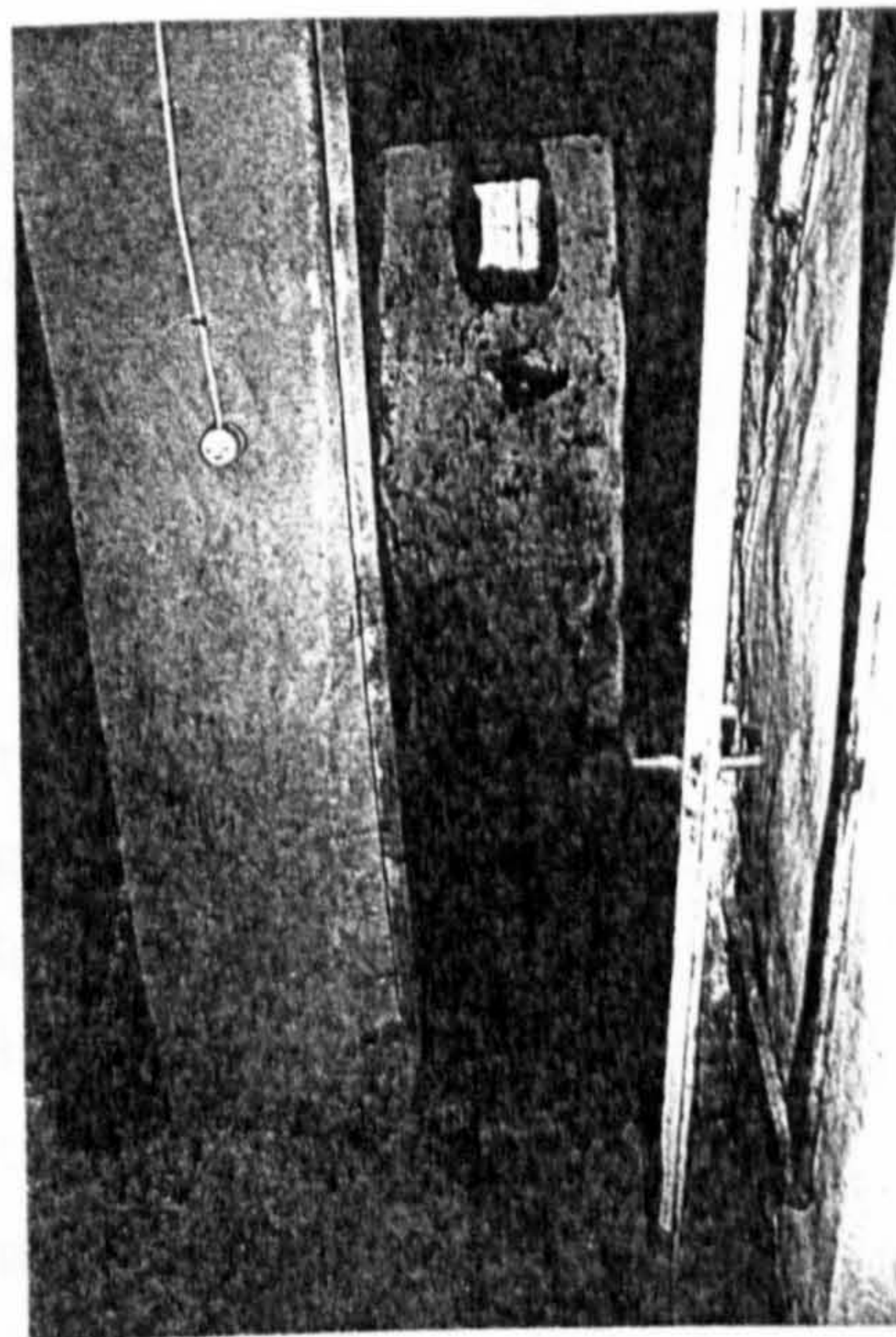


Plate (11.5): A new WC.



Plate (11.6): Inside on of the rooms; notice the deepness effect.

Figure (8.45): Building no. 11, Existing Condition.

8.2.2. Summary of the Building Existing Condition:

Table (8.1) summaries the existing condition of the studied buildings. From this table it is concluded that 30.6% of the existing housing units are occupied by their owners, 51% are occupied by tenants, 4% are under maintenance and 14.4% are deserted. The rent average value is £17.41/month that equals £208.88/year, and which is about half the rent average in the Old Town (£30.5/month). This could be for the poor existing conditions and their small house size, even in comparison with the other houses of the Old Town, as these houses have in average 2.66 room/house, while it is 3.2 room/house in the Old Town and 5.3 room/house in the City.

This ownership and rent value situations influenced the physical condition of these buildings as shown earlier by the photographs of each building, and which is obvious in table (8.1). About 40.0% of these flats are suffering from dampness, 52.5% from wall cracks, 35.0% from roof leakage, 22.5% from plaster falling and 17.5% from paint falling. Beside these problems, the internal environment and house arrangement form other serious problems that positively encouraged the rich and whoever found an alternative accommodation to move out these buildings; such as the health problems caused by the open courts

Table (8.1): Summary of the Existing Condition

FLAT No.	Occupancy		Physical Condition Problems							Ownership		RENT /Year
	O	D	M	W	R	P	F	A	O	R		
	V	R	A	A	O	L	A	S	T	E	N	
	E	S	I	L	R	F	F	A	F	N	T	
	R	C	T	D	L	F	F	A	F	O	R	
	O	T	E	N	M	C	L	A	F	W	R	
	W	A	A	N	P	R	E	L	L	N	T	
	D	B	A	N	A	A	L	L	L	O	R	
	E	E	N	E	C	K	K	I	N	W	N	
	D	E	C	S	S	K	G	N	G	N	T	
	D	E	E	S	S	E	G	G	G	D	D	
1.G1	*									*		63
1.F1		*								*		
1.F2		*								*		
1.F3		*		*	*	*	*	*	*	*		?
1.S1		*								*		
2.GF1	*			*	*					*		
2-3.F2	*			*	*	*	*	*	*	*		345
2.S1		*								*		
3.G		*		*						*		375
4.G1		*		*						*		45
4.G2		*		*						*		225
4.G3		*		*						*		120
4.G4		*		*						*		55
4.G5		*		*						*		
4.F1		*		*	*					*		45
4.F2		*		*	*					*		90
4.F3		*		*						*		
4.F4		*		*						*		
4.F5		*		*						*		480
5.G1		*		*						*		
5.GF2		*		*						*		
5.GF3		*		*	*	*	*	*	*	*		55
6.B1		*		*						*		60
6.G1		*		*						*		
6.G2		*		*						*		
6.F1		*		*						*		
6.F2		*		*						*		
6.S		*		*						*		
7.B		*		*						*		450
7.G		*		*						*		
7.F		*		*						*		
7.S		*		*	*	*				*		
8.G1		*		*	*	*	*	*	*	*		55
8.G2		*		*						*		
8.G3		*		*	*	*	*	*	*	*		115
8.G4		*		*						*		
8.F1		*		*	*	*	*	*	*	*		240
8.FS2		*		*	*	*	*	*	*	*		
8.F3		*		*						*		
8.F4		*		*						*		
8.F5		*		*						*		225
8.S1		*		*	*					*		225
8.S3		*		*	*	*				*		135
9.F		*		*	*	*	*	*	*	*		135
9.S		*		*	*	*				*		750
10.F1		*		*	*					*		315
10.F2		*		*	*	*	*	*	*	*		
10.S1		*		*	*	*				*		150
11.GF		*		*	*					*		270
Total	20	20	7	2	16	21	14	9	7	24	25	5013

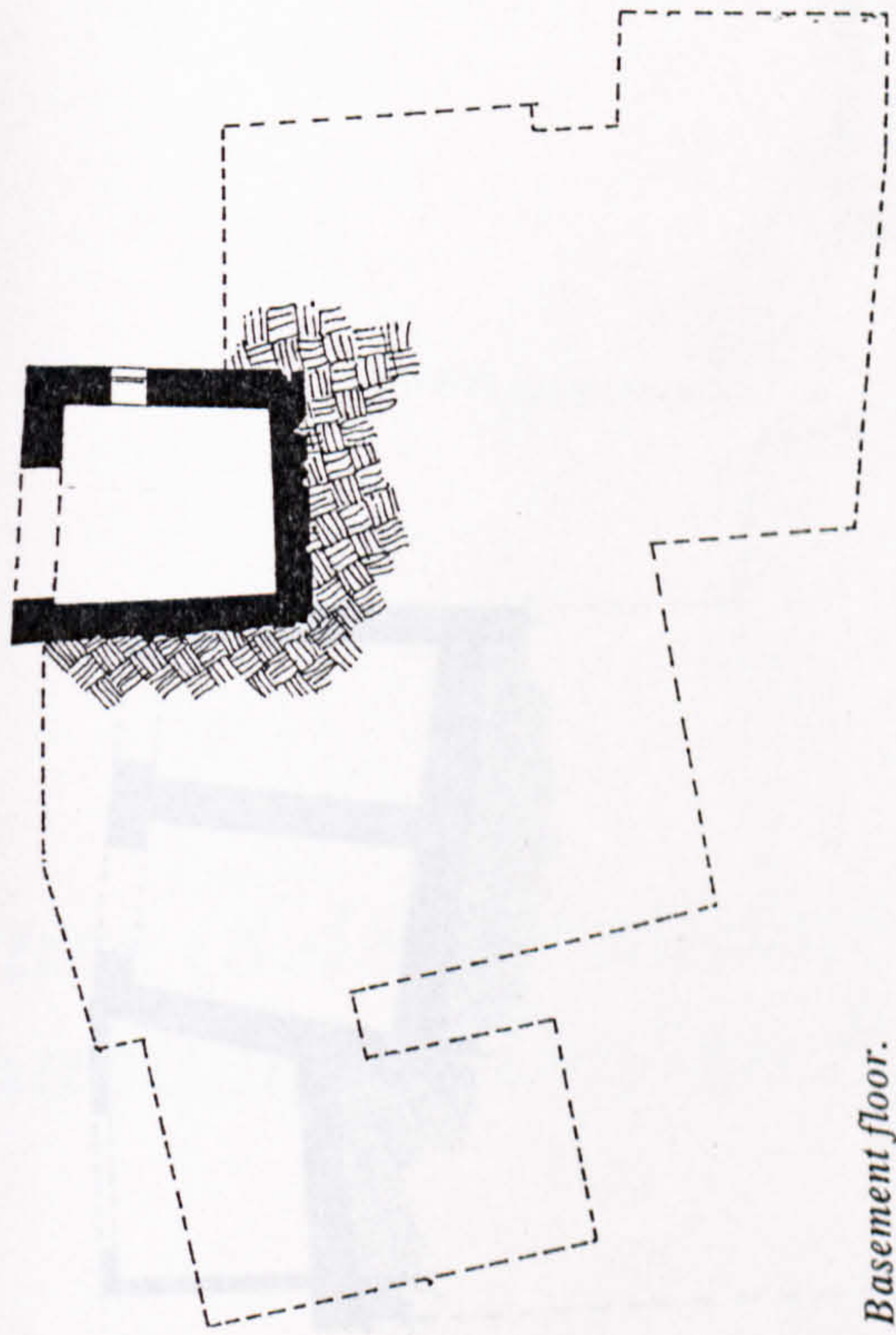
particularly in winter days, and the unsuitable and poor quality additions. As a result of this situation it is found that 50% of the occupied flats are overcrowded as the average number of persons living in each housing unit is 6.125 person/house and 2.3 person/room, while it is about 2.01 person/house in the Old Town and about 1.08 person/house in the City (Za^cnon, 1989).

Unfortunately, and because of the difficult living conditions under the Israeli occupation, it was impossible to survey the income of the residents within the studied area, as most of the gathered figures were obviously incorrect. So it is difficult to provide the exact influence of the socio-economical structure on the physical fabric, but what has been said before on the general situation of the Old Town, discussed earlier in section 5.4. So the existing situation is dispirit and under which nobody can improve anything in these buildings, unless the rich owners were attracted to invest in their buildings. This attraction is a difficult task and a solution of which was proposed in chapter seven; sections 7.4 and 7.5.1.2.

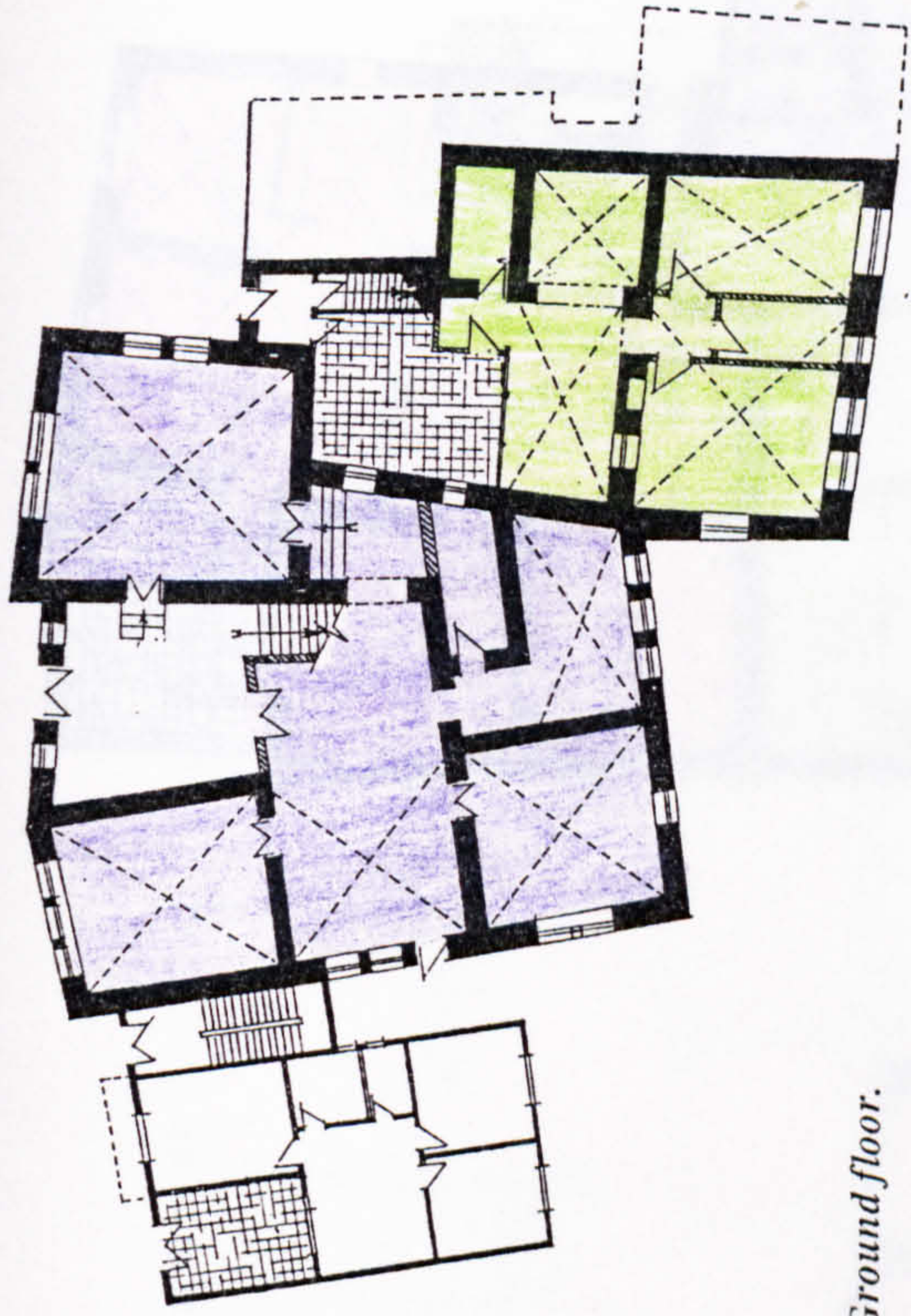
8.2.3. Rehabilitation Design Proposals:

If the old town and this site in particular are to be turned into an attractive place, where people want to live in, these buildings should be redesigned to have the kind of advantages the new houses outside the Old Town provide, as earlier discussed in section 6.5, which could be summarised in providing proper domestic facilities; kitchen, WC, and bathroom with decent sanitation, water, electricity, telephone service, and good and healthy internal environmental conditions; such as proper lighting and ventilation. Also extra advantages should be added, which is a nice private courtyard with decent privacy and garden. Above all proper access for private cars and enough spaces for parking, should be provided and controlled as earlier mentioned in section 6.4.6.

The following pages will present the proposed rehabilitation designs of the studied buildings, except buildings number 6, 7 and 9. Buildings number 6 and 7 are mostly modern except for their basement and ground floors. They have the wanted requirements of the new houses outside the Old Town. But they have the usual problem of poor quality and bad maintenance. So their rehabilitation policy is to improve their physical condition and internal environment. Building number 9 is a transitional style building. It has an urban problem represented by its existence in the middle of a private garden, which is a good characteristic nowadays, but it changes the traditional urban character of the site. So the policy here is to surround it with proper additions to harmonise its appearance within the site - see the proposed solution in the section 8.3.



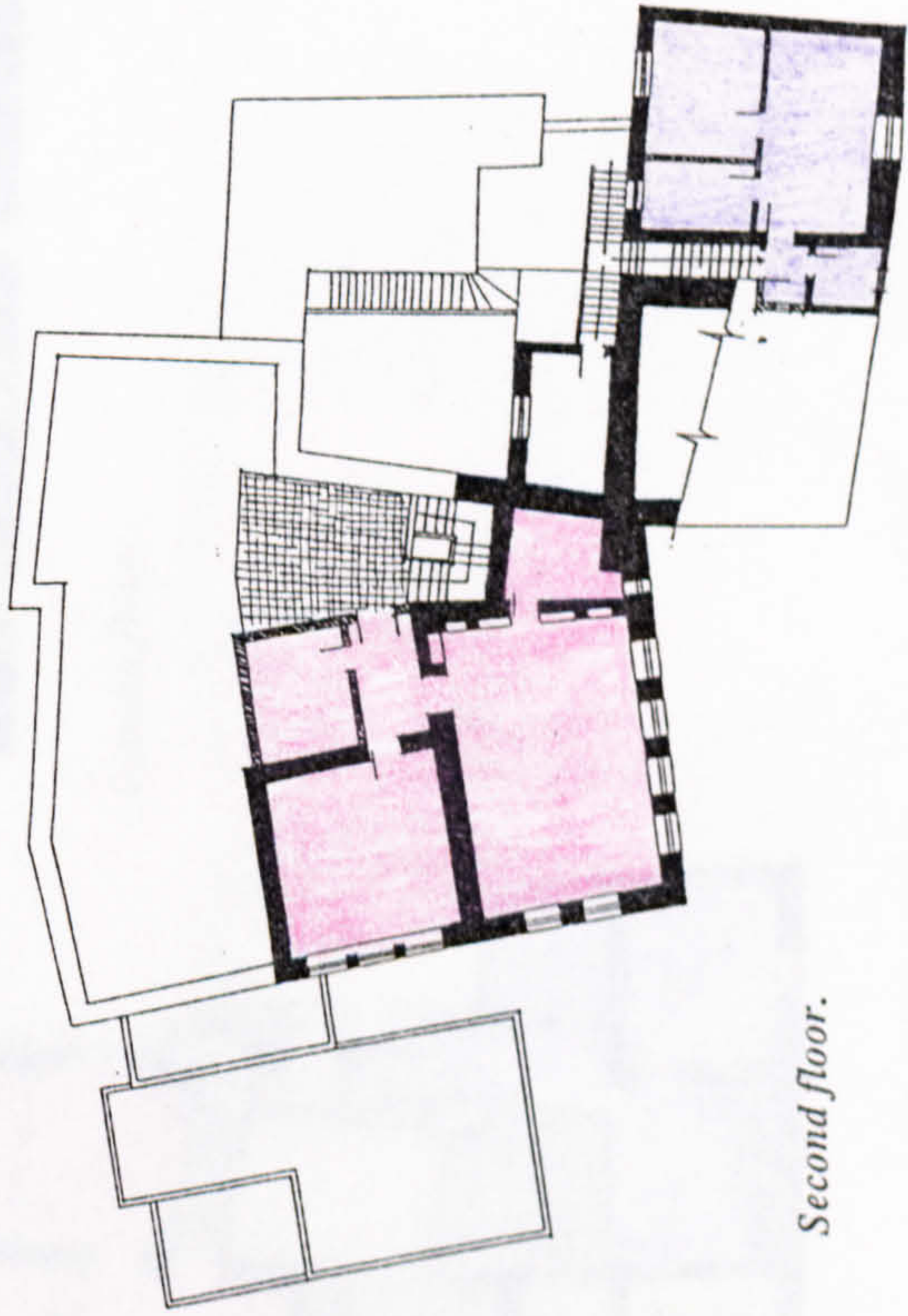
Basement floor.



Ground floor.



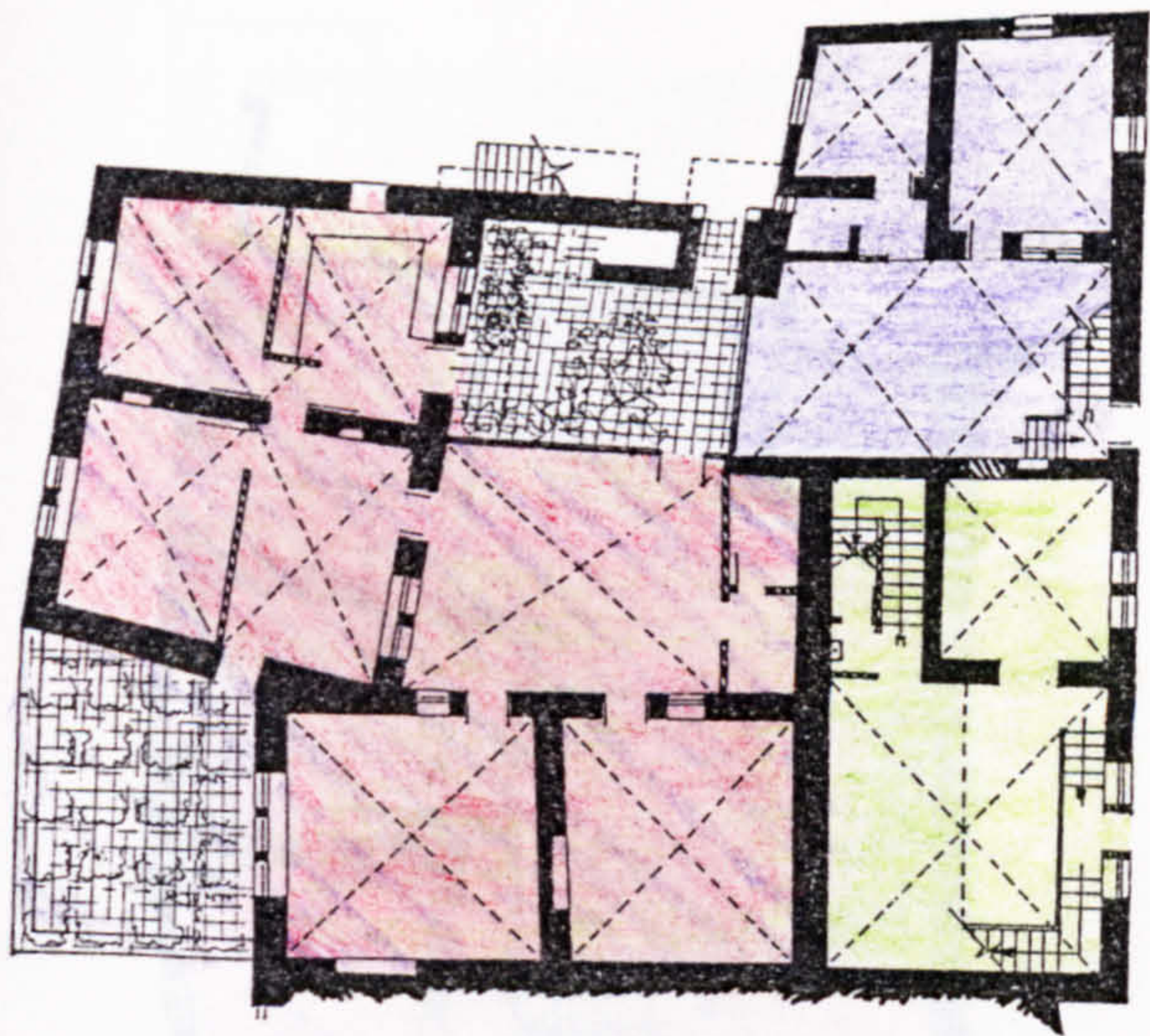
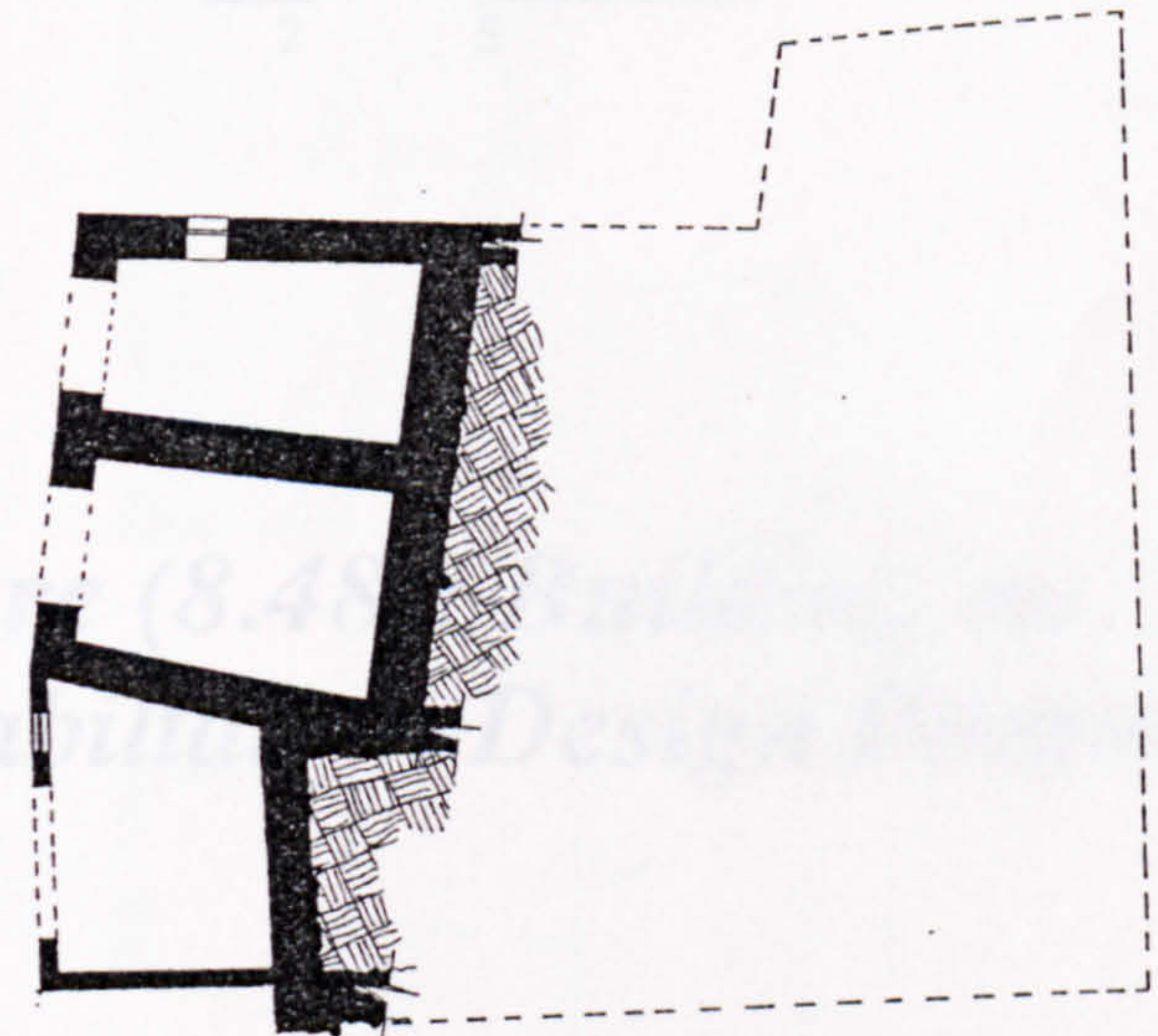
First floor.



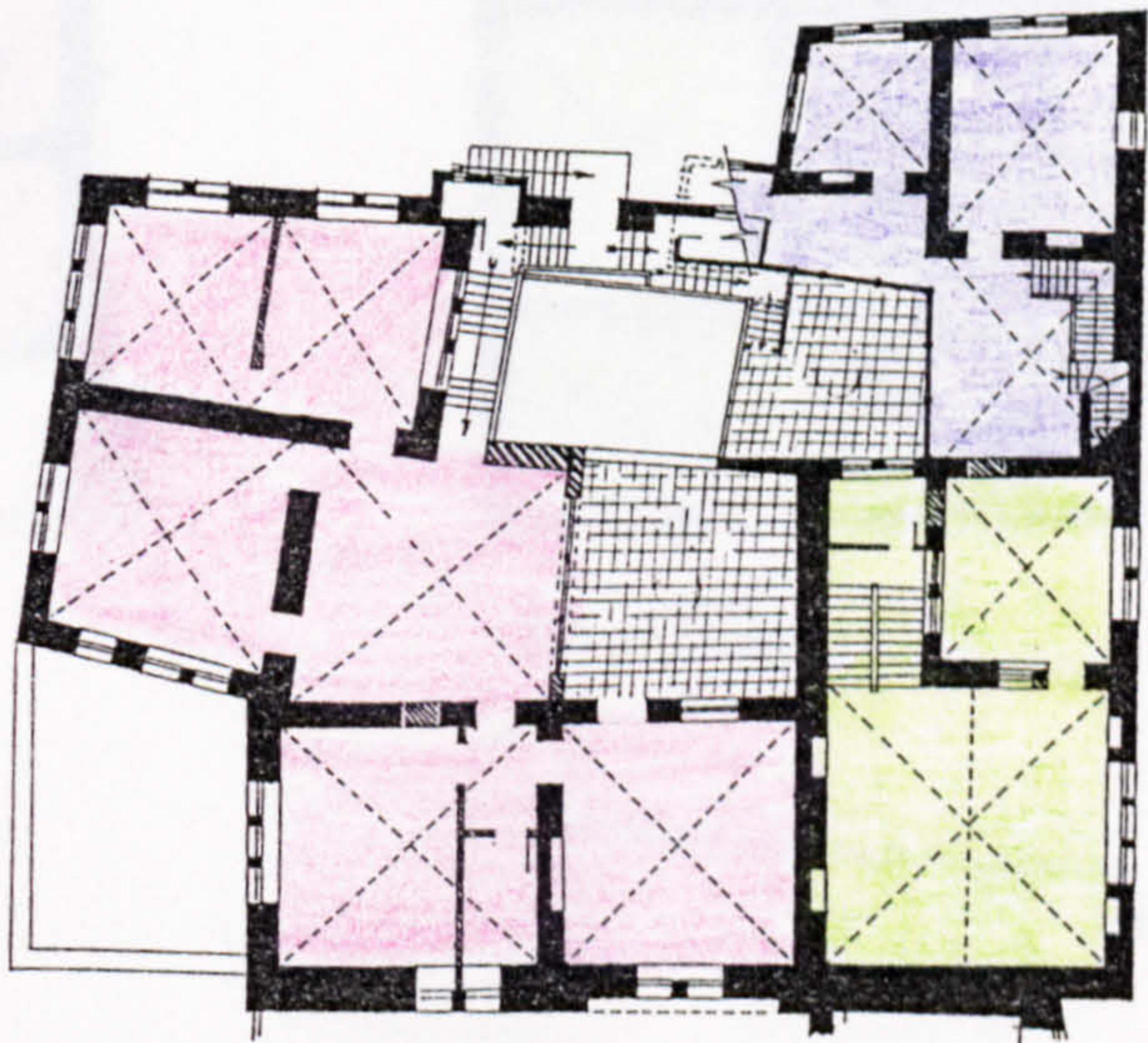
Second floor.

Figure (8.46):
Buildings no. 1, 2 and 3
Rehabilitation Design Proposal:





Ground floor.

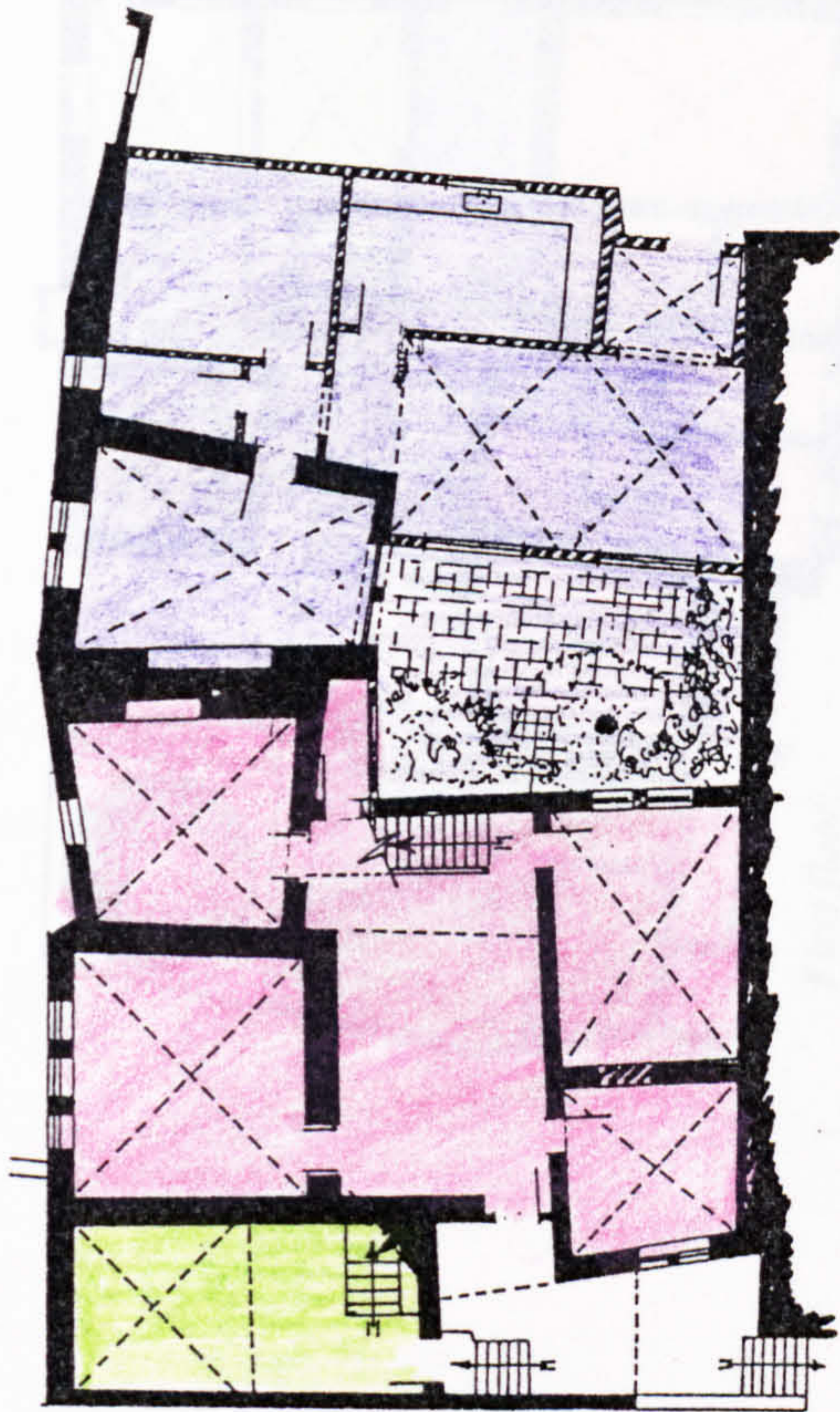


First floor.

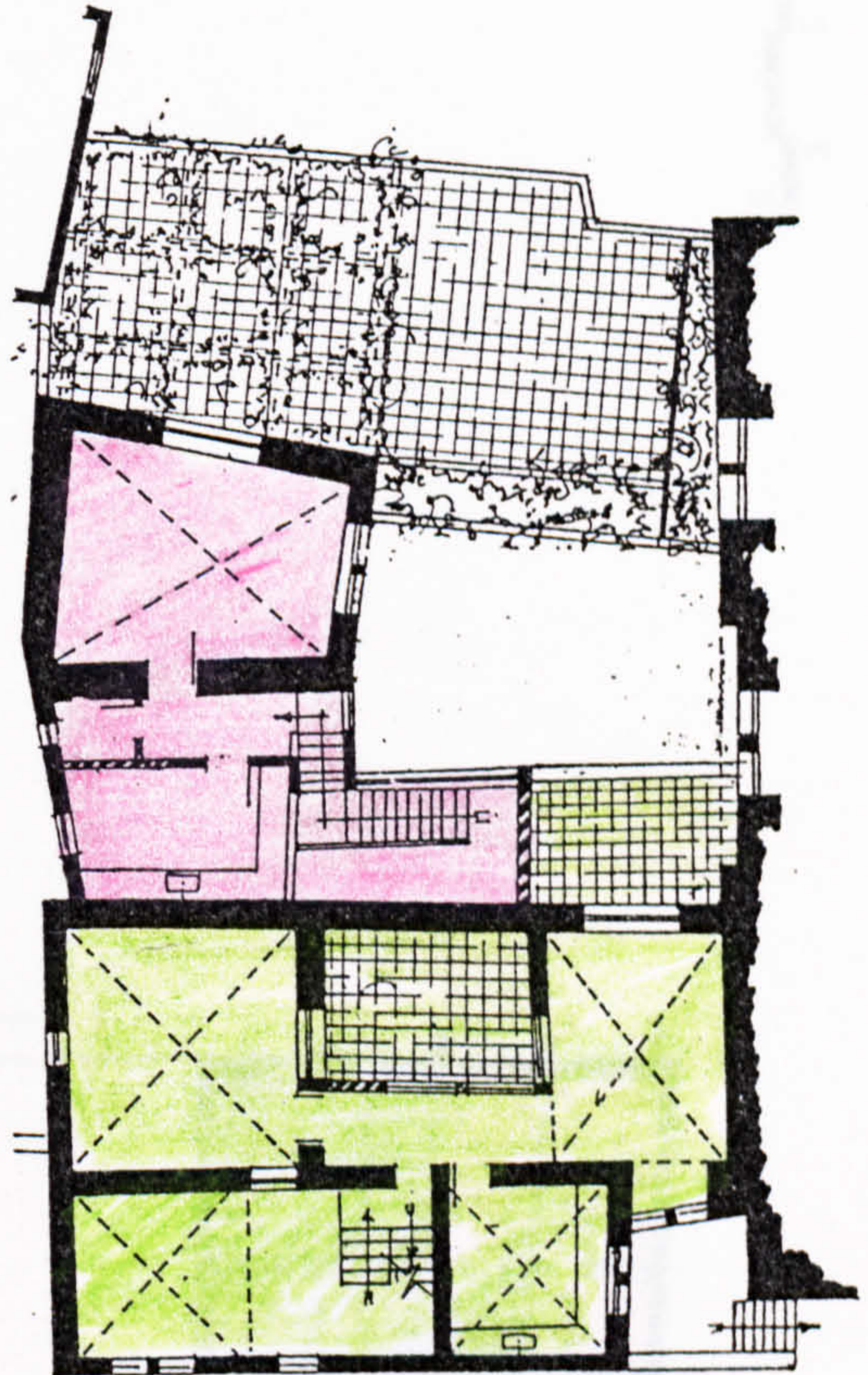


Figure (8.47):

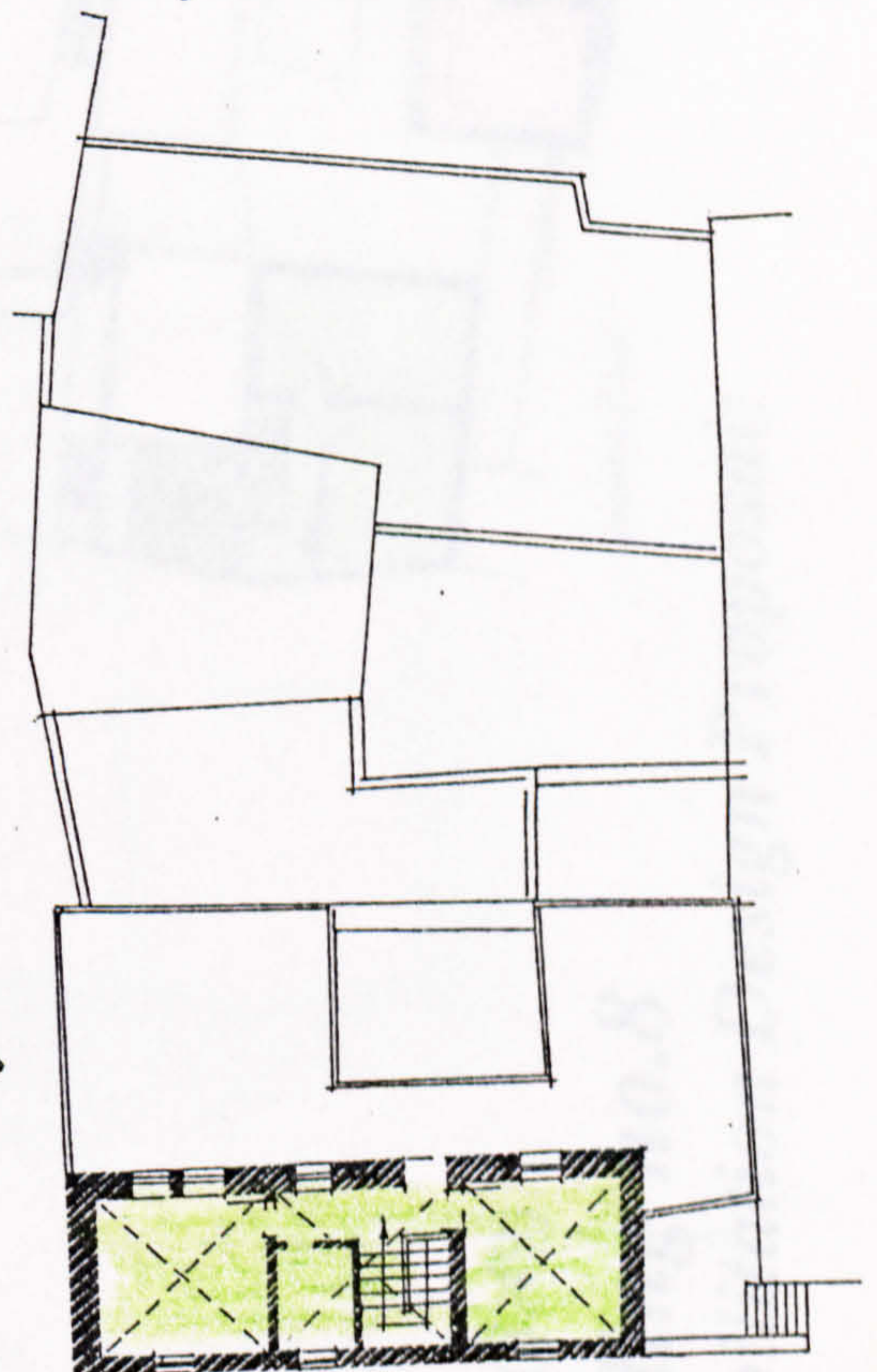
Building no. 4
Rehabilitation Design Proposal:



Ground floor.



First floor.



Second floor.

***Figure (8.48): Building no. 5,
Rehabilitation Design Proposal.***

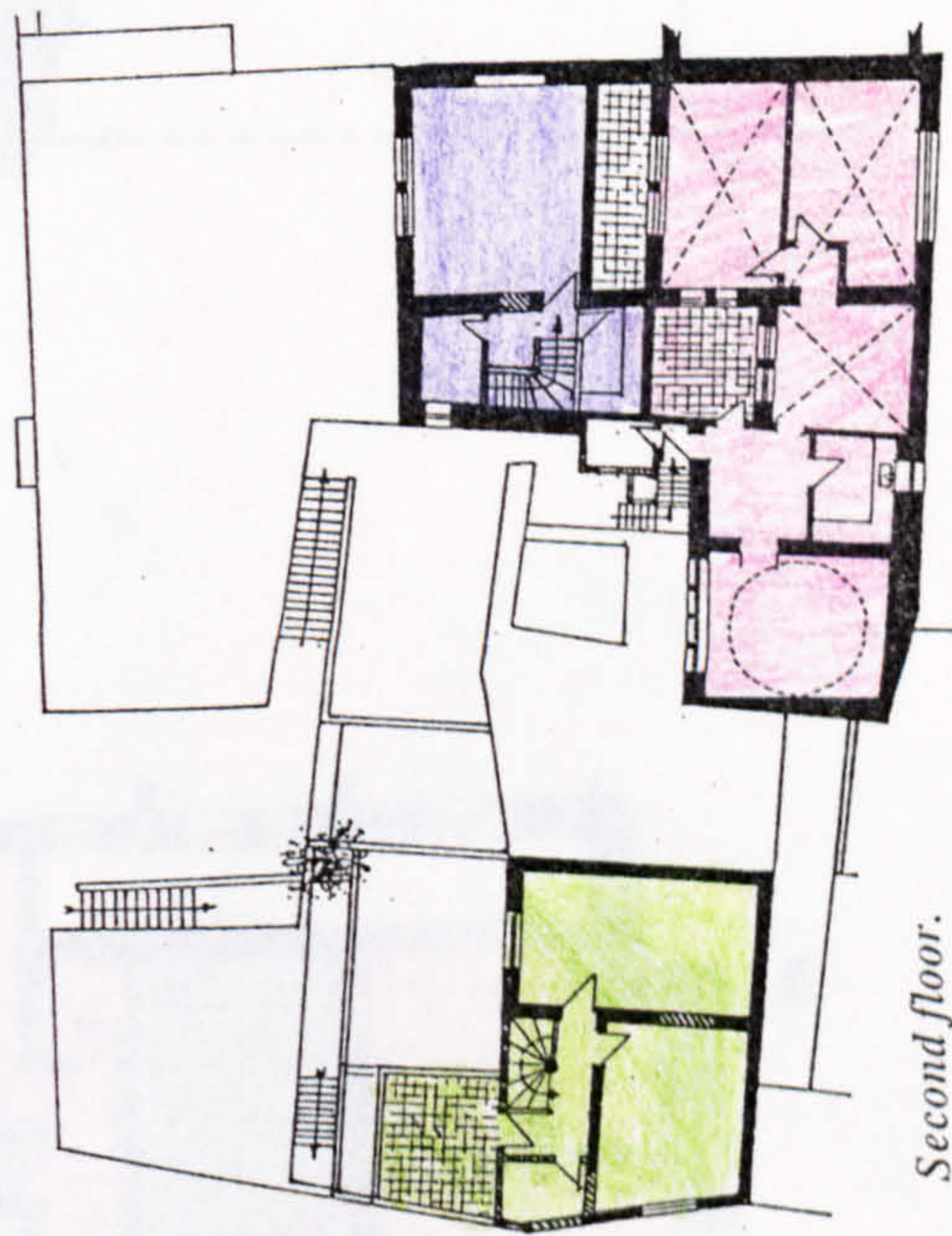
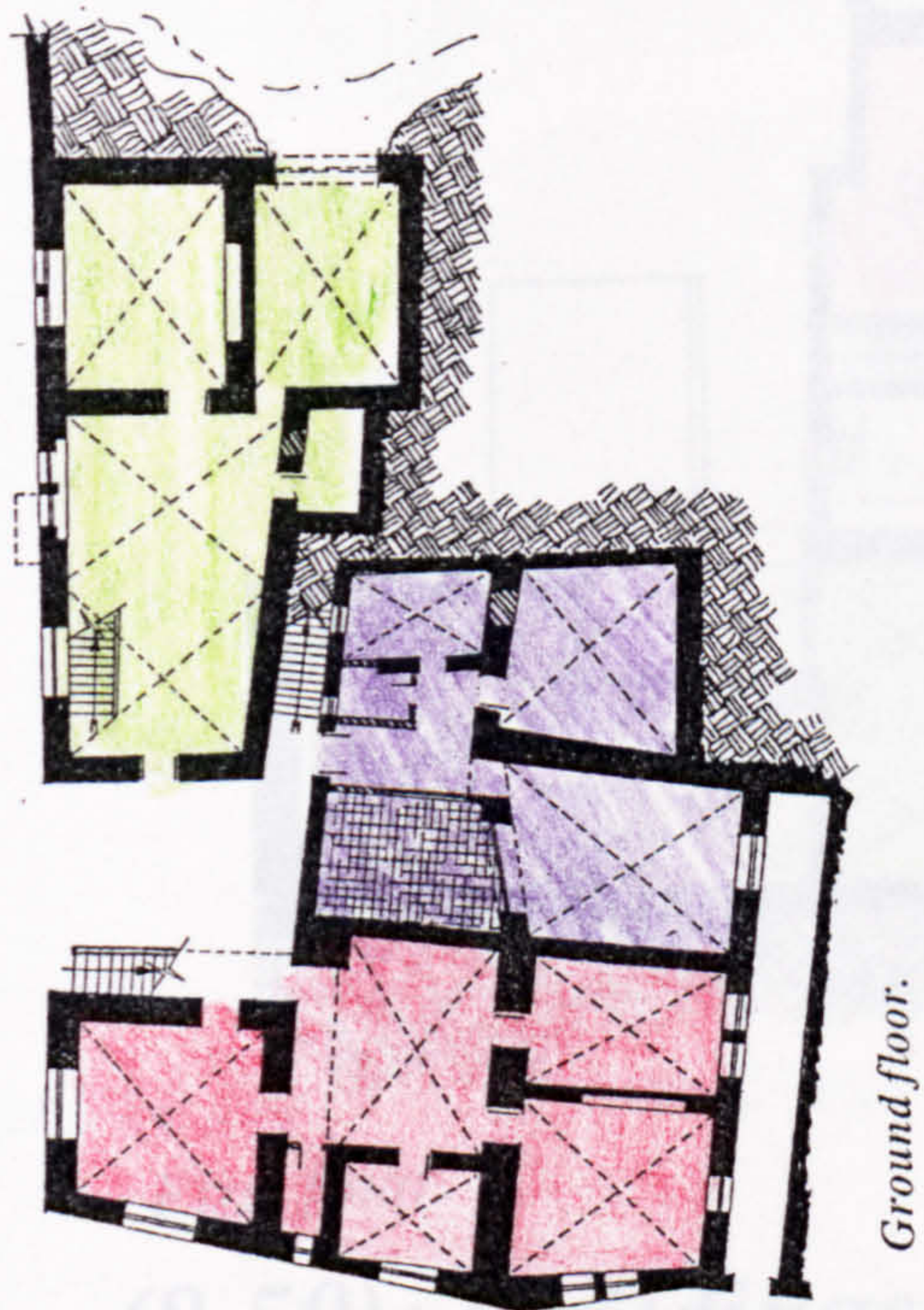
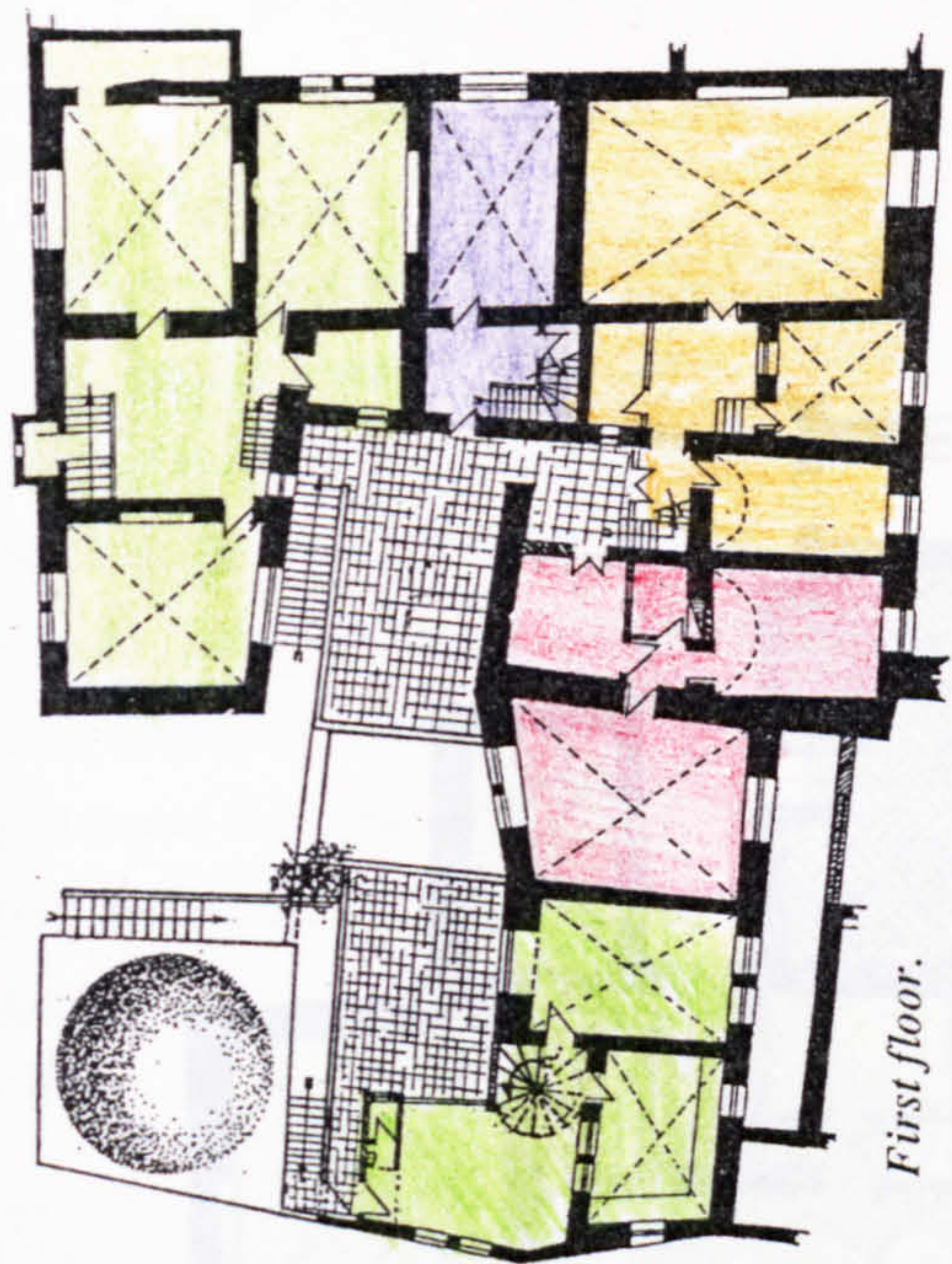


Figure (8.49):

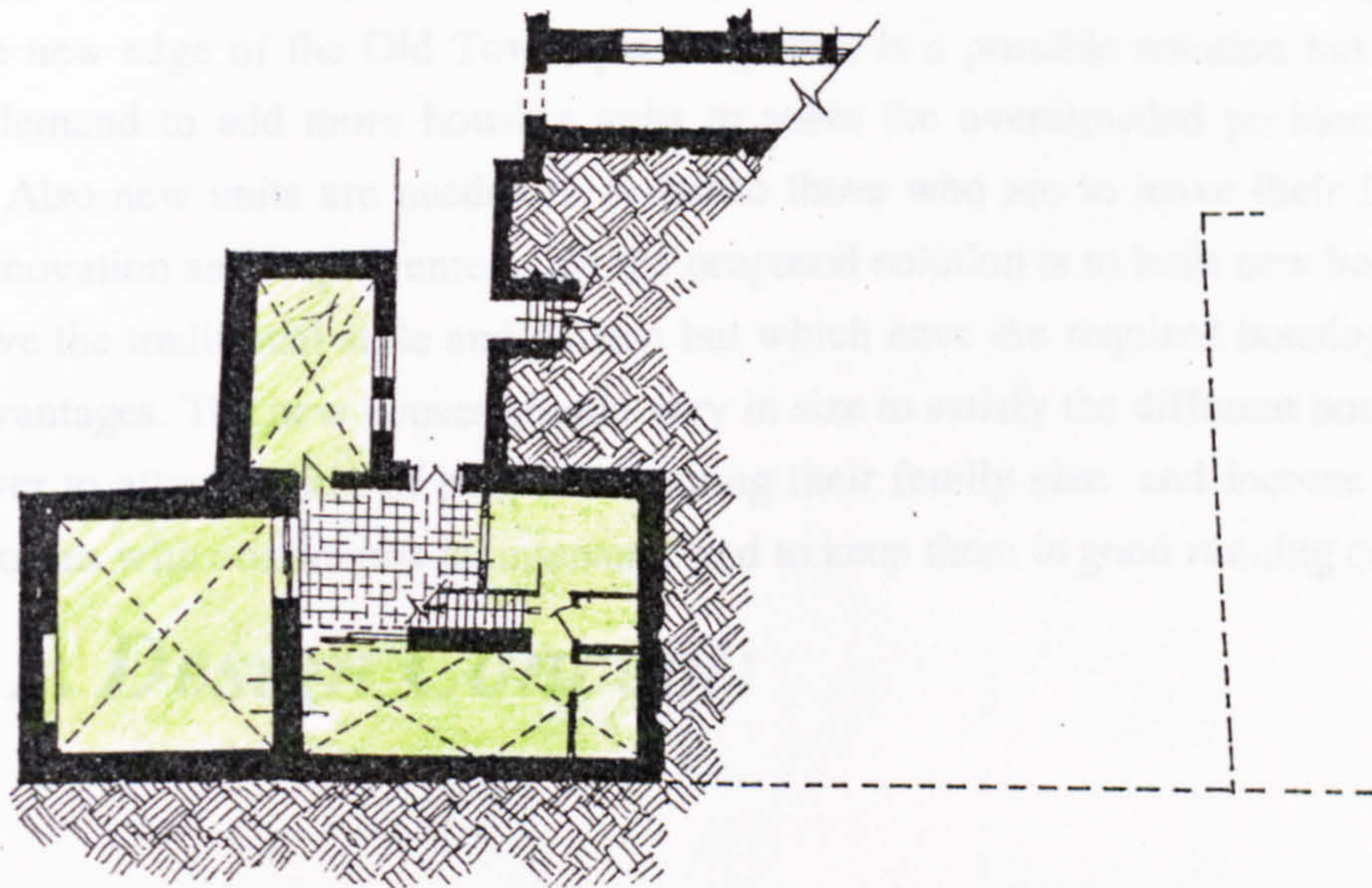
Building no.8

Rehabilitation Design Proposal:

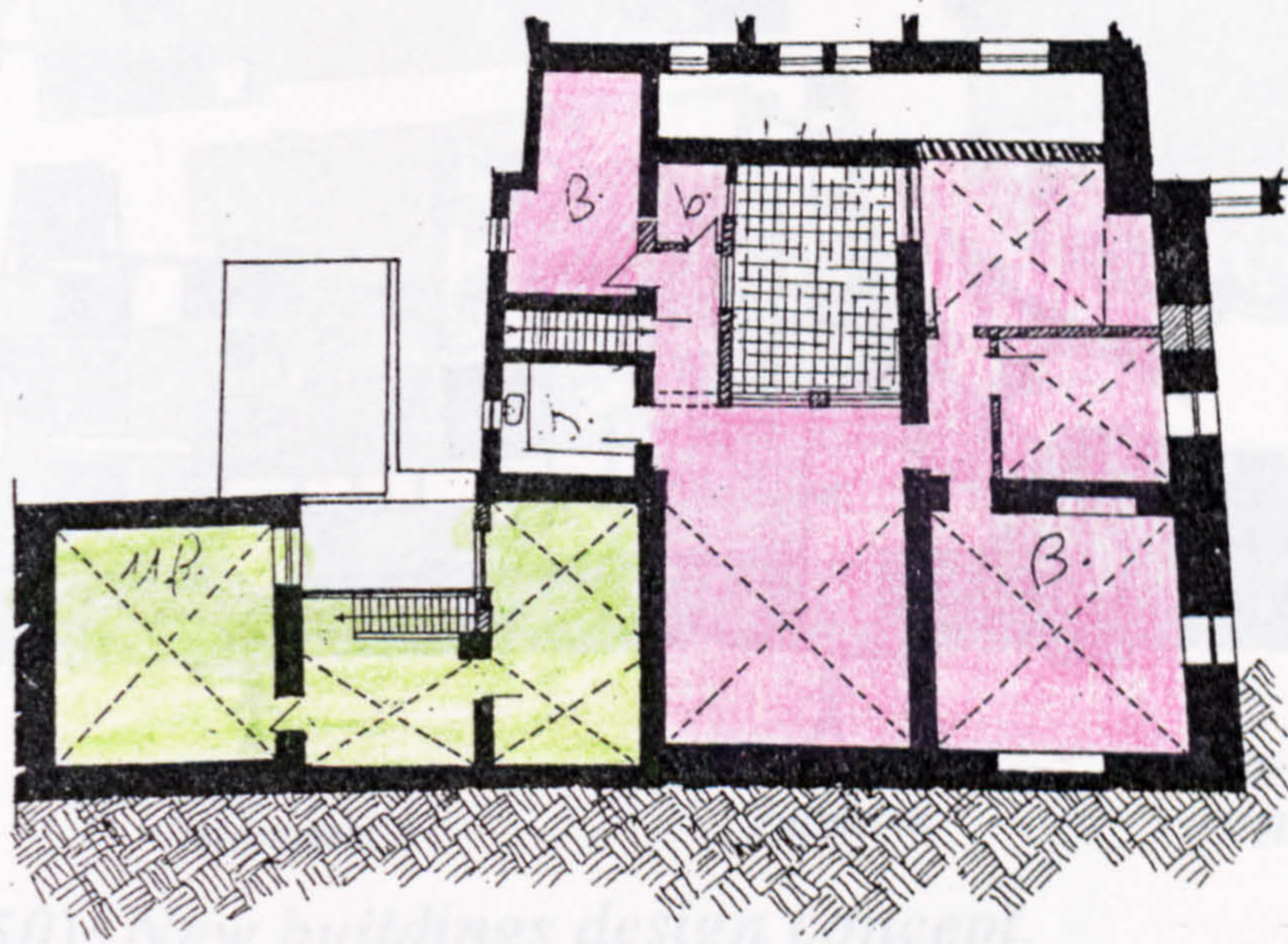
8.3. The New Buildings:

There is a need to put back an edge on the old town, as earlier discussed in section 8.4.4. In the studied site, there is an open space of land between the existing buildings and the new edge of the Old Town. A possible solution has to be found to add more housing units in the open space as earlier found. Also new units are to be added to the existing buildings that have the traditional structure and advantages. The new buildings should be designed to improve the living conditions and provide a better environment for the residents.

8.3.



Ground floor.



First floor.

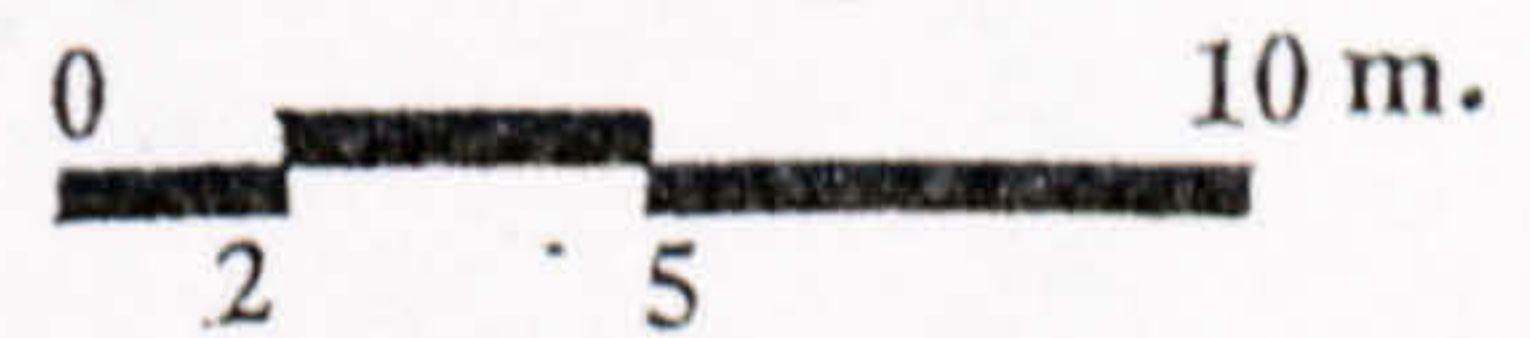


Figure (8.50): Buildings no. 10 & 11, Rehabilitation Design Proposal.

8.3. *The New Buildings:*

There is a need to put back an edge on the old town, as earlier discussed in section 6.4.4. In the studied site, there is an open piece of land between the existing buildings and the new edge of the Old Town, planting trees is a possible solution but as there is much demand to add more housing units to solve the overcrowded problem as earlier found. Also new units are needed to re-house those who are to leave their flats during their renovation and improvement. So the proposed solution is to build new housing units that have the traditional style and pattern but which have the required housing standards and advantages. The new houses should vary in size to satisfy the different housing needs moreover to attract a mix of people according their family size and income to provide these houses with continuous maintenance and to keep them in good running condition.

8.3.1. *Design Concept:*

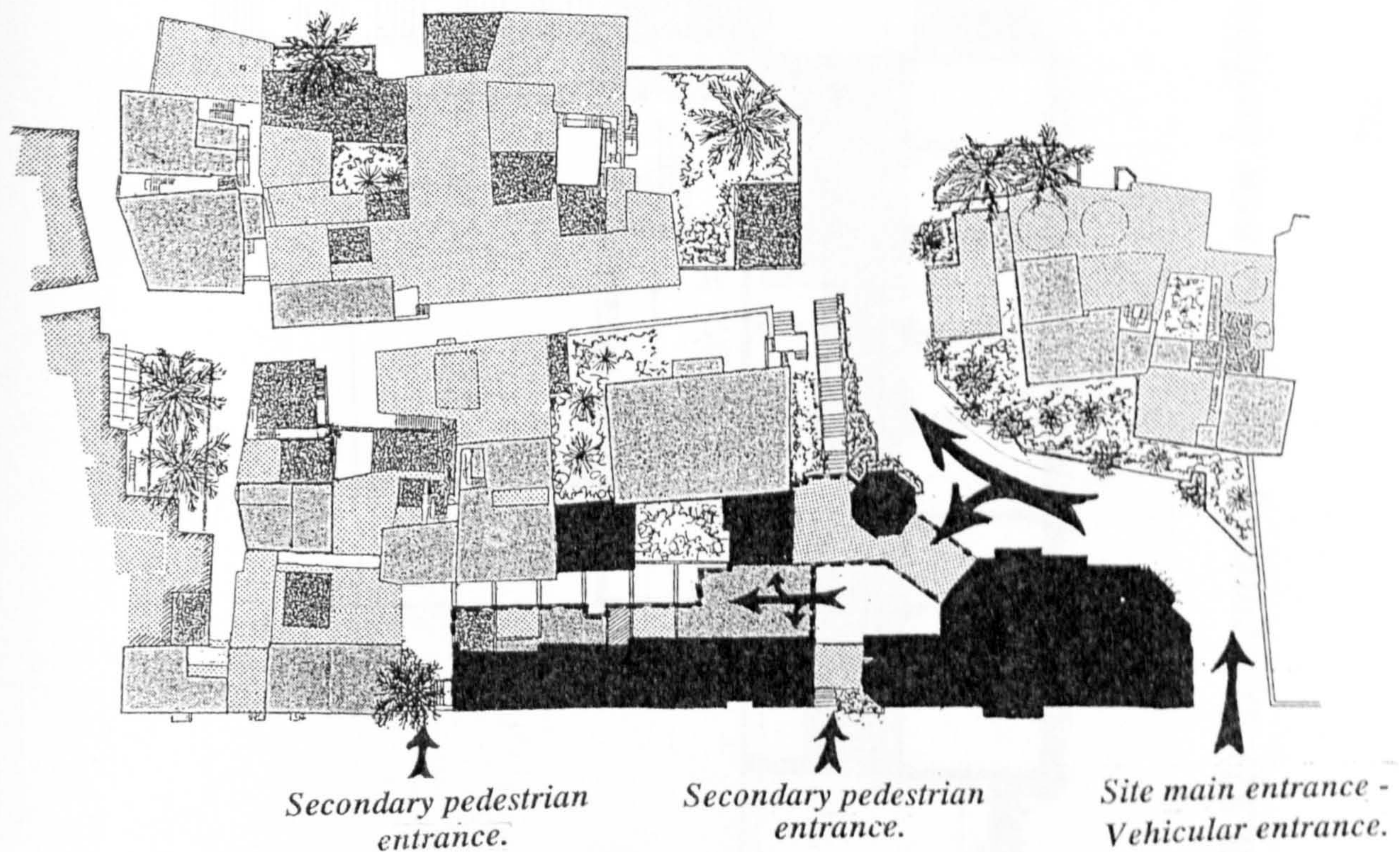


Figure (8.50): New buildings design concept.

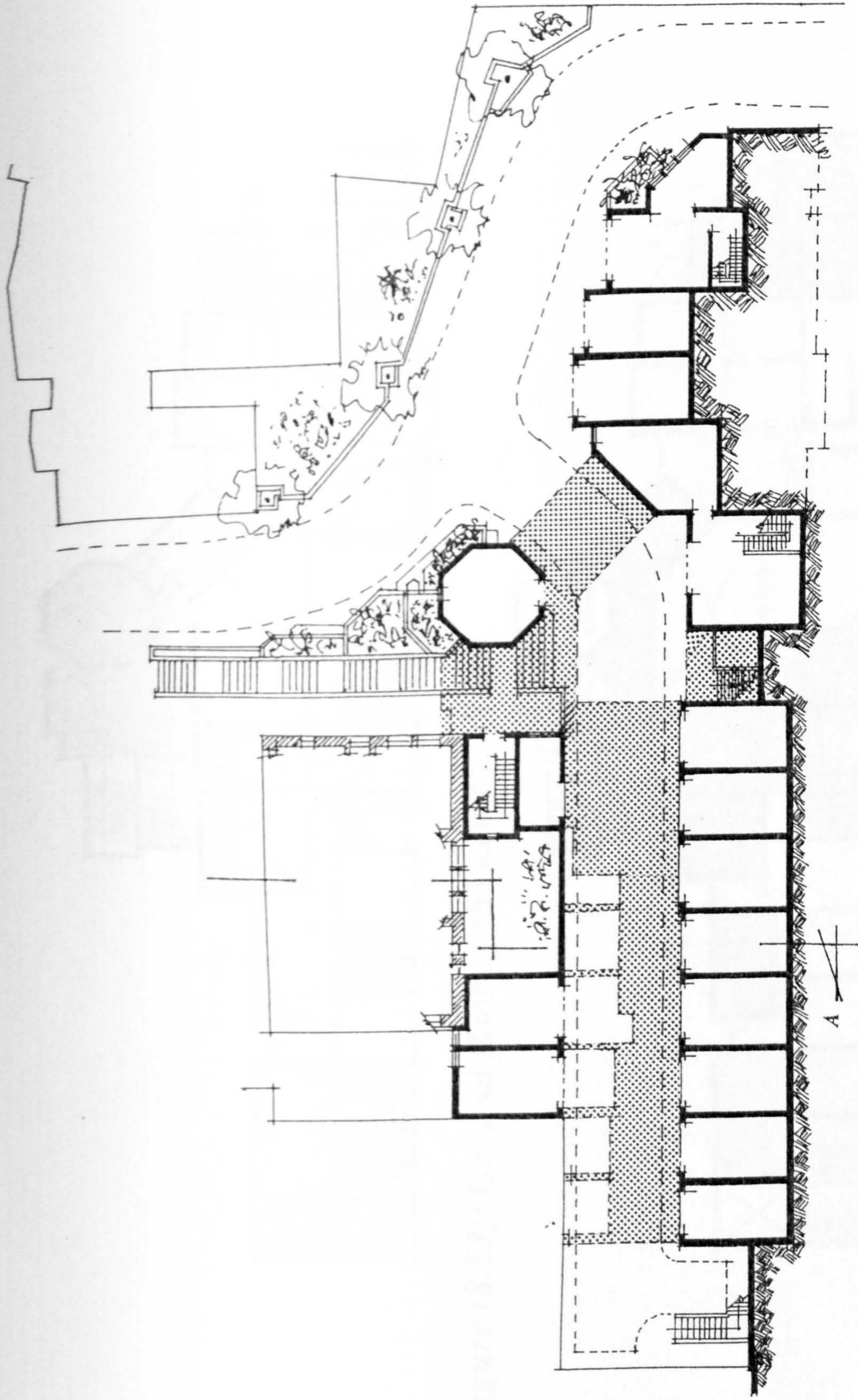


Figure (8.52): Basement floor of the new buildings. indoor garages.

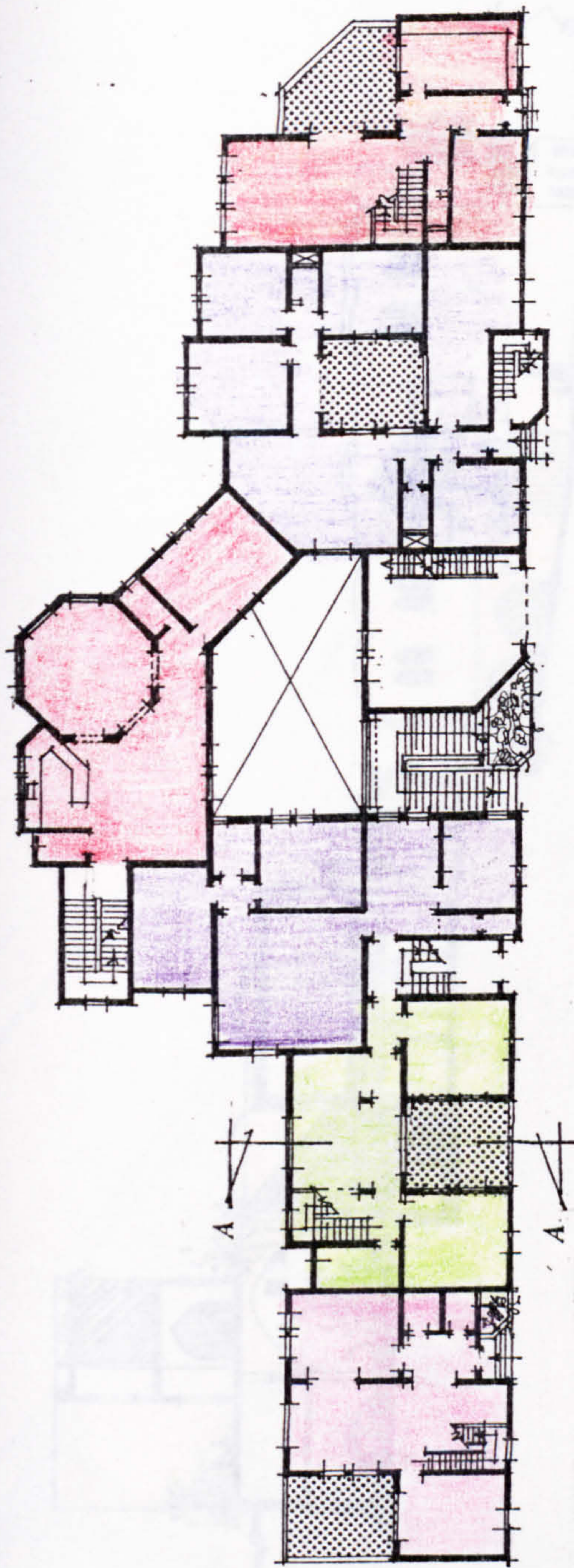


Figure (8.53): Ground floor of the new buildings.

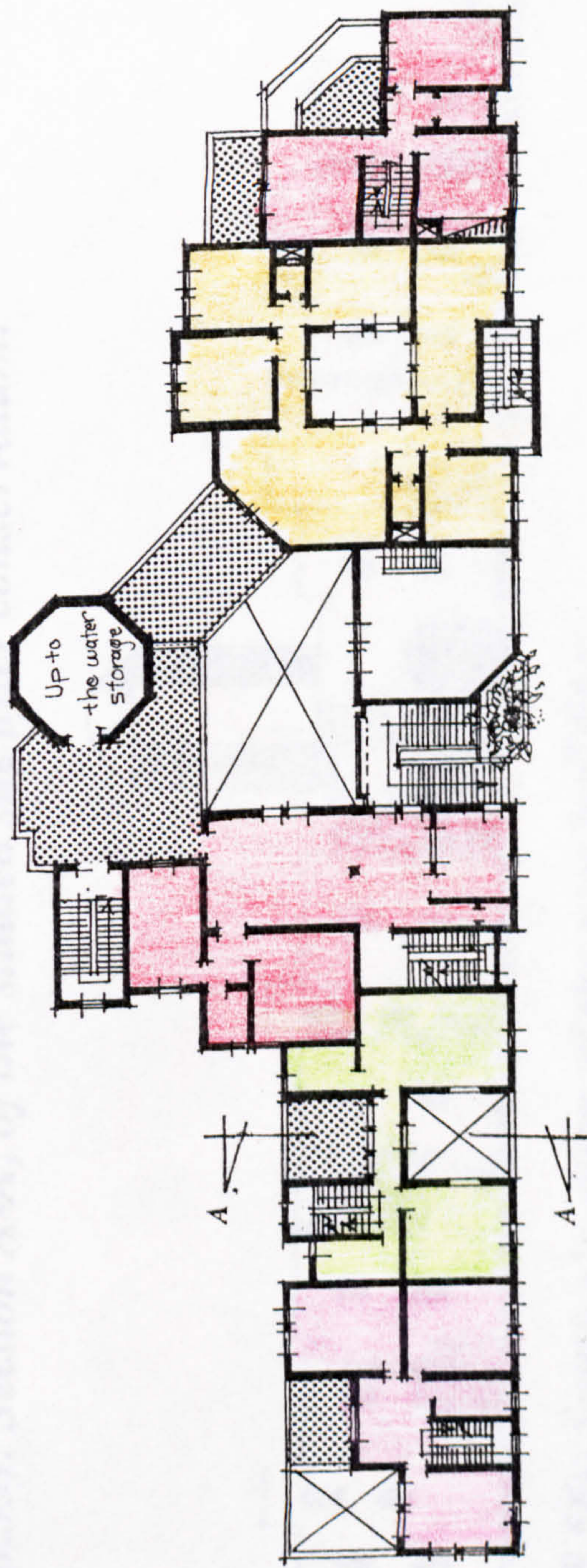


Figure (8.54): First floor of the new buildings.





Figure (8.55): Section A-A, of the studied site after conservation.

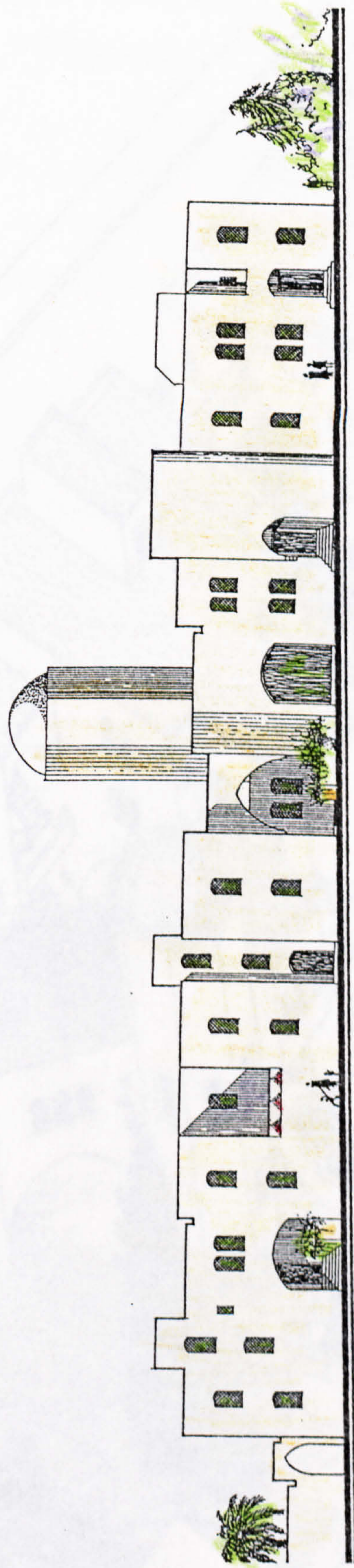
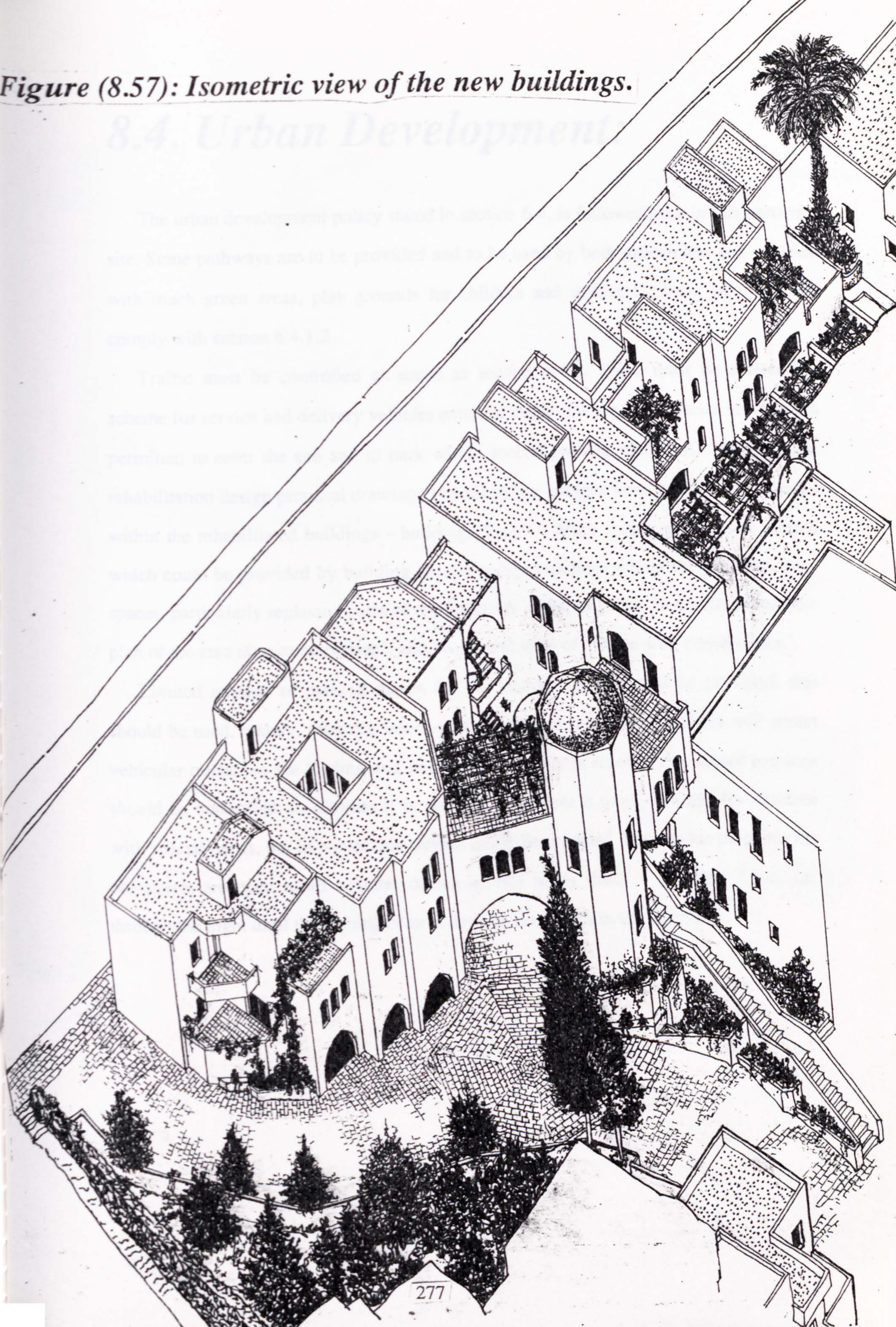


Figure (8.56): South elevation of the new buildings.

Figure (8.57): Isometric view of the new buildings.

8.4. Urban Development



8.4. Urban Development:

The urban development policy stated in section 6.4, is followed here in this particular site. Stone pathways are to be provided and to be used by both pedestrians and vehicles, with much green areas, play grounds for children and seating facilities which should comply with section 6.4.1.2.

Traffic must be controlled as stated in section 6.4.6. There must be a licensing scheme for service and delivery vehicles entering inside this area. Residence vehicles are permitted to enter the site and to park within special parking spaces. As shown in the rehabilitation design proposal drawings several indoor garages were possible to be added within the rehabilitated buildings - buildings 2 and 4. More indoor garages are needed which could be provided by building special garage buildings within the available open spaces, particularly replacing parts of the boundary walls, as shown in the drawings "site plan of the area after conservation", and "Isometric view of the site after conservation".

Limited number of parking places for the visitors' vehicles will be provided, that should be used, mainly, after the working hours. The presence of the school will attract vehicular traffic, so the loading and unloading of pupils in front of the school entrance should be controlled; in summer it is possible to prevent it totally, except for children with special needs, but in winter this service might be accepted. For service purposes the old streets are open to all vehicles during service hours, from 7 pm until 7 am. i.e. through the night until the starting of next day working hours in the morning.

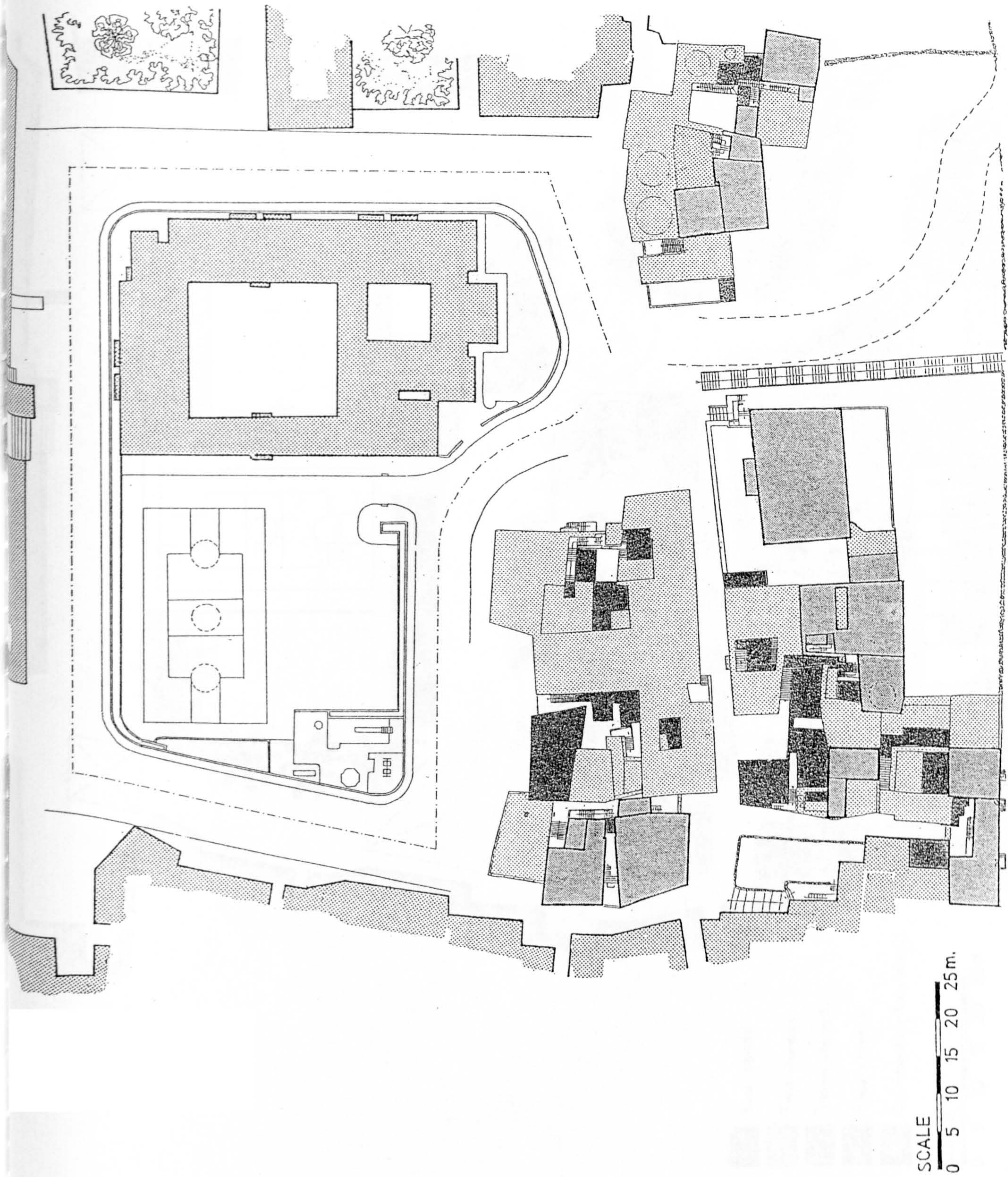


Figure (8.58): Site plan of the studied area before conservation.

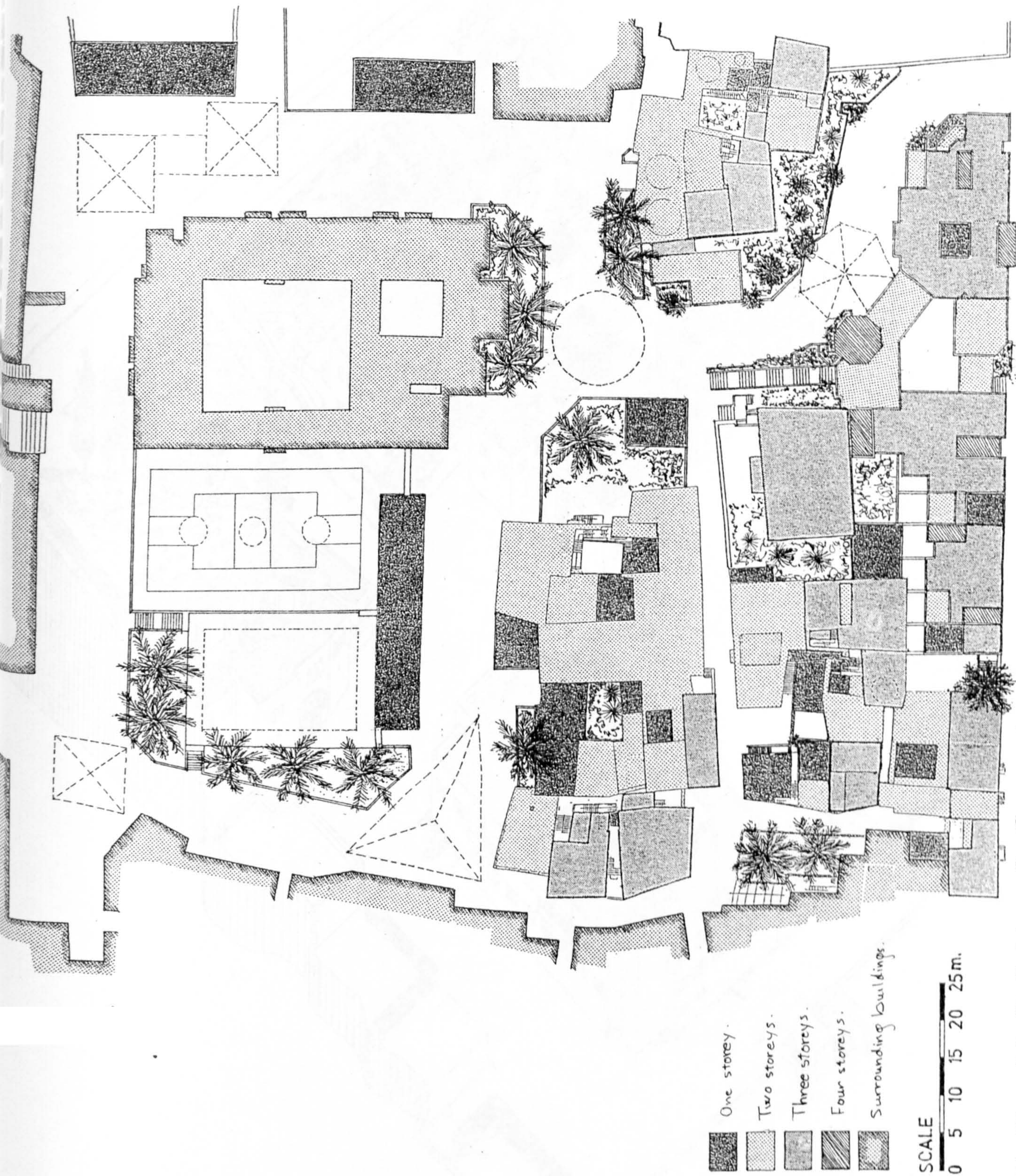


Figure (8.59): Site Plan of the Studied Area after Conservation.

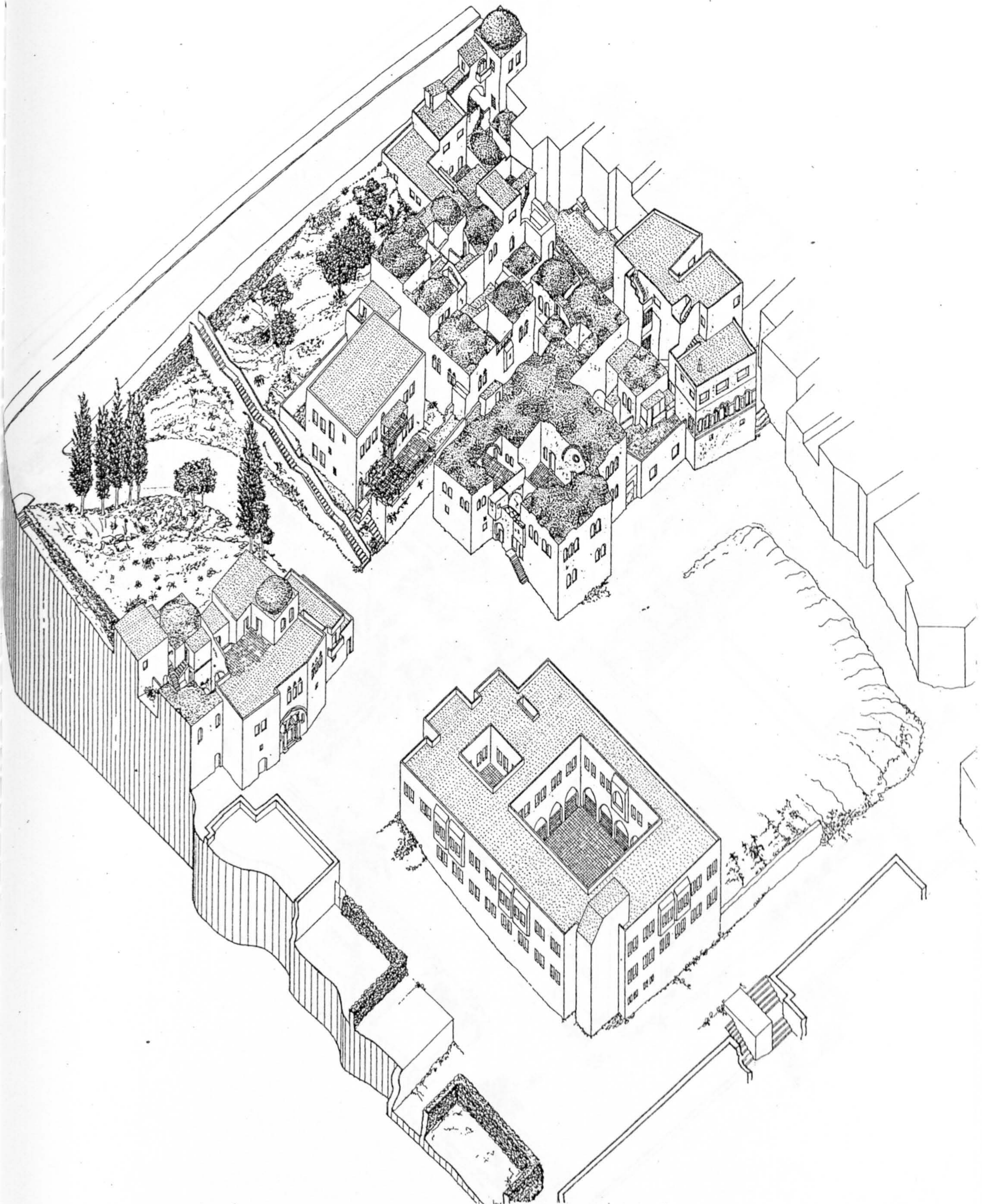


Figure (8.60): Isometric view of the studied area before conservation.

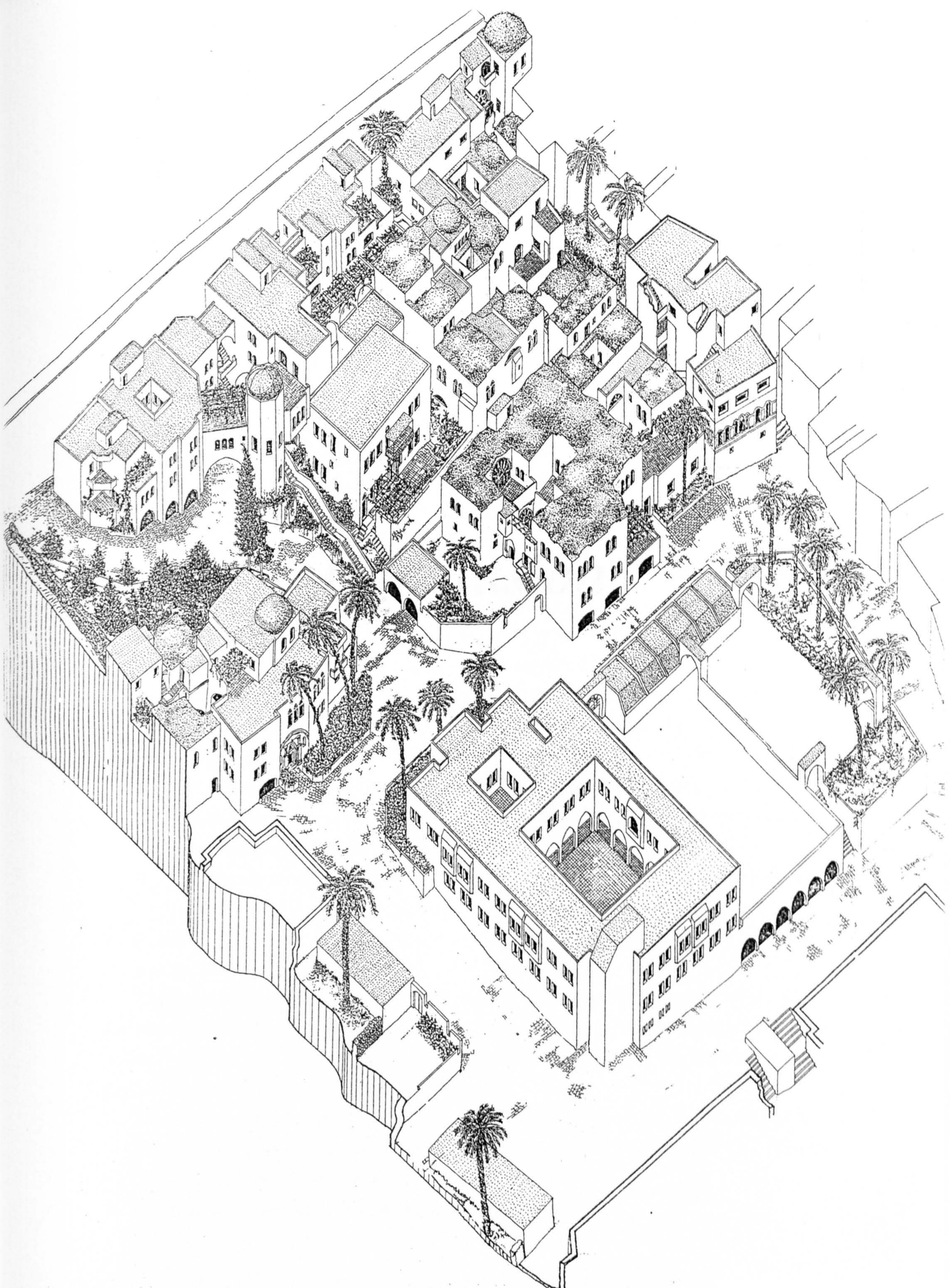


Figure (8.61): Isometric view of the studied area after conservation.

Conclusion

Conclusion

The Old Town of Nablus represents much more than what its physical and urban qualities suggest. Firstly, it is one of the few historic towns survived the modernisation movement without so much disruption or drastic urban changes. Secondly its traditional built environment represents a living history book, the importance of which increases during the presence of the Israeli occupation. Thirdly, although the Old Town is suffering from several problems and difficulties, it still has the potential and the qualifications to provide, if not all, most of the requirements of the twentieth century's towns and urban settlements.

Therefore, the conservation of the Old Town, whilst developing the built environment, should enhance all the historic and traditional values. The historic and urban research for conserving the Old Town documents the existing condition of the Old Town's urban and architectural structure and analyses its problems and reasons behind them. The most important problems of the Old Town's urban structure are the deterioration of the physical fabric, the low efficiency of the traditional buildings and the condensed nature of the public open spaces. These problems could easily be solved in any ideal situation, and through a comprehensive conservation programme. But because of the unique political situation, the Old Town has under the Israeli occupation, the conservation task has been complicated and new dimensions were added to this problem. The political problem is the most serious and dangerous problem facing the Old Town:

1. It badly influences the socio-economical structure of the Old Town:
 - A. Encourage the original residents, mainly the rich, to move out, which increases the percentage of abandoned and deserted buildings.
 - B. Encourage rural emigrants, who, mainly, are poor to move in as tenants. This increases the physical deterioration of the historic buildings.
2. It badly affects the historic properties by the intended destruction for political reasons.

This political problem if positively solved will influence the general situation within the area. The Israeli military occupation one day will come into an end or at least some political easiness will occur. This will facilitate the development of the whole region and particularly, the Old Town. It is possible, then, to:

1. Establish an effective national authority, which will work on providing the required powers and funds to develop the whole area, and implement the Old Town's Conservation programme in particular.
2. An economical revival could easily be achieved if:

- A. A complete external trade freedom is achieved, and the economical restrictions, imposed by the Israelis, are lifted; and
- B. The collected taxes spent on developing the area, instead of paying the occupation authorities.
- C. The dependence on the Israeli economy; which is suffering at least a 400% annual inflation rate (Khatib, 1985), ended.

This will provide stronger economical foundations, which will improve the Palestinian economy, and will positively influence the socio-economical structure of the Old Town, and, in turn will improve the physical fabric and efficiency of the historic properties:

1. When the special conditions of the Intifadah are over, the youths who left the Old Town, escaping from the Israeli brutality and aggression, will return. Consequently, the generations' mixture will return to a normal level that approximates the social structure of any Middle Eastern city. The Old Town's society will regain its social balance status.
2. Also the political easiness accompanied by economical revival will positively influence the nature of the Nablusian people as they will be more open and less bigoted against foreigners. This new characteristic will benefit the tourist activities within the area and particularly within the Old Town.
3. The political, economical and social improvements will positively influence the built environment of the Old Town. The strategic location of the Old Town near the City Centre will attract investors and developers to the area. Consequently the land value will increase, which will encourage the owners of the historic buildings to improve their condition to accommodate as many businesses and economical activities as possible. These new demands if not controlled will change the architectural character and the urban pattern of the Old Town.

At the start of this work the factors standing against conservation in the Old Town of Nablus today appeared to leave no room for any conservation work to take place particularly during the present political situation. This work has shown that much useful good work is capable of being tackled immediately:

1. Controlling any changes, additions or new constructions within the Old Town:
 - A. Controlling the built environment.
 - B. Controlling the vehicular traffic.

This should be started as early as possible with the available Municipal power and authorities. The earlier this control starts the less damage to the traditional architectural character and urban pattern will happen.

2. Preparing all the conservation plans and research studies should start as early as

possible, and a state of readiness to implement any conservation work whenever the opportunity appears, as the political eases or money becomes available for conservation and development of the Old Town might occur at any time.

3. Preparing the fertile ground for a full attraction of investments and for a long and continuous life for the historic buildings of the Old Town, by giving the legal situation of rent and tenancy regulations the priority to be adjusted to suit the free market's prices.
4. Gradual development of the Old Town's Urban Structure according to the conservation plans:
 - A. Restoring the different elements of the traditional street scape, during private initiatives to rehabilitate individual buildings.
 - B. Improving the infrastructure during normal repair schemes.
 - C. Restoring the southern gardens on the traditional town edge.
5. Encourage the private sector to rehabilitate disused buildings with the corporation of the MCC and according to the conservation plans. This could be achieved by a concentrated advertisement and publicity programme.

Therefore, the supervised and controlled public participation in the conservation operations of the Old Town is very essential, particularly during the present political situation. And through this public participation it is possible to advance many steps in saving the Old Town's historic properties.

Glossary

°A (ع)

°Atabeh: lentil, threshold.

°Arabiyyeh: Arabian or Arabic.

°Aros or °Arosah: (bride), the central, perpendicular, and supporting beam of a Tober.

°Aqd: vault; plural °Uqod.

°Ain: (eye), a spring or a drinking fountain.

B (ب)

Bit Al-Ma': the house of water.

Basha: a nickname used by the Ottomans for official hierarchy.

Baghle: a Rukbeh projecting to the outside.

Bayk: an Ottoman expression used to be called on high governmental officials

D (د)

Dal°obeh: cylindrical stone used to close the last part of a vault.

Diwan: a family gathering place; where members of the same family meet each others.

F (ف)

Fakhd Al-Rukbeh: broad rib of a vault.

Gh (غ)

Ghalaq: key-stone.

H (ح)

Hilal: a semicircular walls of a stone house.

Harah: quarter.

Haramlek: a part of Islamic house used only by the family members, mainly women.

Humrah: crushed pottery.

Hawsh, plural Ahwash: a part of the Hay; neighbourhood; .

Hay: a small neighbourhood.

H (ه)

Hajar: stone.

Hajar Aswad: basalt stone.

Hajar Zawiyeh: corner-stone.

Hajar Maqadem: small size coursed stone.

Hajar Mizzi Yahodi: yellow.

Hadiqah, plural Hada'eq: a garden; .

Hasireh: mat; plural Husur.

Hammal: relieving arch or rafter.

J (ج)

Jadah: a lane.

Jahsheh -Al-: (foal) a part of the scaffolding; a wooden frame for constructing the Rukab.

Jame^c: mosque; this expression mainly called on mosques where the Friday prayer is

Jamalon: barrel-vault.

Jund Falastin: the region of Palestine; an early Islamic expression.

Jenineh or Jeninah; plural Janayn: a garden;.

K (ك)

Kuttab: plural Katatib; derived from Kitab - the book: a traditional school.

Kuhleh: pointing.

Korah: a part of the Jund - the Region; also an early Islamic expression.

Kalbeh: certain stones of the jambs.

Kamar: an arch over a Helal.

Kh (خ)

Khan: a traditional hotel, mainly used for merchants.

Khazaneh: a cupboard.

Khawajah: an Ottoman expression used to be called on merchants.

M (م)

Mutasarref: an old name for the regional governor; an Ottoman expression.

Mutasallem: an earlier name of the regional governor; also an Ottoman expression.

Majles: a guest sitting room.

Mehrab: the niche of a mosque.

Maddeh: a layer of lime and Nhateh.

Madraseh: a school.

Mathhab: a religious sect.

Marsheh: rendering coat in plastering.

Maqasir: women bed rooms.

Maydan: a square; plural Mayadin.

Maddadeh: a long strong beam used in vaulting.

Masjed: mosque; for daily prayers.

Maqam: tomb of an Islamic leader or religious man.

Malsa': the superficial, smooth mortar - layer of the Tobar.

Mamluk: slave; this expression used to be called on particular slaves who governed Egypt and parts of Syria.

N (ن)

Na^cmeh: fine coat in plastering.

Nhateh: pieces falling while dressing stone.

Q (ق)

Qubbeh: dome.

Qamt: relieving arch.

R (ﺭ)

Rukbeh: angle of a spout or the springing corner of a cross-vault; plural Rukab.

Rammayeh: a beam running from the central supporting scaffolding beam, ^cAros to the vault corner; Rukbeh.

S (ﺱ)

Sabil: a drinking fountain; a small water reservoir serving the public.

Sahn: a circular disk at the centre of a vault.

Sahah: a square.

Salamlek: a part of Islamic house allowed to be used by guests.

Sultan: an Ottoman head of state.

Slah; plural Slahat, jambs;.

Sunjuk: region; an Ottoman expression.

Sunni: the major Islamic sect.

Sh (ﺶ)

Share^c: a street.

Shid: lime.

Shashiyyeh: lentil.

Shi^ci: an Islamic sect, mainly found in Persia.

S (ﺲ)

Saddaghat: jambs of a door.

Surret Al-^cAqd: centre of the vault.

T (ﺕ)

Tahini: Crushed Sesame seeds

Tariq: rout or street; plural Turuq.

Tobar: scaffolding of a vault.

Tallaqat: slit windows; used in shooting to defend a building or a city.

W (ﻭ)

Wakalah: Caravanserai.

Wasat Al-Dar: the house courtyard.

Z (ﺯ)

Zawiyah: (corner), a place for an Islamic group where they proceed with their liturgies.

Bibliography

- Abalkhil, A.A. 1986, Qur'an and Architecture, (Article), *Albenna*, vol. 5, no. 229/30, 1986 June/Sept., p. 32-38.
- Akbar, Jamel 1988, *Crisis in the Built Environment: the case of the Muslim city*, A Mimar book, Concept Media, Singapore.
ISBN 90-04-08757-5.
- Alam Albenna, 1982, *Preservation of Buildings in the Historic Area of Jeddah and Maintaining Islamic Character in New Construction*, (Article), *Alam Albenna*, no. 19, 1982 Feb, p. 12-17. Language: Arabic.
- Albright, W.F. 1956, *The Archaeology of Palestine*, London.
- Anderson, John 1850-1, *Wanderings in the Land of Israel, and through the wilderness of Sinai*, Glasgow and London.
- Antonio, Jim 1981, *Islamic Cities and Conservation*, Paris: UNESCO.
ISBN 9231019198.
- 1982, *Conservation and the Arab City, Saving Islamic Cairo*, in *The Arab City: its character and Islamic cultural heritage*, edited by Ismail Serageldin, Riyadh: Arab Urban Development Institute, Saudi Arabia.
- Architektur Wettbewerbe 1978, *Pedestrian Areas, Open Spaces*. Karl Karger Verlag, Stuttgart.
- Arkoun, Mohammed 1983, *Building and Meaning in the Islamic World*, (Article), *Mimar*, no. 8, 1983 Apr/Jun, p. 50-53.
- Ashurst, John & Nicola 1988, *Practical Building Conservation*. English Heritage Technical Handbook. 5 Volumes. Gower Technical Press Ltd. Hants, England.
ISBN 0 291 39776 X
- Arif, Abdullah 1964, *Madinat Nablus; Nablus City*, A master Dissertation, Damascus University. Language: Arabic.
- Arraf, Shukry 1985, *Arabic Palestinian Village: structure and land use*, Jerusalem. Language: Arabic.
- Ammar, Y. 1991, (Editor), *Palestine Times*, (a monthly newspaper), Manchester, England.

- Bacharach Jere L.** 1974, *A Near East Studies Handbook: 570-1974*. University of Washington Press. Seattle and London.
- Benvenisti, Meron** 1970, *The Crusaders in the Holy Land*, Jerusalem.
- 1986, *The West Bank Hand Book*, Jerusalem.
- & Shlomo Khayat, 1988 *The West Bank and Gaza strip. Atlas*. WBDP, The Jerusalem Post.
- Ben-Zadok, Efraim** 1987, *Incompatible Planning Goals: Evaluation of Israel's new community development in the West Bank*, (Article), *American Planning Association Journal*, vol. 53, no. 3, 1987 Summer, p. 337-347.
- Biger, Gideon** 1984, *European Influence on Town Planning and Town Building in Palestine 1850-1920*, (Article), *Urbanism Past and Present*, vol. 9, no. 1 (17), 1984 Winter/Spring, pp. 30-35.
- Beshawy, Sai'd** 1984, *Nablus wa Dawruha fi Al-Sera^c Al-Islami Al-Salibi*; (Nablus role in the Islamic and Crusader's Struggle), Unpublished master dissertation in Alexandria University/Egypt. Language: Arabic.
- Bitar, Shakor** 1988, *Design of Waste water, Main Trunk / Western Zone*, Unpublished report for the Municipality of Nablus.
- Boeminghaus, Dieter** 1977, *Pedestrian Areas*, Karl Kramer Verlag, Stuttgart.
- Briggs, M. S.** 1974, *Muhammadian Architecture in Egypt and Palestine*. Da Capo Press, New York.
- Brookes, John** 1987, *Gardens of Paradise, the history and design of the great Islamic gardens*, London, Great Britain. ISBN 0 297 78682 2.
- Buchanan, Colin** 1968.a, *Bath: a study in conservation*, London. SBN 11 750043 7.
- 1968.b, *The Problem of Traffic*, in *Conservation and development in historic towns and cities*, edited by Pamela Ward, Newcastle upon Tyne, England.
- Canaan, T.** 1927, *Mohammed Saints and Sanctuaries in Palestine*, Jerusalem, Palestine.

-
- 1932-3, **The Palestinian Arab House: its Architecture and Folklore**, in *Journal of the Palestinian Oriental Society*, vol. 12, 1932, and vol. 13, 1933.
- Cambridge, Mass.** 1983, **Adaptive Reuse: integrating traditional areas into the modern urban fabric**, The Aga Khan Program for Islamic Architecture, edited by Sevckenko, M.B.
- Cantacuzino, Sherban** 1989, **Re / Architecture Old Buildings / New Uses**. Artes Graficas Teldo S. A. Spain.
- Celebi, Evliya** 1938, (Seyahat - nameh) tr. St. H. Stephan, **Evliya Tshelebi's Travel in Palestine**. V. in *Quarterly of the Department of Antiquities in Palestine* 8.
- Cohen, Amnon** 1978, **Population and Revenue in the Towns of Palestine in the Sixteenth Century**, New Jersey.
- Creswell, K.A.C.** 1989, **A short a count of early Muslim architecture**, UK. Aldershot: Scolar Press.
ISBN 0-85967-368-5.
- Clermont-Ganneau** 1896, **Archaeological Researches in Palestine**.
- Cullen, Gorden** 1962, **Townscape**, London.
- Cunnington, Pamela** 1988, **Change of Use The Conservation of Old Buildings**, London.
ISBN 0-7136-3020-5.
- Dabbagh (Al), M.M.** 1965, **Biladuna Falastin; Palestine our Country**, Bayrot. Vols. 1 and 2.
- Dow, Martin** 1990, **Hammam Al-Jadida in Nablus**, (Report), British School of Archaeology, Jerusalem.
- Erder, Cevat** 1983, **Training Architects for Conservation**, (Article), *Adaptive Reuse: integrating traditional areas into the modern urban fabric*, The Aga Khan Program for Islamic Architecture, edited by Sevckenko, M.B. Published by Cambridge, Mass.
- Erlik, A.** 1984, **British Architects in Mandatory Palestine**, (Article), *TVAI*, no. 22, 1984, p. 48-51. (Text in Hebrew, Summaries in English. Published in Israel).
- Esher, Viscount** 1968, **York A Study In Conservation**, London.
SBN 11 750042 9.

- Europa** 1988, *The Europa World Year Book*. Europa Publications.
- Feilden, Bernard M.** 1982, *Conservation of Historic Buildings*, London. ISBN 0-408-10782-0
- Fitch, James Marston** 1982, *Historic Preservation: curatorial management of the built world*, New York. ISBN 0-07-021121-3.
- Fleming L. Ronald** 1983, *A Special Islamic Townscape with a Conservation Plan and no Policy*, (Article), *Monument*, vol. 26, no. 1, 1983 Mar, p. 7178.
- Frics, J.G. Powell** 1968, *The Changing Function of Towns*, in *Conservation and development in historic towns and cities*, edited by Pamela Ward, Newcastle upon Tyne, England.
- Frtpi, J. H. RaeDip TP** 1988, *Park Anderston Local Plan*. City of Glasgow District Council. Consultative Draft - written statement.
- Fussell, W.F.J.** 1968, *Conservation - Cost and Profitability*, in *Conservation and Development in Historic Towns and Cities*, edited by Pamela Ward, Newcastle upon Tyne, England.
- Graham-Brown, S.** 1980, *Palestinians and Their Society 1880-1946*, London. ISBN 0 7043 2225 0.
- 1982, *The Political economy of the Jabal Nablus*, in *Studies in The Economic and Social History of Palestine in The Nineteenth and Twentieth Centuries*, edited by Owen, R. London, Oxford.
- Hadden, Tom** 1979, *Housing Repairs and Improvements, social work and law*. Sweet & Maxwell. London.
- Hakim, Basim S.** 1983, *The Representation of Values in Traditional And Contemporary Islamic Cities*, (article), *Journal of Architectural Education*, vol. 36, no. 4, 1983 Summer, p. 22-28.
- 1986, *Arabic-Islamic Cities*, London.
- Hanbali (Al), M.** 1973, *Al-Uns Al-Galil Bi tarikh Al-Quds we Al-Khalil*, Amman/Bayrot. Language: Arabic.
- Houtsma, M. T.** 1936, *Encyclopaedia of Islam*. Vol. 3 (L-R) London.

- Jaussen, A. J.** 1927.a, *Coutumes Palestiniens: Naplouse et son District*, Paris.
- 1927.b, *Inscriptions Arabes de Naplouse*, in *Bulletin de l'Institut Francias d'Archeologie Oriental* 27.
- Jeddah Municipality** 1986, *Up-Grading of the Urban Environment of Cities*. Dar-Al-Sharouk (publisher), Egypt.
- Khatib (Al), Adib** 1985, *Housing In Nablus: socio-economic characteristics and housing satisfaction of three Palestinian sub-groups*. Ph.D. Dissertation, University of New York.
- Khayyat, S.** 1985, "*Nablus, Mashro^c Tanthim Haykaly*"; Nablus, Town Planning Project; Jerusalem. Language: Arabic.
- Lolah, A.** 1983, *Al-Tadakhul Al-^cImrani Al-Hadith fi Al-Markaz Al-Tarikhi Li-Al-Madina Al-^cArabiyyah*, (article) in *Alame Al-Bena*, No. 40, Dec. 1983. pp. 29-33. Language :Arabic.
- Muqaddasi (Al), S.** 1877, *Ahsan Al-Ta^cqasim fi Ma^crrifat Al-Aqalim.*, edited by de Goeje, Leiden, France.
- Mayer, L.A.** 1931-2, *Satura Epigraphica Arabica I*, in *Quarterly of the Department of Antiquities in Palestine I*.
- Mills, Edward** 1980, *Building Maintenance and Preservation, a guide for design and management*. Butterworths & Co. (Publishers)Ltd. London.
- Mills, John** 1864, *Three Months' Residence at Nablus: and an Account of the modern Samaritans*, Repr. of 1864 ed. AMS Pr.
 ISBN 0-404-16434-X
- Morris, A.E.J.** 1982, *The Changing Suq: commercial heart of the Islamic city*, (article) *Middle East Construction*, vol. 7, no. 11, 1982 Nov., p. 14.
- Nablus Municipality** 1986, *Baladiyyet Nablus, Masiratu Al-^cAmal wa Al-Bina'*, Nablus. Language: Arabic.
- 1987, *Madinet Nablus*, April issue, Nablus. Language: Arabic.
- 1989, *The Comprehensive City Plan*, (Unpublished proposal, prepared by the planning department), Nablus. Language: Arabic.

- Najimi, A. Wasay** 1988, *Herat the Islamic city, a study in urban conservation*, London.
ISBN 0 7007 0188 5.
- Nimir (Al), Ihsan** 1961-75, "*Tarikh Jabal Nablus wa al Balqa*", Nablus, The West Bank. Language: Arabic.
- Nour, M.M.A.** 1982, *Factors Underlying Traditional Islamic Urban Design*, (Article), *Alam Albena*, no. 16, 1981 Nov., p. 4-5. Or, *Planning Outlook*, vol. 24, no. 1, 1982, p. 29-32.
- Owen, Roger** 1982, *Studies In The Economic And Social History Of Palestine In The Nineteenth and Twentieth Centuries*, London, Oxford.
- Patai, Raphael** 1958, *The Kingdom of Jordan*, Princeton, New Jersey.
- Pearce, Fred** 1991, *Wells of Conflict on the West bank*, (article), in *New Scientist 1 June 1991*, United Kingdom.
- Rapaport, Amos** 1969, *House Form and Culture*, London.
- Raymond, Andre** 1984, *The Great Arab Cities in the 16th-18th Centuries An Introduction*, New York and London.
ISBN 0-8147-7391-5.
- Reda, Hassan M** 1981, *Yanbu Industrial City, Medina, Saudi Arabia*.
- Reekie, Fraser R.** 1972, *Design in the Built Environment*. Fletcher & Soon Ltd. Norwich, Great Britain.
- Rogers, Mary** 1862, *Domestic Life In Palestine*, London, First published in 1862, The last edition is in 1989.
ISBN 0 7103 0290 8.
- Roinson, Edward,** 1856, *Biblical Reseaches in Palestine and the Adjacent Regions: A Journal of Travels in the Years 1838-1852*. John Murray, London.
- Rozen, G.** 1860, *Ueber Nablus und Umgegend*, in *Zeitschrift der Deutschen Morgenlandischen Gesellschaft 14*.
- Sauvaget,** 1948, *Bulletin d' etudes Islamiques*, tom. XII, n. 5.
- Schafnitzel, Ulrich** 1982, *Social Housing in Historic Islamic-Arab Cities*, in *The Arab City: its character and Islamic cultural heritage*, edited by Ismail Serageldin, Riyadh: Arab Urban Development Institute, Saudi Arabia.

- Scholch, Alexander** 1982, **European Penetration and the Economic Development of Palestine, 1856-82**, in *Studies in The Economic and Social History of Palestine in The Nineteenth and Twentieth Centuries*, edited by Owen, R. London, Oxford.
- Serageldin, Ismail** 1982, (Editor), **The Arab City: its character and Islamic cultural heritage**, Riyadh: Arab Urban Development Institute, Saudi Arabia.
- Shahada, Kamal** 1987, **Madinet Nablus**. in *Falastinuna*, no. 26, Sha^cban 1408 AH. Damascus, Syria.
- Shakland, Graeme** 1975, **Why Trouble with Historic Towns?**, in *The Conservation of Cities*, UNESCO, Paris.
ISBN 92-3-101087-5 (UNESCO).
- Shiber, Saba G.** 1968, **Recent Arab City Growth**, Kuwait.
- Shen^car, Amnon.** 1974, **Judia and Samaria: Studies in Settlement Geography**. Jerusalem. Language: Hebrew.
- Stanley A.P.** 1896, **Sinai and Palestine**, London.
- Steering Group (The),** 1963, **Traffic in Towns**, a study of the long term problems of traffic in urban areas. Waterlow & Sons (publishers). London.
- Tahal** 1972, **Nablus, Water Study**, Report for Nablus Municipality, the West Bank.
- Tannous, ^cIzzat** 1988, **The Palestinians**, London. ISBN 0-9620106-0-X
- Thomson, William** 1882, **The Land and The Book, Central Palestine and Phenicia**, New York, Harper and Brothers Publishers, Franklin- square.
- Tristram, H. B.** 1866, **The Land of Israel or A Journal of Travels in Palestine**. 2nd. Ed., London: Society for promoting Christian knowledge.
- UNESCO** 1975, **The Conservation of Cities**, Paris.
ISBN 92-3-101087-5 (UNESCO).
- UNESCO** 1983, **International Symposium on Conservation And Restoration of Islamic Architectural Heritage**, Lahore, Pakistan, 7-13 Apr 1980: Report and recommendations, Paris.
- Unsal, Behcet** 1959, **Turkish Islamic Architecture**, London.

- Ward, Pamela 1968, (Editor), *Conservation and Development in Historic Towns and Cities*, Newcastle upon Tyne, England.
SBN (68UK)85362 046 6.
- Wilson, C. (No date), (Editor), *Picturesque Palestine, Sinai and Egypt*, London, vol. 2 .
- Worskett, Roy 1983, and Warren, John *Conservation and Redevelopment of the Kadhimiyyeh Area in Baghdad*, in *Adaptive Reuse: integrating traditional areas into the modern urban fabric*, The Aga Khan Program for Islamic Architecture, edited by M.B. Sevckenko.
- Youngson, A.j. 1968, Britains' Historic Towns, in *Conservation and Development in Historic Towns and Cities*, edited by Pamela Ward, Newcastle upon Tyne, England.
- Za^cnon, Faisal A.M. 1989, personal communications with the author while he was preparing his Ph. D. thesis "*Fertility preferences of the Arab population in the West Bank*". for University of Glasgow, and which has been submitted in 17/7/1991.

