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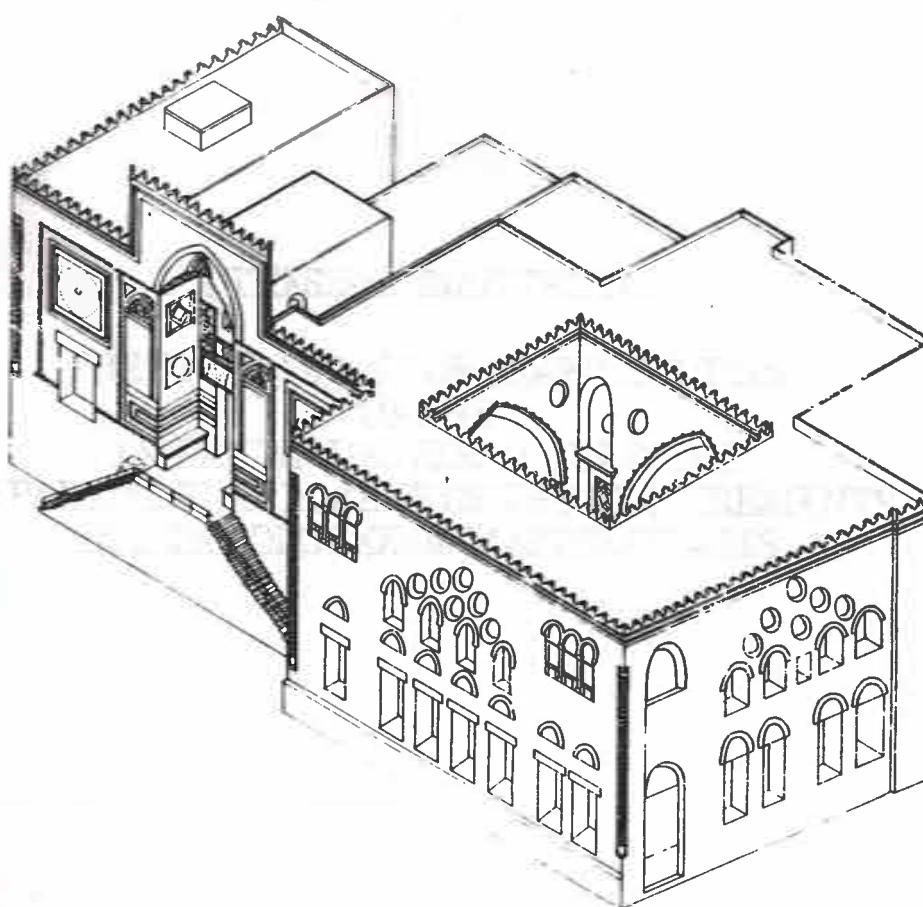
THE DIMARISTAN
OF
ALMAU' AYYAD SHAYKH
AND
THE AREA AROUND IT

BY
MARY HAMMIRIAN

THE BIMĀRISTĀN OF AL-MU'AYYAD SHAYKH

and

THE AREA AROUND IT



CAIRO - 1991

943
photo

TITLE

THE BIMĀRISTĀN
OF
AL-MU'AYYAD SHAYKH

and
THE AREA AROUND IT

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A THESIS SUBMITTED TO:

THE DEPARTMENT OF ARABIC STUDIES
OF THE
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IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS

BY
NAIRY HAMPIKIAN
DECEMBER 1991

This Thesis for the Master of Arts Degree

by

Nairy Heraz Hampikian

Has Been Approved


January 1992




Chairman, Thesis Committee



Reader, Thesis Committee



Reader, Thesis Committee



Chairman, Department of Arabic Studies

NOTES ON THE transliteration

The system of transliteration adopted in this thesis

q ق	z ز	ʾ ʾ
k ك	s س	b ب
l ل	sh ش	t ت
m م	ṣ ص	th ث
n ن	ḍ ض	j ج
h ه	ṭ ط	ḥ ح
w و	ẓ ظ	kh خ
y ي	ʿ ع	d د
a ة	gh غ	dh ذ
	f ف	r ر

FOR VOWELS:

long ʾ	or ي	ā
long و		ū
long ي		i
doubled ي		iyy
doubled و		uww

All the transliterated Arabic words have been underlined except the ones used very often in the text as *bīmāristān*, *māristān*, *mamlūk*, *Sultān*, *waqf*, *waqfiyya*, *madrassa*, *sikkat*, *shariʿ*, *ʿatfat*, *darb*, *zuqāq*, *ḥāra*.

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INTRODUCTION

Since its foundation in 640 AD, Cairo has never ceased being the centre of power during the various Islamic dynasties of Egypt. Regardless of the fact that it has grown northeastwards four times: Fūstāt , al-ʿAskar, al-Qatā'ī, and finally al-Qāhira , it has never suffered any foreign barbaric invasions or natural catastrophes. On the contrary, once Islamic Cairo, occupying 3.7 sq. Kms (bounded by Bāb al-Futūḥ to the north, Ibn Ṭulūn mosque to the south, Port Saʿīd road to the west, and Ṣalāḥ Ṣālem road to the east)¹, was chosen as the capital of the Fatimids, it has never lost its urban, political, and economical significance during all the subsequent periods. It has a unique character - that of being an "agglutinative" city. This distinguishes the historical Islamic nucleus of the modern city of Cairo and gives as much importance to its urban texture as to its numerous extant historical monuments.

Thus historians of art and architecture have little difficulty in tracing back the continuous and uninterrupted development of Islamic history and art in Egypt. Cairo can boast of hundreds of medieval and post-medieval monuments; by the great efforts and concern of the Comité de Conservation, 622 Islamic monuments are listed (450 of them are contained in the area mentioned above). Unfortunately, not all of the listed monuments are under continuous surveillance. Actually only a small percentage of them are being restored. Most of them suffer great negligence and natural decay because of:

- The rising ground water table,
- The deficiency of the sewage system of the old part of the city,
- The haphazard overpopulation in the historical areas (where sometimes the interior of the monuments serve as dwelling areas),

¹Lewcock, Antoniou, "The conservation of the Old City of Cairo", The Expansion Metropolis Coping with the Urban Growth of Cairo, Proceedings of Seminar Nine in the series Architectural Transformations in the Islamic World, Cairo November 11-15, 1984, p. 68.

- The saline corrosion of the old fabric of the buildings,
- The lack of control over parasite constructions endangering the monuments,
- The general lack of maintenance.²

We must not underestimate the scale of efforts needed to solve this problem. In 1980, it was estimated that restoration of the 450 indexed monuments to international standards would, with great restraint, cost one hundred and thirty five (135) million Egyptian Pounds³ (One should reconsider the magnitude of this figure in accordance with the rise of the cost of living since 1980). Hence under such circumstances, the only immediate solution seems to be the full documentation (salvage on paper) of all the monuments in Islamic Cairo, until a rescue project is set on practical grounds by the government to conserve them.

The problem of preservation of Islamic Cairo presents three facets:

- I- The huge number of neglected listed Islamic monuments.
- II- The disappearance of the urban pattern of the Islamic mediaeval Cairo.
- III- The rapid change of the social and economic life in the city of Cairo as a whole.

Usually, the first facet takes the whole attention of specialists, while the two others are either neglected, or given less importance. The latter problems do not concern only the Islamic nucleus of Cairo, but also its 18th, 19th, and 20th century centers and suburbs as well, which are being continuously and with great speed demolished without any documentation.

Hence, today's urban planner inspecting mediaeval Cairo is not as lucky as the historian of art, although Cairo, as a medieval Islamic city with an uninterrupted history, seems to be the perfect example for studying the urban planning of a medieval Islamic town. Actually, it was so until the beginning of this century, when the material, scheme, and size of the buildings, especially the habitation units, were more or less similar to those of the medieval period. By the introduction of the

²Ibid., pp. 78-80.

³This figure is taken from the report prepared for the Egyptian government by a UNESCO team in 1980.

new materials and methods of construction in Cairo, the physical appearance of the city experienced a new metamorphosis. The impact of this novelty was challenging: the newly founded quarters where new techniques were employed, gave birth to innovative trends in architecture. Cities already organized⁴ adopted these new conceptions with quite interesting solutions creating an amalgamation of the new and the old. This was not the case in Cairo which was and is still busy creating rudimentary services necessary in a modern city such as basic installations (electricity, transportation, water supplies, sewage system, etc.) and public institutions (educational, medical, social, etc.). Therefore, the introduction of the new construction methods in Cairo resulted in the imposing of the new materials and techniques with no prior thought.⁵ Massive apartment and commercial blocks began to replace the fine buildings of the last two centuries⁶.

The rate of demolishing these buildings has increased during the last twenty years because:

- i. The list of monuments included only 23 buildings belonging to the 19th century and four to the 20th century.⁷ The list was prepared at the beginning of this century when the buildings of this age were not regarded worthy of mention. This gave much more freedom to the owners to destroy them and erect instead horrible new constructions.

- ii. Lack of maintenance led to natural decay.

- iii. The urgent need to create dwelling areas for the overgrowing population of Cairo implied quick architectural solutions. There was the need of cheap and rapidly erected blocks and flats in or near Cairo. New satellite cities around Cairo did not achieve the purpose of relieving pressure on the existing city. The result was

⁴Here "organized" stands for cities which have solved the basic needs of a city like water supply, sewage, electricity, transportation, etc.

⁵The allusion involves the introduction of concrete as "the" building material of the twentieth century and the technique of pre-fabrication.

⁶Most of these buildings were an Egyptianised combination of different styles: Baroque, Neo-Islamic, Art Nouveau etc. - a kind of the local Egyptian version of these well known styles.

⁷See Index to Mohammedan monuments appearing on the special 1:5000 scale maps of Cairo, published by the Survey of Egypt in 1951.

excessive construction, sacrificing 18th, 19th, and 20th century buildings to high rise buildings.⁶

iv. The flow of money from work opportunities in Arab neighbouring countries helped accelerate this process.

The ultimate result is the irreversible disappearance of buildings of the last three centuries and the rapid erection of new ones. Very few of these latter constructions can be classified as modern architectural exercise in Egypt. They do not even satisfy the basic needs of a work of architecture: no satisfactory functional use, no stability, no agreeable physical appearance, etc., only a new forced presence spread all over the urban scene under the pretext of providing accommodation for everybody.

The rapid change in the urban texture of Cairo as a whole affects the distinctive accumulative characteristic of Islamic Cairo which has always been over-populated. Throughout the centuries, buildings were erected at the expense of existing ones, but seldom did the path of the street change its course. The new buildings usually were shaped after the space available for their erection. This has led to the preservation of the original street pattern of Islamic Cairo, with the exception of some basic changes in the main lateral spine of the street of al-Mu'izz and the enlargement of al-Azhār street which divided the old city into two separate districts.

Unlisted buildings of the last two centuries are being demolished and replaced by austere concrete constructions which have no relation with the borders of the previously existing buildings. Sometimes two or three buildings are demolished to give rise to one ; in other instances, narrow streets are being blocked by the rise of one building, or streets are enlarged because of the same sort of intrusion (This will be demonstrated in the survey of the area). The fatal result of all these additions is not only the creation of ugly constructions in the heart of Islamic Cairo, but the gradual annihilation of its original street pattern; thus a street pattern which was preserved for nearly ten centuries is now disappearing.

⁶Unfortunately, the forced destruction process is still going on, at a greater speed, on the whole map of Cairo.

An urgent documentary salvage of the still existing urban fabric seem to be the only option to save as much as possible of the physical appearance of Islamic Cairo, including both its medieval monuments and its urban texture.

In this thesis, we will attempt a new approach in surveying a monument in Islamic Cairo. The central point of attraction will be the remains of the bimāristān of al-Mu'ayyad Shaykh, accompanied by a complete survey of the area around its existing borders. The survey will include an analysis of the physical fabric of the area based on the complete photographic documentation of the private and public buildings showing the scheme, rate, and nature of change in the area. In our case the survey of the area represents an indispensable part of the study as the monument under investigation in the thesis has lost its original borders. Thus, thorough examination of any fragment in the area around the bimāristān and applied to the waqfiyya document can provide precious information about the original borders of the building and help reconstruction.

CHAPTER ONE THE BIMARISTĀN OF AL-MU'AYYAD SHAYKH

Section One THE DEVELOPMENT OF THE MEDICAL INSTITUTION IN THE EAST AND IN THE WEST

To provide care and shelter for the sick is nowadays one of the fundamental demands of our society. Throughout history, this human need was satisfied in different forms starting with the most simple arrangements to the most sophisticated hospitals existing today. The focus of this thesis is an Islamic institution which provided medical care in Egypt in the fifteenth century - the bimāristān of al-Mu'ayyad Shaykh built in 1418-20.

In the west, hospitals originated with the religious institutions which were probably the earliest concerned with the care of the sick. The temple of Asclepius (Aesculapius) at Epidaurus had accommodations for those who sought help from the Greek god of healing. Physicians also took the liberty of practicing medicine in their own houses. Such dwellings developed more in Ancient Greece where they became offices of individual physicians called 'Iatreia' meaning surgeries. In the provinces of the Roman Empire, these private establishments developed into hospitals supported by public funds.

On another front, the necessity of creating special areas in the military camps for the injured fighters served as an example. These so called transportable hospitals were automatically transferred to the cities where, in time, they were to become part of a social necessity. Finally, the Christian idea of charity had its beneficial impact on the foundation of medical centers in the cities. St. Basil established one of the earliest hospitals at Caesarea in Cappadocia in 369 AD, while in Rome, the first charitable institution of this kind was established in the fourth century by a Christian woman named Fabiola. The monasteries also had an "infirmatorium", where the sick were taken for treatment, and would frequently have a pharmacy and a garden

with medical plants. The beginnings of this practice are unknown, but it is probable that they go back to the early middle ages.⁹

In the eleventh century, hospitals were also established by several knightly orders¹⁰ along the routes taken by the Crusaders. These can be considered as the first Christian military hospitals since the disintegration of the Roman Empire. The most famous was founded in Jerusalem by the Knights of St. John. A member of one of the orders was called a hospitaller or a Knight Hospitaller.¹¹ From this came the word hospital which originally meant a place for the reception and entertainment of strangers or guests.

It is quite evident that from the 8th to the 12th century monastic hospitals were virtually the only institution in Europe whose chief task was to care for the sick and the medical profession lay only in the hands of the ecclesiastics. After the 13th century, medieval hospitals came more and more under secular jurisdiction.

The foundation of the Holy Ghost Hospital at Montpellier in 1145 served as the cornerstone in the serious propagation of the idea of building hospitals. The order of the Holy Ghost, sanctioned by Pope Innocent III in 1198, established and maintained similar hospitals throughout Europe.

According to the chronicler Giovanni Villani, the city of Florence in 1300, with a population of some 90,000, had 30 hospitals and welfare establishments which could accommodate more than 1,000 patients¹². They were staffed by more than 300 monks and other nursing personnel. During the later 15th century, under Lorenzo the

⁹Encyclopedia Americana, vol. 14 (1982), pp. 439-443.

¹⁰The best known of these orders are the Knights of St. John, or the hospitallers, who founded hospitals in places as far as Malta and Germany.

¹¹The English order of St. John did notable work during the World War I (1914-18).

¹²The figure show that at that time in Florence, a hospital was built for every 3000 inhabitants - this can compete with the actual standards of modern urban planners.

Magnificent, there were at least 40 hospitals of various kinds in operation.¹³

At Amiens in the 15th century, for example, the master of the Hôtel-Dieu¹⁴ was elected by the community, but installed in his office by the resident bishop. The physicians of the hospital were chosen and paid by the municipality. The monks and nuns attended to the needs of the patients. By the end of the 15th century Europe had a network of hospitals: in England alone from the 12th to the 15th century, more than 750 hospitals were established of which 217 were for lepers.

It is no exaggeration to describe the development of the hospital as one of the great public health achievements of the middle ages. In Islam, the institution satisfying this care to the citizens was called "bimāristān". The complex word is composed of the Persian word 'bimār' meaning sick and the Indo-Persian suffix 'stān' meaning abode. Literally translated, a bimāristān is a house for the sick. The word lost its two first letters and became 'māristān'. When such institutions suffered decline, all the patients deserted the place except the mentally disturbed; as a result, in time, the word māristān, lost its original meaning as hospital and signified an asylum for the demented - this distorted meaning still attends the word today¹⁵. Nevertheless, we will disregard the distortions, and use the original meaning and form of the word 'bimāristān'.

In the beginning Islamic rulers allowed also foreign practitioners to work in Islamic communities. This was the situation until the Caliph al-Walid I (86-91 H/705-710 AD) founded the first 'fixed' bimāristān. Al-Maqrīzī reports: "The first who built the bimāristān in Islam and a house for the sick is al-Walid Ibn 'Abd al-Mālik. He was also the first to build a guest house and this was in the year 88H / 707AD. He organized salaries for the doctors in the bimāristān; he ordered the imprisonment of the mentally sick, not

¹³Encyclopedia Americana, Vol.14, (1982), p.440.

¹⁴Any medieval hospital in France is called Hôtel-Dieu; the name now refers to those whose history goes back to the Middle Ages (Encyclopedia Britannica, Micropaedia 6, p. 80).

¹⁵Encyclopaedia of Islam (New Edition), p. 1259.

allowing them to go out; he gave them and the blind subsidies."¹⁶ Therefore, the official existence of a fixed institution providing medical care and other services for the sick or injured in Islam, goes back as far as the beginning of the eighth century, ambulant hospitals already existed at the dawn of Islam. These were transported from one spot to the other according to the location where medication was needed. This is why the Prophet Muḥammad is sometimes considered as the first to have established the bīmāristān in the Islamic world: When Sa'd Ibn al-Mur'izz was injured during the battle of the Khandaq, he was transported, by the order of the Prophet, to a lady's tent where the injured soldiers were being taken care of.¹⁷ This kind of transportable bīmāristān was well known, even before Islam, especially near battlefields in time of war.

In Islam, hospitals were created by rulers and public officials in the urban centers. In the 9th century, during the reign of Caliph Harūn al-Rashid, a hospital was founded at Baghdad; another was built in the same city in the next century by Caliph al-Muqtadir; a third one was founded there in 970 AD, which had a staff of 25 physicians and was used for the teaching of medical students.¹⁸ The existence of three hospitals in one city between the ninth and the tenth centuries show that this particular medical concern was much more developed in the east than in the west during that period.

In Cairo, the bīmāristān of Qalāūn founded in 1283 AD illustrates the high quality of the Islamic hospital. It had separate sections for patients with febrile diseases, for the wounded, and for those with eye diseases, as well as special rooms for women. Medical care was provided by a staff of physicians under a director, and there were male and female nurses. The bīmāristān included a teaching hospital with its own running water, surgical operating theaters, and even convalescent facilities for male and female patients.¹⁹ The remains of

¹⁶Al-Maqrizī, *al-Khitat*, II, Bulāq 1306 H, p.405.

¹⁷Isā, Aḥmad, *Histoire des bīmāristāns (Hôpitaux) à l'époque Islamique*, Cairo, 1928, p. 82-83.

¹⁸*Ibid.*, pp. 178-202.

¹⁹Al-Maqrizī, *al-Khitat*, II, Bulāq 1306 h, p. 406. This bīmāristān calls for special attention because of the richness of information about it.

the bimāristān are in a dilapidated state. In 1910, a new building serving as a new hospital was built in the courtyard of the thirteenth century complex which is still used as a hospital specializing in eye diseases.

All in all, there are records of some 79 medieval hospitals in the countries under Islamic rule (Fig.1 : The distribution of the bimāristāns in the Islamic world). These hospitals were generally well organized and reflected the high state of development attained by medicine in Muslim lands. Aḥmad ʿIsā Bey, in his book on the history of bimāristāns, gives a whole account on these institutions mentioning also, whenever possible, the name of the doctors who have worked in them²⁰ (Appendix I- The bimāristāns of Egypt according to Aḥmad ʿIssa Bey, al-Maqrizī, and ʿAlī Mubārak).

Later in the thesis, it will be examined in detail in an attempt to reconst the bimāristān of al-Muʿayyad Shaykh's original appearance.

²⁰ʿIsā, Aḥmad, Histoire des bimāristāns (Hôpitaux) à l'époque Islamique, Cairo, 1928.

LOCATION	No. OF BIMARISTANS
AL-SHAM	20
IRAQ	18
ANATOLIA	16
EGYPT	10
IRAN	8
NORTH AFRICA	4
ARABIA	2
ANDALOUSIA	1
TOTAL	79

Fig. 1 The distribution of the bimāristāns in the Islamic world according to Ahmad Tsā. Bey
 Histoire des bimaristans (Hôpitaux) à l'époque Islamique, Cairo, 1928.

Section Two

ABOUT THE FOUNDER OF THE BIMĀRISTĀN AL-SULTĀN AL-MU'AYYAD SHAYKH (1412-1421 AD)

Sultān al-Mālik al-Mu'ayyad Abu al-Naṣir Sayf al-Dīn Shaykh Ibn 'Abd Allāh al-Mahmūdī al-Zāhiri, was the twenty-eighth of the Turkish monarchs in Egypt, and the fourth of the Circassians and their sons. He was originally one of the mamluks of al-Malik al-Zāhir Barqūq who had bought him in 782 H. When al-Sultān Barqūq placed him in the ranks of his mamlūks, Shaykh was about twelve years old and Barqūq was not yet a Sultān. Once on the throne of the sultanate, Barqūq promoted Shaykh until he became one of his intimate mamlūks and then, in his second sultanate, his cup-bearer.²¹ In 815 H Shaykh became Sultān. When he died he was over fifty years old; he ruled for eight years, five months, and eight days.²²

In this thesis, the above basic information about the founder of the bimāristān under examination is sufficient, as Tarik Swelim, in his MA thesis consecrated a detailed section on this matter to the Sultān's life and architectural activities.²³ The doctoral thesis of Fahmī 'Abd al-'Alīm also presents the life of al-Sultān al-Mu'ayyad.²⁴ Avoiding unnecessary repetition, here I will deal with the Sultān's personality regardless of his military and political qualities or the historical events of his time. A building in the middle ages primarily quenched the thirst for glory of its founder (usually the political head of that period), indirectly satisfied the avarice of his surrounding personnel (the ruling class of that era), and in few cases, could redeem a public desire for fulfilling a common benevolence, and also reflect personal piety.

²¹Ibn Taghrī Bardī, History of Egypt, University of California Press 1957, Part III, page 15.

²²Ibn Iyās, Badā' al-Zūhūr fi Waqā' al-Dūhūr, Wiesbaden, 1972, II, p. 60.

²³Swelim Tāreq, The Complex of Sultān al-Mu'ayyad Shaykh at Bāb Zuwaylā, MA thesis American University, Cairo 1986, pp.4-37 and appendix (A).

²⁴'Abd al-'Alīm Fahmī, Wathiqat al-Sultān al-Mu'ayyad Shaykh, unpublished PHD thesis, Cairo university, 1988.

Nevertheless, since the focus of this thesis is not a mosque securing its founder's thawāb in the heavenly world, or a palace where he would enjoy the earthly life, or a mausoleum where he would rest, or a madrasa to produce the learned backbone of his governing class, but simply a bimāristān providing medical service to the common citizens, we have chosen to approach the human aspects of the Sultān's life; the emphasis will be on the circumstances and the special lines in the Sultān's character which played an important role in making him build a bimāristān, accompanied by the opinions of some of the historians who surveyed al-Mu'ayyad's life in detail.

Al-Maqrizī has approached al-Mu'ayyad's personality as objectively as possible, honestly reporting about both the good and the evil qualities in the Sultān's character.²⁵ This is how al-Maqrizī praised al-Sultān al-Mu'ayyad:

"He was courageous and brave; loved scholars and sat with them; exalted the religious law of the Prophet and obeyed it. When anyone was summoned for judgment before him and desired to go instead to the judges of the religious law he did not refuse him, but was pleased, and he scolded his emirs for interfering with the qādīs in their decisions. He was mindful of his friends, not neglectful of them nor subservient to them. He did not favour any religious innovation; and he sometimes arose in the night for prayer."

On the other hand al-Maqrizī reported the evil character of the Sultān:

"But he was avaricious, parsimonious, and stingy, even in eating; arrogant, hot-tempered, harsh, envious, evil-eyed, addicted openly to various abominations, using obscenity and curses; he was the greatest cause of the ruin of Egypt and Syria, through the numerous quarrels and conflicts which he stirred up in the days of his vice-regency in Tripoli and Damascus, then through his plundering of the land, the imposition of his followers upon the people, abasing them, taking from them what they could without anyone to

²⁵Ibn Iyās reports that most of the chronicles praised the Sultān except al-Maqrizī who writes about some of his bad traits (op. cit., p. 62).

restrain them because of reason or to forbid them because of religion".²⁶

Having considered these aspects of the Sultān, we will now try to speculate on the circumstances of his life with a view towards developing some convincing reasons that helped him decide to build a bimāristān:

Firstly, the Sultān was a very sick man. Very often historians mention him being confined to his bed, not enduring riding on a horse with all its movements, not being able to move from one place to another except on the shoulders of the mamlūks because of the severe pains in his foot.²⁷ Moreover, Ibn Taghrī Bardī adds:

"the bloody diarrhea increased, with various other disorders and an increase in pain; in fact there was no kind of malady which did not attack him in his sickness, though his reason and understanding remained sound and his speech was fluent."²⁸

The Sultān must have suffered extremely from this physical weakness as it deprived him of exercising the sports he loved. We are told that he was a leader in lance play and target shooting, powerful in sword stroke and archery, clever in very many ways, whether in earnest or in jest. Since the pains in his feet had become persistent, the Sultān had restricted everything objectionable such as wine and the like. Earlier, we were told that Al-Mālik al-Zāhir had him beaten more than once because of his indulgence in intoxicating liquor.²⁹

The constant pains attacking first the Sultān's feet and then his entire body must have played a basic role in his desire to create a bimāristān.

Secondly, during the reign of al-Mu'ayyad, the plague spread in Cairo twice (819 and 822 H). During the second epidemic a proclamation was made among the people that they should fast three days and go out with al-Mu'ayyad to the desert and pray to God

²⁶Al-Maqrīzī, *Kitāb al-Sūlūk*, 1972, IV-i, pp. 550-551.

²⁷Ibn Taghrī Bardī, *History of Egypt*, tr. Popper, 1957, Part III, pp.56-61-62-69-71.

²⁸Idem., p.85. This was in Muḥarrām 824 H and shows the acuteness of the health condition of the Sultān who died after some months.

²⁹Idem., p.89-15.

so that He might lift the plague from them.³⁰ Al-Maqrizī reports about this event:

"The number of those who died in Cairo and whose names were entered in the bureau from Safar 20 to the end of I Rabi' (822 H) was 7,652 men, 669 women, 3,969 children, 544 male slaves, 1,369 female slaves; 69 Christians, 32 Jews. That was exclusive of the hospital and exclusive of the Old Cairo bureau, and those whose names did not come to the bureau (in Cairo)."³¹

The widespread plague must have had its impact on arousing the idea of building a bimāristān.

Thirdly, no bimāristāns had been erected in Egypt since Sultān Qalaūn had built his famous bimāristān in Bayn al-Qaṣrayn (1284-85 AD). Though still functioning when al-Mu'ayyad built his new hospital, the Qalaūn bimāristān must have hard pressed for space because of the epidemic of plague. This could also have been another reason for constructing a new hospital.

Al-Sultān al-Mu'ayyad was an ill-fated person as the following events illustrate:

i. In Safar 818 H, the Sultān began constructing the dam between New Naṣiri College Mosque and Rauda Island. al-Mu'ayyad drove the people hard to work on this project. The herald announced each day threats of punishment for anyone who held back from the work on excavation; one day it was even proclaimed that anyone who opened his shop would be strangled. In the month of Jamādā I of the same year, the flood of the Nile rose high and the waves were heaped up against the dam, a section of it was broken through, then the whole of it was destroyed. Thus everything the men had wearily constructed was perished.³²

ii. In the year 821 H, one of the minarets of al-Mu'ayyad's mosque collapsed and the Zuwayla Gate was shut for thirty days. It had been built on the foundations of the tower which was part of Bāb Zuwayla. The foundations were of small stone while the upper part

³⁰Idem., pp. 39-40-64-66.

³¹Al-Maqrizī, Kitāb al-Sūlūk, The National Library Press, 1972, IV-i, p. 481, 486-487.

³²Ibn Taghrī Bardī, op. cit., pp.30-32-33.

was built with large stone. This caused its inclination and destruction after it had been completed. This distressed the Sultān exceedingly.

iii. The events of the funeral of the Sultān prove that he was more than unlucky. When he died, prayers were said for him outside the Gate of the Citadel. He was then carried to the Mu'ayyad Mosque and buried in the domed mausoleum a little before evening. Not a single great amir or Mamlūk witnessed his burial, because they had remained behind in the Citadel. Moreover, when his corpse was washed they could not find a towel to dry his body, so it was dried with the scarf of one of the persons at hand. Afterwards they found no waist cloth to cover his nakedness, until a piece of Sa'idi wool was taken from the headdress of one of his slave girls and used as a covering. Also they did not find a cup to pour water on him. Al-Maqrizī gives this kind of comment:

"And there happened in regard to al-Mu'ayyad an astonishing thing in which there lies a great warning".³³

Nevertheless, although historical sources give us contradictory information about the personality of the Sultān himself, they all agree on these events which demonstrate, without any doubt, that al-Mu'ayyad was a luckless, unfortunate, and, one can even go further and say, a 'damned' personality, regardless of the fact that he knew how to make the people assume his great faith in God.³⁴

Hence the fate of his bimāristān seems to parallel the litany of his other misfortunes.

³³The allusion here is to the fact that in spite of the vast wealth that the Sultān had left, the basic needs to make a dead man rest were not found. Al-Maqrizī hints at a heavenly punishment (See Al-Maqrizī, op. cit. pp. 550.)

³⁴The Sultān had once ordered that when on Fridays the preachers wished to pray on the pulpit for the Sultān they should descend a step, then pray for him; this was done as a sign of his humility before God, so that the mention of the Sultān's name should not occur in the same place as the mention of the name of God and the name of his Prophet (See Ibn Taghri Bardī, op. cit., p. 40).

Section Three

HISTORY OF THE BIMĀRISTĀN OF AL-MU'AYYĀD

The bimāristān lies on al-Suwāh³⁵ at the Citadel across al-Tabalkhāna al-Sultāniyya on the site where the al-madrasa al-Ashrafiyya³⁶ once existed. According to al-Maqrizī, Sultān Barqūq ordered the demolishing of the madrasa of al-Sultān al-Mālik al-Ashraf Shaʿbān in the month of Jamādā al-ūlā [814 H/1411 AD]. The blocks of the debris were reused in the building of some parts of the Citadel. The Sultān also ordered a building³⁷ attached to the wall of the Citadel to be demolished. The cleared area stretched from al-Suwāh to the skirts of the Citadel as far as Bāb al-Qarāfa (Fig. 2). The territory was evacuated and its inhabitants were dispersed.³⁸

On the site of the already destroyed madrasa al-Ashrafiyya, "Al-Mu'ayyad entrusted al-Mu'allim Ibn ʿUmar al-Ṭalyūnī with the construction of the bimāristān. He was able to finish the construction very promptly."³⁹ It was accomplished during the period starting from Jamādā al-Ākhira the year 821H. and ending in Rajab the year 823 H⁴⁰. The Sultān appointed physicians, kahalin, servants etc...for the service of the bimāristān and provided all the expenses from the waqf of the mosque of al-Mu'ayyad near Bāb Zuwayla. Patients started arriving in the middle of Shaʿbān of the same year⁴¹.

³⁵al-Suwāh is a high mound in front of the Citadel.

³⁶Al-Madrasa al-Ashrafiyya was built by al-Malik al-Ashraf Shaʿbān (who reigned from 1363 to 1376 AD) in the year 770 H. It was so prestigious that it competed with al-madrasa of al-Sultān Ḥasan (the uncle of al-Ashraf Shaʿbān) [See Mubārak ʿAli, al-Khitāt al-Tawfiqiyya, Cairo 1982, II p.285, Ibn Duqmāq, Al-Intisār li-Wasitat ʿiqd al-Amsār, Lebanon, pp. 124-125].

³⁷Al-Maqrizī mentioned that it was al-Dūr.

³⁸Al-Maqrizī, Kitāb al-Sūlūk, ed. ʿAshūr, 1972, IV pp. ~~181~~ 183.

³⁹Al-ʿAyni, ʿAqd al-Mabānī, p. 469.

⁴⁰Al-Maqrizī, al-Khitāt, Bulāq 1306 H, II, p. 408.

⁴¹Al-Maqrizī, Kitāb al-Sūlūk, Dār al-Kutub, 1972, IV pp. 182-183.

A somewhat confusing source states that: "In this month (Jamādā al-ūlā, 821 H) the Sultān commenced the construction of a bīmāristān for the sick on the site of the madrasa al-Ashrafiyya . . . He built there a māristān and a madrasa which still exists..."⁴². At first glance it seems that a madrasa could have been erected on the Suwāh with the bīmāristān because of the vast evacuated area and the absence of a madrasa in al-Mu'ayyad's building activities in Cairo. We will ignore this information as :

a- no other source mentions the existence of a madrasa,

b- the erection of a madrasa could mean the teaching of medicine inside the bīmāristān proper and not in a separate building. This is confirmed by the utilization of third singular tense of the verb "exist" which betrays the existence of one building and not two.

Nevertheless, from this source we confirm that this bīmāristān must have been designed originally to serve also as a medical school as was the tradition for all medieval medical institutions.

When al-Mālik al-Mu'ayyad died in the 8th of al-Muḥarram the year 824 H, services in the bīmāristān were held up for a while; then members of a newly immigrated foreign sect occupied the place in Rabi' al-Awal of the same year. Afterwards a minbar was installed, and a khatib, an imām, Mu'dhdhins, and a porter assigned; thus the bīmāristān became a mosque and was called the "bīmāristān-mosque". The first Friday prayer was performed there in the month of al-Rabi' al-Akhir in the year 825H. It remained as a mosque and the salaries of the mentioned functionaries were provided from the waqf of the al-Mu'ayyad mosque⁴³.

In 1711 AD the northern facade of its imposing portal disappeared behind the small mosque of Abū Ghāliya al-Sukkārī which rested against it. Other modern constructions had invaded the interior and hemmed in the access to the monument. Creswell presumes that prayers in the bīmāristān-mosque must have stopped before the year 1123 H\1711 AD, which is the date of the erection of the mosque of Abū

⁴² Ibn Iyās, Badā' al-Zuhūr fi Waqā' al-Dūhūr, Cairo 1972, II, p.28 and 62.

⁴³ Al-Maqrizī, al-Khitāt, II, Bulāq 1306 H, II, p. 408.

Ghāliya al-Sukkārī⁴⁴. This is a correct deduction as this new mosque did actually block the entrance to the bimāristān - mosque (Pls. 1-2).

The mosque of Abū Ghāliya itself did not last long and was soon dilapidated. Meanwhile, the bimāristān which was called "the mosque" had completely lost its original features. Moreover, nineteenth and twentieth century habitation units had crawled insidiously in, on, and around it, completely effacing its majestic appearance (Pls. 3-5 and Fig. 3).

It was only at the end of the nineteenth century that Hertz Pasha, after having examined the waqfiyya document of Abū Ghāliya al-Sukkārī, identified the building behind the Abū Ghāliya mosque as being the bimāristān al-Mu'ayyad Shaykh. Thus the building was resurrected, in a manner of speaking.

The Comité, had not been able to attend to it until 1911. At the beginning of that year, it was decided to conduct the various small tasks of clearing and demolition necessary for making a preliminary study on the problem of restoring the monument.

The chief architect was then asked to prepare a project aimed at clearing the northern facade and to get rid of the houses congesting the precinct. In 1912 the Comité's plan extended also to the clearing of the monuments on all sides. A study of the plan for ancient remnants, which was proposed for publication in 1900, served as a basis for the execution of yet another specially detailed plan concerning the new expropriation project. However, this clearance presented two difficulties different in nature but equal in complexity :

- 1- The religious law prohibited the demolition of the little mosque of Abū Ghāliya al-Sukkārī, which was necessary for the approach of the northern facade.
- 2- The expropriation of the buildings crowding the interior of the bimāristān entailed considerable expenditure.

The first of these difficulties could have been overcome by the construction of a small oratory, erected at a sufficient distance, so as

⁴⁴Creswell, A Brief Chronology of the Mohammedan Monuments, Cairo 1919, p. 112.

not to obstruct the whole facade of the bimāristān. This project, presented in 1912 for approval by the qādi of Egypt, was rejected.

However, in 1916 an unexpected event threw a new light on this affair. The mosque of Abū Ghāliya was situated on a high vaulted ground level. This basement, as well as the mosque, were poorly built. The masonry of the walls of the ground floor showed signs of slow and progressive decay. The stone vaults with very fine voussoirs had suffered considerable deformations which had led to the crumbling of the tiles of the mosque and, for some unexplained reason, but always possible in these old buildings, the south-western angle of the mosque suddenly crumbled carrying away with it four arches. The extent of the disaster was such that the Service ordered the clearing of the ground floor, fearing that this operation would bring about further wreckages. Nevertheless, with the unexpected clearing, the opportunity was seized to complete the demolition of the roof of the truss skirting the whole of the northern facade, thus approaching a full view of the facade of the bimāristān. As this state of affairs could not be prolonged, the Service initiated a study for moving of ground floor of the mosque of Abū Ghāliya. It was decided that the latter would be reconstructed elsewhere. Its execution would necessarily entail considerable expenditure in spite of the planned utilization of all the old materials. Consequently, it was judged that this project should be consigned to a second stage, it being more urgent that the resources of the Comité should be devoted to the expropriations envisaged since 1911 to the advantage of the grandiose remains of the bimāristān which had been for so long invaded and ruined by parasite constructions. Thus this difficult problem was solved.

In order to overcome at least partially the second problem, the Comité obtained the collaboration of the Tanzīm relative to the advantages which certain public roads would gain from the clearing. It was in 1914 that the Comité was forced to acquire two small houses for the following reasons. As the first house was included in the southern part of the enclosure, the proprietor requested authority for its demolition which would impair some of the walls of the bimāristān; the second house, which leaned against the western extremity of the northern facade, concealed the springing of the arch of an opening of considerable dimensions situated in the basement of the bimāristān. It

was important, therefore, to deter the proprietor from erecting new constructions.

Thus began the realization of the recommended clearing which was carried out during the following years and resulted in the evacuation of 9 dwelling units (Figs. 4-8). Having overcome the two basic problems envisaging the salvage of the *bīmāristān* of al-Sultān al-Mu'ayyad Shaykh, the Comité started works of conservation, consolidation, reconstruction, etc.⁴⁵

Because of the numerous and various works done by the Comité de Conservation de l'art Arabe, a table is presented at the end of this chapter including a resume of everything published in the 41 volumes of the "Cahiers de Comité de Conservation des Monuments de l'Art Arabe" concerning the *bīmāristān* of al-Mu'ayyad Shaykh. This will be extremely important for understanding the various parts of the building and will serve as a basis for further research on the monument⁴⁶.

From the historical background, we realize that :

- 1- We have sufficient evidence to believe that the *bīmāristān*, if closely examined, may give information about two other monuments which no longer exist (al-madrassa al-Ashrafiyya and the mosque of Abū Ghāliya al-Sukkāri).
- 2- We can trace approximately the area cleared by Sultān Barqūq later used for the erection of the *bīmāristān* (or a *bīmāristān* and a *madrasā*). Therefore the date of anything in this area cannot precede that date, except such remains of al-Ashrafiyya madrasa which were reused within the walls of the *bīmāristān*.
- 3- The impressive building served as a *bīmāristān* for only 15 months, hence one is tempted to speculate on a reasonable explanation:

⁴⁵Information in this section is taken from the C.R., No 32 (1915-1919), Cairo 1922, p.124-127, and other volumes of the C.R.

⁴⁶A full report of the information in the volumes of the C.R. is presented in the attached list.

- a. Was it the greedy character of al-Mu'ayyad Shaykh who did not allocate enough money for the continuous financing of the public services of the bimāristān?
- b. Was it the Sultān's constant sickness which did not allow him to make a regular follow up of the works in the bimāristān?
- c. Were there any miscalculations in the architectural solution of the building which did not satisfy the medical function it was originally planned to serve?
- d. Was the elevated position of the building - being on al-Suwāh, which created a strategic point for attacking the official troops of the rulers settled in the Citadel and consequently, being attacked by them that led to the dilapidation of the place?
- e. Or was it simply the mischievous fate of the Sultān?

4- The area around the bimāristān is, without any doubt strongly linked with the monument; thus a systematic survey in search of any remains could reveal much more about the original borders of the bimāristān, the aim of the next chapter.

5- The contingent waqfiyya document would complement the survey study of the area (See next chapter).

CHART INCLUDING ALL THE INFORMATION AVAILABLE IN THE CAHIER
DE COMITÉ ABOUT THE BĪMĀRISTĀN AL-MU'AYYAD SHAYKH

Cahier	Report	Special Details about the restorations in the bimaristan of al-Mu'ayyad Shaykh
13 (1899)	No. 193 \ p.16	Investigation of the monument on the southern edge of the mosque of al-Hajj Abū Ghāliya.
same	No. 196 \ p. 38	Hertz Bey examined waqfiyya of Abū Ghāliya al-Sukkārī and verified that the remains behind the mosque do belong to the bīmārīstān of al-Mu'ayyad Shaykh.
15 (1898)	No. 234 \p. 36	The Comité suggests clearing of the portal of the bīmārīstān and the removal of the roof which obscures the view of the bīmārīstān.
28 (1911)	No 432 \p.49	An estimate of LE 35 is given to Mūḥammad Sid Aḥmad with a 24 o/o reduction.
same	No 433 \p.60-61	The architect is asked to find a way to separate the two buildings from each other.
same	No 434 \p.65	Two of the expropriated houses are in the enclosure of the bīmārīstān.
same	No 439 \p.103	An amount of LE 35 is given to M. Muller to prepare, inter alia, the drawings of the bīmārīstān.
32 (1915-19)	p.124-127	A full report about the works in the bīmārīstān al-Mu'ayyad Shaykh including the problem of removal of the Abū Ghāliya mosque, the evacuation of the interior of the bimaristan of the parasite houses, and the beginning of the clearing process of the northern facade of the monument.
same	No 490 \p.308-9	The members agree to pay an amount of LE 60 as a compensation for another house inside the bīmārīstān which they had bought.
	No 493 \p.319	The Comité pays LE 180 to al-Karamānī-the owner of a bought house.

same	No 501\p.362	Legal arrangements for the house of Shafiqa bint Ramaḍān.
same	No 507\p.399	During 1916-1917 two houses were evacuated(See previous reports).
33 -	No 569\p.71-72	M. Patricolo mentions that the site was neglected for 4 years. He presents a reconstruction project of the mosque of Abū Ghāliya on its actual ground floor. He proposes a site visit to make a proper decision.
same	No 570\p.75-76	Members examine the project which aims at clearing the northern facade of the bīmārīstān and they assign M. Patricolo to start work.
same	No 578\p.157	Members organize a visit to the site.
same	No 580\p.175	On the site M. Patricolo explains that most of the bīmārīstān can be reconstructed, as the waqfiya gave sufficient information. He adds that it was absolutely necessary to clear the facade from all modern additions. For this, extra money had to be requested from the Ministry of Finance. The committee agrees.
same	No 585\p.258	An amount of LE 113.437 was added on the budget of the Comité.
34 -	No 608\p.17	An amount of LE 1000 is estimated for works in the bīmārīstān in the 1925-1926 budget.
same	No 608\p.21	Presentation of an estimate for the LE 1000. Works included: evacuation of a large house, conservation of the facade, removal of the paint on the walls, reparing the masonry, consolidation of the base of the facade, and other works.
same	No 620\p.118	M. Ahmad al-Sayed Bey mentions that one section of the bīmārīstān can be utilized as a mosque, as it was originally.
same	No 621\p.122	Presentation of a project of a semi-circular staircase in front of the facade. They agree to make some modifications on the project.
35 (1927-1929)	No 622\p.3	The technical section agrees to buy the house of Mrs. Bamba bint Muḥammad for LE 110 (total 25 sq m - approximately LE 4.800/sq m)

same	No 626\p.76-77	Presentation of 4 projects of staircases. One was approved.
same	No 631\p.115	
38 (1936-1940)	No 750\p.225-6	It was decided : 1- To continue the repairs on the facade with the collaboration of the Tanzim to protect the space in front the bīmārīstān by an iron grill. 2- To entrust Mahmud Effendi Aḥmad with the study of evacuations. 3- Discuss in the next meeting the amounts needed for evacuating the area.
same	No 755\p.260	In spite of the 10 o/o decrease of the budget, the Comité decides not to reduce the bīmārīstān's expenses.
39 (1940-45)	No 838\p.290	An amount of LE 1000 is estimated for works in the bīmārīstān.

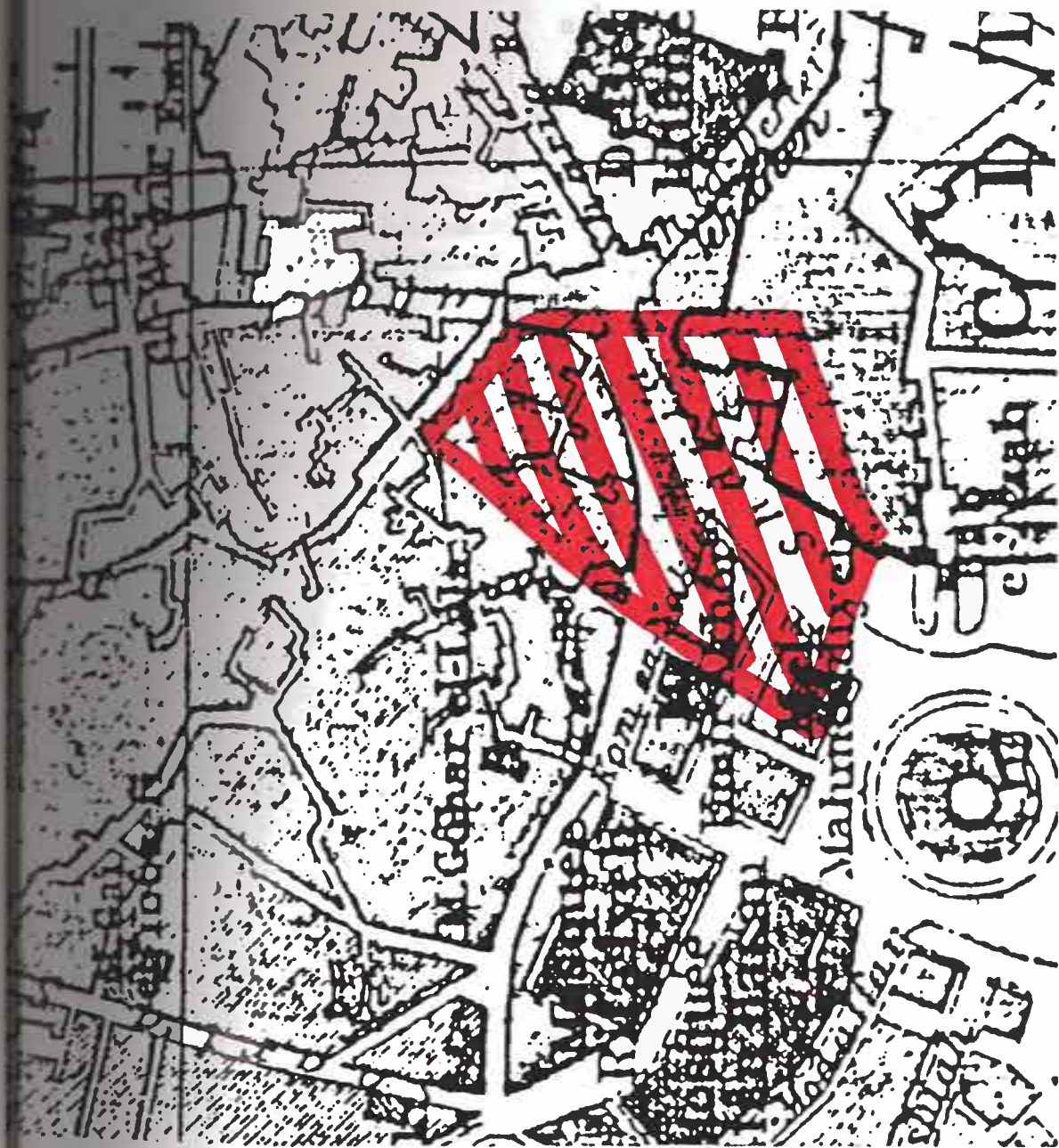


Fig. 2 Area cleared by al-Sultān Barquq
(map 1931)

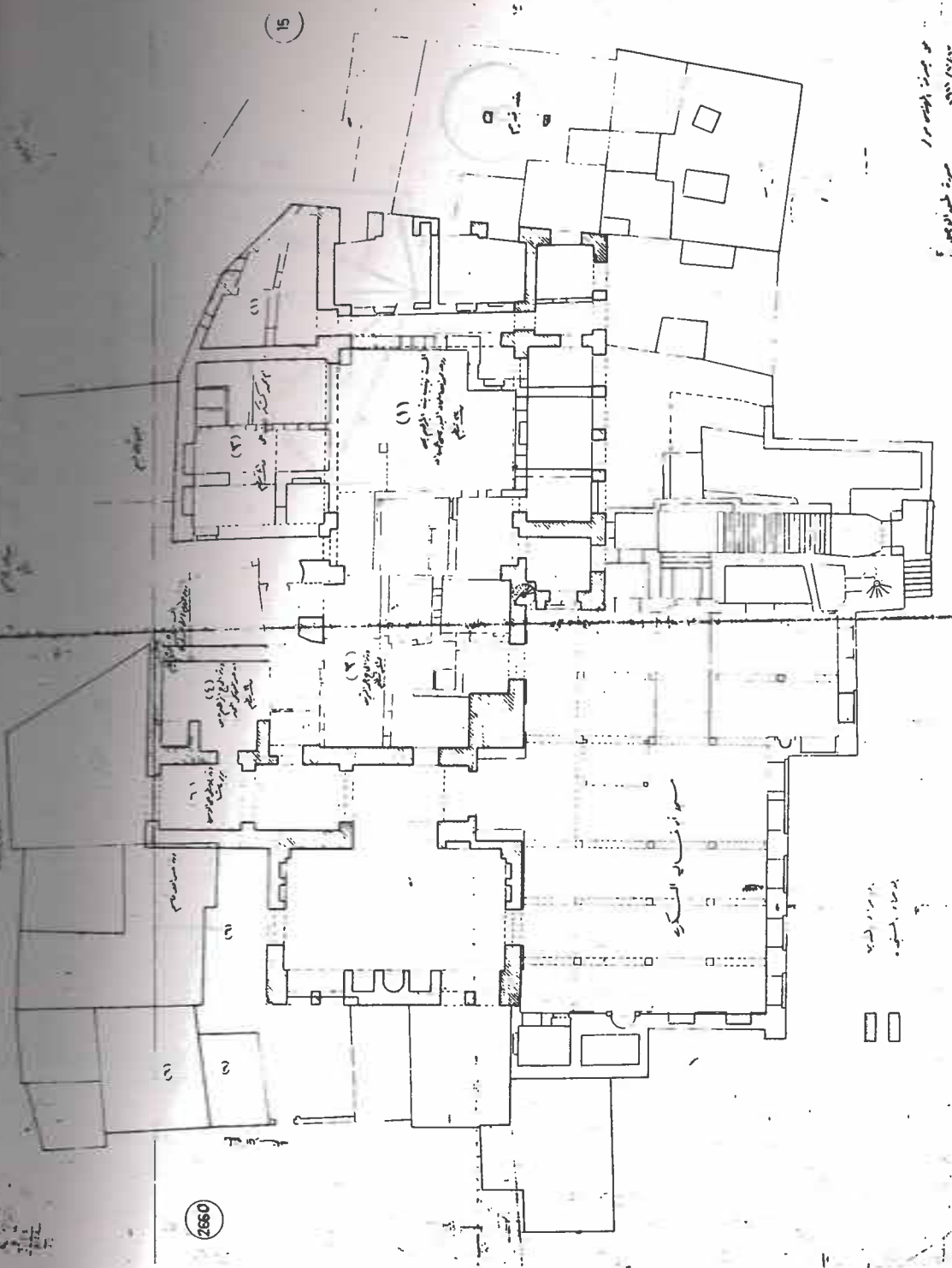
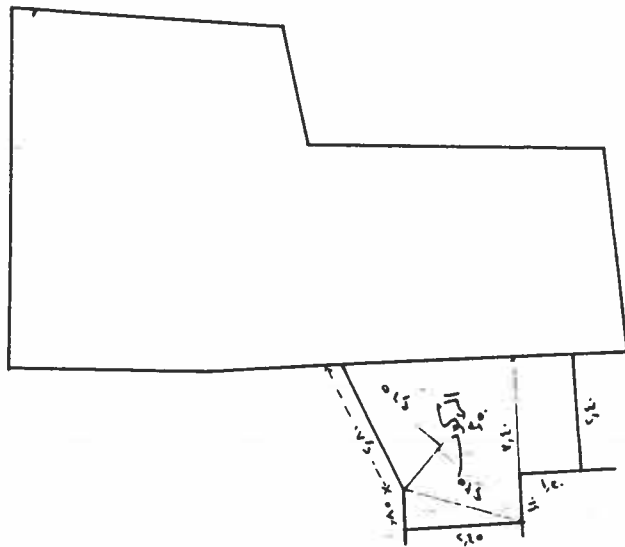


Fig. 3 Nineteenth and twentieth century habitation units inside the bīmārīstān

المطابق نوع كتيبة بمركز الجنت

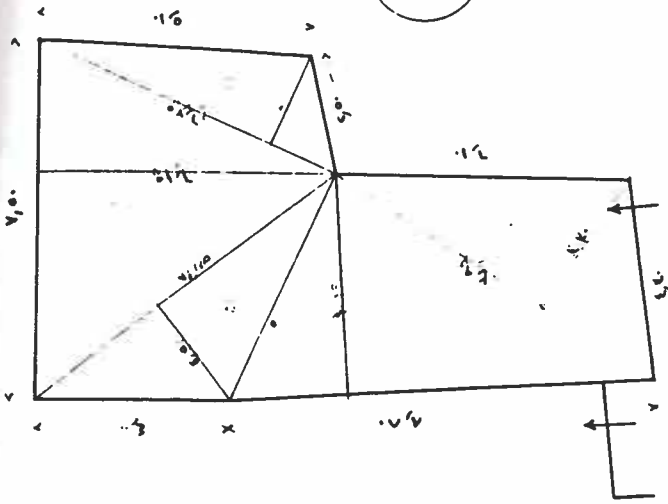
الدور العلوي

الدور الارضي



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8



مساحة الدور الارضي

73.11

مساحة الركوب

13.91

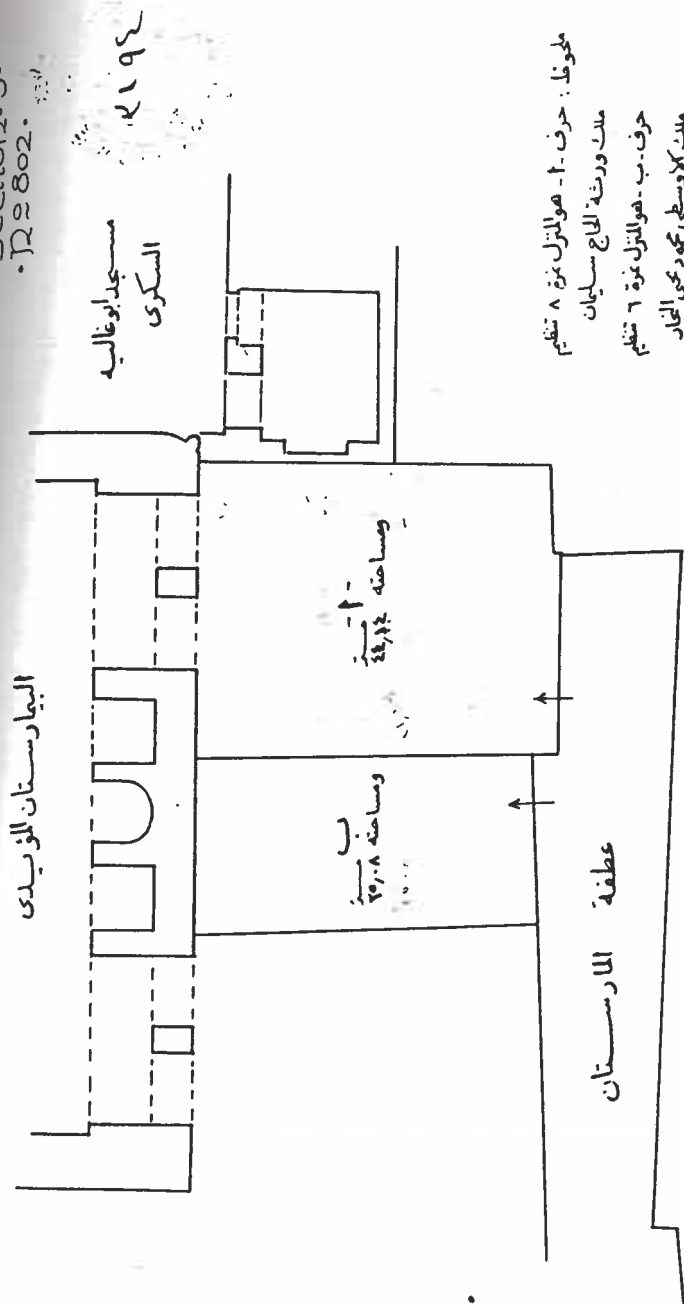
المقياس 1/10

عمل هذا الرسم بمقرتي مك
الهندسة المعمارية

يعتمد استهنيك لكت الانار
مع العرب
W.P. Al-Sayid

Fig. 4 Evacuated dwelling unit

Section 3.
R 802.



ملفوظ: حرف أ - هو المنزل نمرة ٨ تنظيم
ملك وردنة الحاج سليمان
حرف ب - هو المنزل نمرة ٦ تنظيم
ملك لاوسطي محمود يحيى النجار

مقياس الرسم ١:١٠٠
عوض الرسم بمئة ريال
موسى
الطوبى
ديب

بمقدمة
تاريخ
بإشراف
المهندس
الميكانيكي
١٩٦٢-١١-٢٧

7

2652

Fig. 7 Evacuated dwelling unit

Section Four

DESCRIPTION OF THE BIMARISTAN OF AL-MU'AYYAD SHAYKH

The bimāristān of al-Mu'ayyad Shaykh attracts special attention because of its grandiose appearance, complex and unusual planning, and the debatable questions relative to its original borders.

Thus the physical description of the bimāristān will be divided into three sections :

A. THE NORTHEASTERN FACADE

B. NORTHWESTERN FACADE

C. THE INTERIOR OF THE BIMARISTAN

C.i. THE VESTIBULE

C.ii. THE MOSQUE

C.iii. RECEPTION HALL FOR MALE PATIENTS

A. THE NORTHEASTERN FACADE:

Leaving Bāb al- 'Azab at the foot of the Citadel and walking along shari' al- Mahjar, one gets the impression of entering the narrow crooked streets of Islamic Cairo. But suddenly, the factor of surprise, so cleverly used in the urban planning of Islamic Cairo, is demonstrated at its best as one comes across a majestic facade of 47.70 meters long which lies approximately 25.00 meters above the level of the street (Sikkat al-Kūnī) - the NE facade of the bīmāristān of al-Mu'ayyad Shaykh (Pl. 6 and Fig. 8).

It is to this overwhelming facade that the bīmāristān owes its survival. At the beginning of this century, a mosque and a number of dwelling units crowded the facade as well as the interior of the building. In spite of the resulting distorted appearance of the area (Pls. 1-5), the soaring height of the facade and its striking stone masonry caught the special attention of the members of the Comité, who exerted great efforts, first in evacuating the building's facade and interior, and then restoring some parts of it⁴⁷.

The facade is composed of two blocks almost equal in length, but quite different in character ⁴⁸. This reflects both the complexity of the building presaging the variety of activities performed within, and the grandiose scale of its original borders. This facade provides the best example of the intention of Mamlūk architecture to dominate the urban setting visually.

A monumental entrance enriches the central portion of the main block which lies at the SE end of the present facade (Pl. 7). The height of the block is 17.00 meters enhanced even more, reaching 21.50 meters, by a 10.00 meter wide pishtāq carrying a pointed arch which frames the recess of the stalactite portal. The simple doorway is surmounted by a joggled lintel which has a double moulding and a black and white marble inlaid external frame (Pls. 8-9). It was most probably prepared for an inscription which was never carved. The

⁴⁷For more details see the list where a whole summary of the works carried out by the Comité are presented (Appendix III).

⁴⁸This seems to be the characteristic of Islamic architecture where details handled singularly seem rather plain, but the ensemble results in an overwhelming impression - that of monumentality.

lintel is surmounted by a joggled relief arch and a double-arched window within a keel arch - the type called ruhayn fi jasad (two souls in a body). The two arches are separated by a pair of collonettes whose capitals are decorated with rosettes, while the bodies are linked together by a chain-like form as if tying them together (Pl. 10 and Fig. 9). The silhouette of an arch is visible through the double opening of this window which indicates the existence of an arched doorway behind (Pl. 11). This was most probably the doorway of al-madrassa of al-Ashrafiyya as cited by al-Maqrizī:

"... the door of the bīmāristān lies where the door of the madrasa lay, but it is narrower than the latter"⁴⁹

This window and the relieving arch below are flanked by two rectangular stone carved arabesque panels with curved geometric star patterns inlaid with turquoise tiles (Pl. 12 and Fig. 10)⁵⁰.

Along the facade, running both horizontally and vertically, is a high relief carved moulding in a pattern resembling a chain - the only instance where such a design is executed in a Mamlūk facade (Pl. 13).

The intricate six-tiered stalactite fall from the semi-spherical ribbed hood, placed below the pointed arch of the pishtāq, adds to the monumentality of the entrance. Another interesting feature is the half spherical construction behind the stalactite hood, which is visible from the interior of the bīmāristān. The architect has created an interesting method of hiding the usually filled up cuboid back of the hood. He also created a half dome - a rather visually pleasing form to hide the finishing of the stalactite hood from behind (Pls. 14-17).

On the two inner sides of the recess (3.00 meters deep) are three panels of different shapes with inlaid black and red marble : a roundel and a rectangular one are placed beside each other above a square one. The roundel and the square bear arabesque patterns while the rectangular panel bears a repetitive trefoil design similar to the crenellation running along the whole length of the uppermost carved moulding enframing the huge facade (Pls. 18-20 and Fig. 11).

⁴⁹ Al-Maqrizī, al-Khitāt, II, Bulāq 1306 H, II, p. 408.

⁵⁰ A similar panel exists on the portal of the mosque of al-Mu'ayyad Shaykh.

The entrance door is flanked by two mastabas with a 0.80 meter height running along the whole width of the recess with carved decorations on the sides. These, as well as the door sills, are re-used pharaonic marble blocks⁵¹ (Pls. 21-22).

Two keel-arched panels flank the portal recess each composed of a carved naskhī inscription inlaid with black marble which reads at its right side: "There is no god but God" and "Muḥammad is the messenger of God" on its left. Under each of these is a square Kufic panel which reads "Allah Muḥammād" inlaid in turquoise tiles (Pls. 23-24 and Fig. 12).⁵²

Further to the right and to the left on each side of the keel-arched panels, framed by the vertical chain-like pattern carving, are two windows with an interior pointed arch silhouette, while the rectangular exterior is decorated by two tiers of horizontal stalactites. These windows are surmounted by two roundels with geometric designs inlaid with marble (Pl. 25 and Fig. 8). The free end of the block (its SE corner) has an engaged column with a Corinthian capital and the body is carved with the arrow pattern (Pl. 26 and Fig. 8).

The level of the entrance is elevated from the street by nearly 7.00 meters and from the bottom of the building by 5.00 meters. This problem was handled by the Comité where a number of projects were proposed by the simplest solution : a double flight, executed with later corrections⁵³ (Fig. 13) :

1. 22 steps were used instead of the proposed 25.
2. Another staircase on the street compensated for the difference of height (2.00 meters) between the foot of the monument and the street level .

⁵¹A common feature in most Islamic monuments of Cairo (see the blocks of the passage between Bāb al-Nassr and Bāb al-Futūḥ, the door seals of the mausoleum of al-Ṣāliḥ Najm al-Din Ayyūb, madrasa Khāyer Bek etc.).

⁵²The square kufic first appears in the mausoleum of al-Sultān Qalāūn (683-4/1284-5). It appears on the exterior on the sides of the entry way to the complex of al-Sultān Hassan (See Tārik Swelim, The Complex of Sultān al-Mu'ayyad Shaykh at Bāb Zuwayla, MA thesis American University, Cairo 1986.

⁵³For more details see Appendix III.

3. A simple iron balustrade was suggested instead of the complex decorated one designed, which was a very clever substitution as it minimized intrusion on the front view of the facade⁵⁴.

The neighbouring block has the same height and nearly the same length (23.00 meters). It protrudes outwards from the entry block by 5.00 meters. In this recess a keel-arched panel with a naskhī inscription tops a door which is itself surmounted by a double-arched window by a unique scalloped corbel (Pl. 27-28). The inscription, in large and fine naskhī inlaid with black marble, bears the name of the founder of the bīmāristān:

Al-Mālik al-Mu'ayyad Abu'l-Naṣr Shaykh
May his victory be glorious

On the left corner of this area, beside the window, are the remains of an opening which has a spiral staircase inside (Pl. 29), but how would one reach this staircase, and what was its real function is still a question to be solved. One possible reconstruction would be the existence of a huge one sided ramp starting from the left end of the newly added double flight staircase which would have ended at a platform giving access to both the entrance and the spiral stairs.



NE facade

⁵⁴Unfortunately such consideration do not seem to bother anyone today. Only last year a horrible new house was built in front of the bīmāristān annulling all the efforts exerted by the members of the Comité (Fig. 28).

The long face of this block once had two engaged columns at both its corners. The one on the left has been restored, judging from the remains of that on the right end. The whole side of this block is very simple with no decorative device except the capitals, the columns, colonnettes and the bodies of the columns. In the center, six round windows, set one on two on three, are placed above four arched windows which lie above four rectangular windows. This central part is flanked by one window on the left and two on the right. On either sides of the six circular windows are triple-arched windows. The whole block is raised on a 1.75 m. plinth which seems to have no function at all, or to be a result of misinterpretation during restoration works (Pls. 30-33).

Below the third window, from the right are traces of an arched passage which probably belonged to the madrasa al-Ashrafiyya⁵⁵ (Fig. 8). Similar traces of an arched construction exist on the main block which indicates the existence of rooms below the level of the entrance (Pl. 34). This is confirmed by waqfiyya document of al-Mu'ayyad (cf. pp. 41-44)⁵⁶.

This NE facade presents an unusual composition, one with problems cleverly solved by the architect.

He used the already existing door of the madrasa al-Ashrafiyya. This resulted in the breaking of the general symmetry of the facade as the door is shifted by 1.80 meters to the left of the central line of the facade. He has solved this problem by the chain-like moulding which he had created as a decorative device on the facade, which corrects the slight asymmetry of the facade.

The staggered effect created by the protrusion of one of the blocks from the other makes one assume that this was done to accentuate the original approach of that facade. This is also emphasized by the arrangement of the engaged columns at the corners of each block. It is interesting to note that the building on the corner between sharia al-Mahjar and sikkat al-Kūmi (a 19th century construction) has a staggered facade, most probably was following the street pattern (Pl. 79a 2).

⁵⁵In the waqfiyya document al-Mu'ayyad Shaykh there is no mention of such a passage which makes us believe that it existed then.

⁵⁶There is an obvious difference in level of these rooms.

The bimāristān is placed partly on the rock and partly on a basement forming a highly developed ground floor. The architect has preferred to use this height difference by the creation of a number of shops below the elevated plateau (Traces of one still exist - Pl. 34).

The semi-domed construction at the rear of the stalactite hood can also be considered one of the architect's brilliant solutions to hide the rough finishing of the stalactites (Pls. 5 and 15).

B. NORTHWESTERN FACADE:

This facade is in a sorely dilapidated state. The Comité had planned to reconstruct it (Fig. 15 and Pl. 35), but did not do so. Today the facade is not visible because of the modern parasite constructions built around it. In spirit the facade bears the same features as the side block of the main facade, as can be seen from the Comité photo.

C. THE INTERIOR OF THE BIMARISTĀN OF AL-MU'AYYAD SHAYKH:

All that remains of the interior of the bimāristān of al-Mu'ayyad Shaykh are a vestibule, a mosque and a reception hall for male patients in an area of approximately 1156 square meters (Figs. 16-20).

C.1. THE VESTIBULE:

The main door of the bimāristān leads to a rectangular vestibule 9.15 meters long. Two pointed arches divide the vestibule into three enclosures. Traces of a third archway indicate that originally the bimāristān extended further in this direction (SW). Compare possible solutions in Figs. 15-17 and 20, the last being our reconstruction.

The first room (Pls. 36-40) measures 3.30 by 7.05 meters. It is longer but narrower than the others which are identical, each measuring 4.20 by 5.17 meters. This area is considered as the main distribution area of the complex (this is the dihliz mentioned in the waqfiyya of al-Mu'ayyad Shaykh which will be discussed in detail in the next chapter). It opens into the mosque lying SE through a pointed arch which has a span of 5.17 meters. The room gets its lighting

through the semi-circular arched window on its NW wall and the triple-horseshoe arched windows on the SW face separated by two colonnettes (Pl. 37). Above the triple arched window are traces of the stone cornice which indicate that the room had a flat wooden ceiling set at a height estimated as nearly 9.70 meters (Pl. 40).

By mere observation of the distribution of the openings in this room, we discern the following :

1. Traces of the springing of a horseshoe arch with the location of the tie-beam on the NE side below the pointed arch (Pl. 39). This makes one speculate about the reconstruction scheme of this portion and sets forth the possibility of having had two tiers of arches - a conception which certainly corresponds to the desire of the architect to raise the height of the building.

2. The arched gateway leaning on the facade wall blocking a portion of the double windows of the facade belongs to al-madrassa al-Ashrafiyya. It is quite obvious that it was only used as a reinforcement to the facade wall and a base for the erection of the semi-domed construction behind the stalactite hood (Pls. 5 and 15). Maqrizi's quotation mentioned earlier and its semi-circular silhouette compared to the pointed arches of the bimāristān confirm this deduction.

3. The difference in the levels of the windows and arches indicates the complex levels of the bimāristān. The semi-circular nature of the window on the NW (Compare Fig. 17 and Pl. 56) wall hints at the possibility that this opening also belonged to al-madrassa al-Ashrafiyya.

4. The triple arched windows indicate that the height of the next room (the second in the vestibule) could not exceed 5.80 meters (the height of the window from the ground level of the rooms).

The second room (Pls. 41-43) leads NE by a semi-circular arched doorway. Three wooden beams intimate the wooden covering of the ceiling. Whether they are the original beams or beams used by the intruding parasite 19th century building is hard to tell. Nevertheless, they do suggest the approximate height of this room (nearly 4.50 meters). The upper traces of plastered brickwork on both side walls of the room are the remains of a house removed by the Comité.

The last room (Pl. 44) of the vestibule is in a very bad shape. Its SW pointed archway is blocked by rubble and bricks and its ground level is higher than the other rooms as a result of the accumulation of debris. There are traces on its NW face indicating that it once had a doorway similar to the one in the second room (Pl. 45).

C.ii. THE MOSQUE :

The mosque (Pls. 46-53), measuring 13.16 x 7.52 meters, is reached through a pointed arched opening in the SE direction of the first enclosure of the vestibule. The NE and SW walls of the mosque are identical with a centrally placed pointed arched opening (window on the external facade side and doorway on the opposite face) surmounted by four arched windows. Even the pair of cupboards on the NW side of each of the walls are identical. The buttressing at the corners of the mosque and the traces of the wooden beams suggest a flat wooden ceiling covering the enclosure. This is confirmed by the existence of the two corbels around the pointed arched entrance way, the traces of a wooden beam above one of them (Pl. 47), and the wooden battens fixed inside the masonry. These illustrate the exact direction of the main beams and the method of execution of the ceiling. Unfortunately, we have no further information about the central part of the ceiling which must have had a kind of shukhshaykha. It is very difficult to examine the SE wall of the mosque because of the debris. Nevertheless, according to the plans prepared by the Comité and the surface examination of the site, it was possible to reconstruct it. A mastaba at least 0.80 meters high and 1.50 meters deep runs along the whole wall and is interrupted by a central mihrāb flanked by a cupboard on each side. There are a pair of windows at the two ends of the walls which have a semi-arched silhouette internally but a rectangular shape externally. These are surmounted by a pair of triple-arched windows separated by two colonnettes (the same composition as those on the second block of the main facade (Pls. 30 and 33) and that in the first room of the vestibule (Pls. 37 and 40).

On examining the external side of this wall, it was confirmed that the building had no extension on this side. This was proved by the existence of the engaged columns on both external corners. Hence it is possible to fully reconstruct this portion of the bimāristān.

From the plan drawn (Fig. 17), one gathers that the monument comprised a large courtyard surrounded by four iwāns to which other pieces were annexed. The eastern iwān is backed by a vast hall intended for prayers. According to Maqrizī, this intention was established only in the year 825 H, that is, one year after the death of the founder. He presumes that on that date the whole monument was transformed into a mosque and that a minbar was installed there. On the other hand, this assertion raises some doubts, because the hall, intended for prayers and which contains important remains of a mihrāb in masonry, is completely separated from the rest of the monument. Moreover, nowhere else was it possible so far to find traces justifying this presumed transformation.

C.iii. RECEPTION HALL FOR MALE PATIENTS:

The last area in the remains of the bimāristān of al-Mu'ayyad Shaykh is the large majestic courtyard (13.60 X 10.80 meters) surrounded by four iwāns (Pls. 54-57) which served as a reception hall for male patients. The ground level of the courtyard is approximately 2.25 meters lower than the level of the vestibule and the mosque. To date, no trace whatsoever of the adjusting staircase remains, so the area can only be reached by climbing down the remains of the 19th century parasite dwellings at the southern corner of the enclosure reached through the end opening of the vestibule (Pl. 58).

The courtyard opens to the iwāns by four immense arches which have a span of 8.93 meters and a height of 11.90 meters. Another variation of the chain-like carved design of the main facade runs along the silhouettes of the pointed arches. On the tympana of the arches are circular panels which most probably had decorations. On each of the NE and SW faces a doorway is placed at the bottom of a pointed arched niche. The door is surmounted by two joggled lintels inlaid with red, black and white marble and has an inscription band running along its width into the courtyard (Pl. 64). Higher up inside the niche a square arabesque panel is surmounted by two tiers of horizontal stalactites. The two niches are nearly identical, but their state of preservation is different. The lower portion of the NE niche is well preserved, while the upper part is partially destroyed, contrary to

the SW niche where the upper part is preserved and the lower one is restored by the Comité. Two similar compositions are found on the two (NE and SW) sides of the NW iwān, which imply the existence of two other two-storeyed chambers. Therefore, the courtyard (most probably covered originally by cloth) is flanked by four iwāns which have between them four double-storeyed chambers (the staircases are missing today) - two are accessible from the courtyard, while the others can be reached directly from one of the iwāns. The style coincides with the typical Mamlūk cruciform madrasa-mosque (Pls. 54-68).

The three existing iwāns differ in depth from one another while the end border of the SE iwān is not clear because of the chaotic situation in this area (Pls. 69-72). Only excavations can decide the real borders of this iwān. A site survey of the area suggests a hypothetical reconstruction concept.

A possible solution would be to consider the vast hall to be the iwān proper intentionally created for prayers - as according to al-Maqrizī, in the year 825 H, that is one year after the death of the founder, the whole monument was transformed into a mosque and a minbar was installed. This assertion raises some doubts because the hall intended for prayers and which contains important remains of a mihrab (according to the drawings of the Comité), is completely separated from the rest of the monument. Moreover, nowhere else was it possible so far to find traces justifying this presumed transformation. Therefore this solution is rejected.

The following are some observations concerning the SE wall in question (22.09 meters long), which corresponds with the NW wall of the vestibule. The wall bears a number of features which affirm that it could not have been the inner wall of the iwān but a complex with rooms and passages of various heights :

1. The arrangement of the blocked vaulted underground passage, the pointed arched niche with engaged columns, and the arched window placed on the axis of the niche, implies a logical division of the height in this portion of the wall (Pl. 70).

2. The clear cut between the original stone masonry and the invading brickwork remains of the 19th century constructions clearly indicate a difference of height (Pl. 72).

3. Traces of the springing of an arch and the springing of a vault above the doorway of the second room of the vestibule imply a low ceiling at this point (Pl. 72).

4. The difference of the ground level between the *iwān* and the vestibule conveys that a staircase once existed somewhere in this area.

Hence, one can locate the end wall of this *iwān* at a depth of 6.58 meters from the courtyard in alignment with the minaret base wall, and leave the area behind for services (see proposed depth in Fig. 17).

The complexity of the *bimāristān* arises from several facts.

It was built on the ruins of the Madrasa al-Ashrafiyya as mentioned previously. It seems that, for some reason or other, during the process of demolishing the madrasa, the foundations and the lowermost fabric of the latter were left untouched and even some of the architectural elements were cleverly re-used by the architect responsible for the planning of the *bimāristān*. This is clearly demonstrated in the subterranean passage running below the *bimāristān* from its NE corner to the SW end (not mentioned in the waqfiyya document of al-Mu'ayyad) and the internal arched gateway behind the main entrance.

A thorough examination of the masonry reveals five phases of construction (Pl. 73):

- pharaonic re-used blocks,
- original lower fabric belonging to the madrasa al-Ashrafiyya,
- the blocks of the *bimāristān* proper,
- remains of brickwork and masonry of the parasite dwellings added inside the *bimāristān*, and finally
- the masonry used by the Comité during restoration works.

The area found at the disposal of al-Mu'ayyad to erect his *bimāristān* lay from the the skirts of the Citadel in the north to its monumental portal in the south and as far as Bāb al-Qarāfa to the west⁵⁷ - a vast area to work on (Fig. 2).

⁵⁷The territory corresponds with the area demolished by the Sultān Barqūq, in the month of Jamādā al-Ulā [814 H./1411 A.D.]. See section on the history of the *bimāristān*.

The building was left unfinished for some reason or other. This is demonstrated in the following areas :

- the undecorated triangular tympanum of the pointed arch (Pl. 74),
- the missing inscription of the band running around the doorway and a part of the facade (Pl. 75), and
- the unfinished rectangular joggled lintel on the entrance (Pl. 76).

The difference in the style of the two blocks - one being heavily decorated and the other practically bare of any decorative device - gives one the impression that the architect was forced to finish the complex in a hurry. Nevertheless one must also mention that the undecorated side block was practically rebuilt during the restoration works of the Comité, so it could have lost most of its original decorations.

All these factors lead to the creation of a sometimes chaotic situation inside the building which arouse a lot of question marks and speculations about the original state of the bīmāristān. Nevertheless, after describing the building and with the aid of the extra information from the waqfiyya document of al-Mu'ayyad Shaykh, it will be possible to reconstruct the complex.

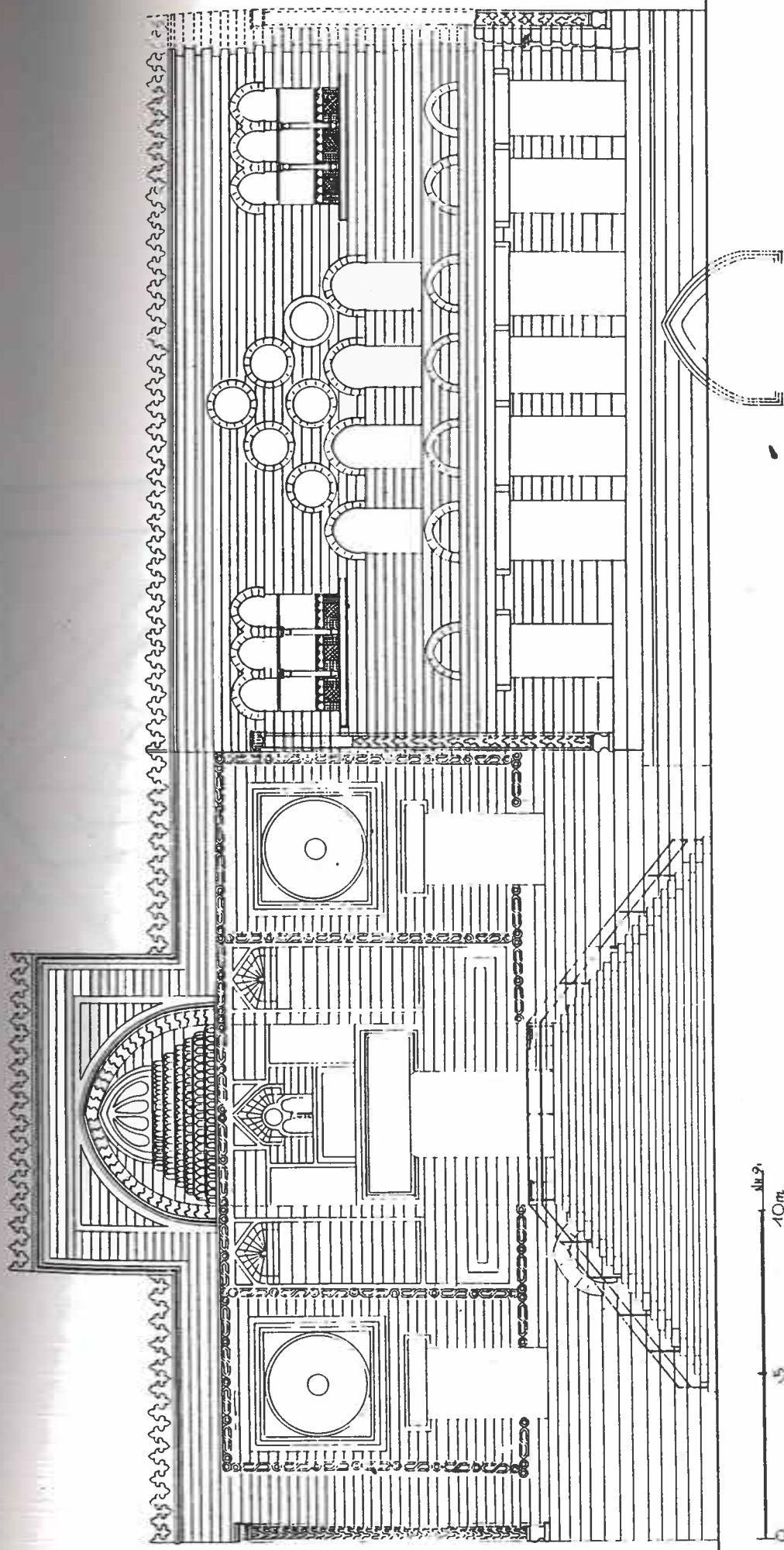


Fig. 8 NE facade of the bīmārīstān of al-Mu'ayyad Shaykh

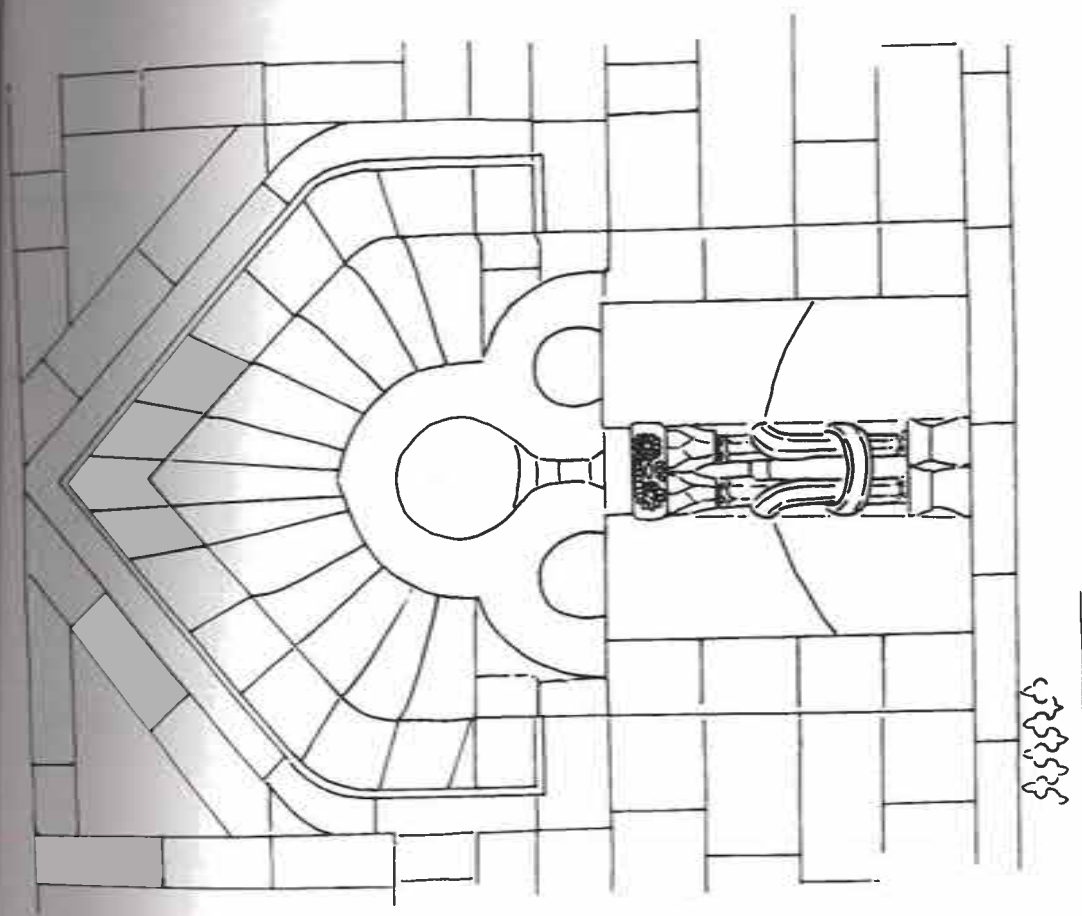


Fig. 9 Double-arched window within a keel arch (ruhayn fi iasad)

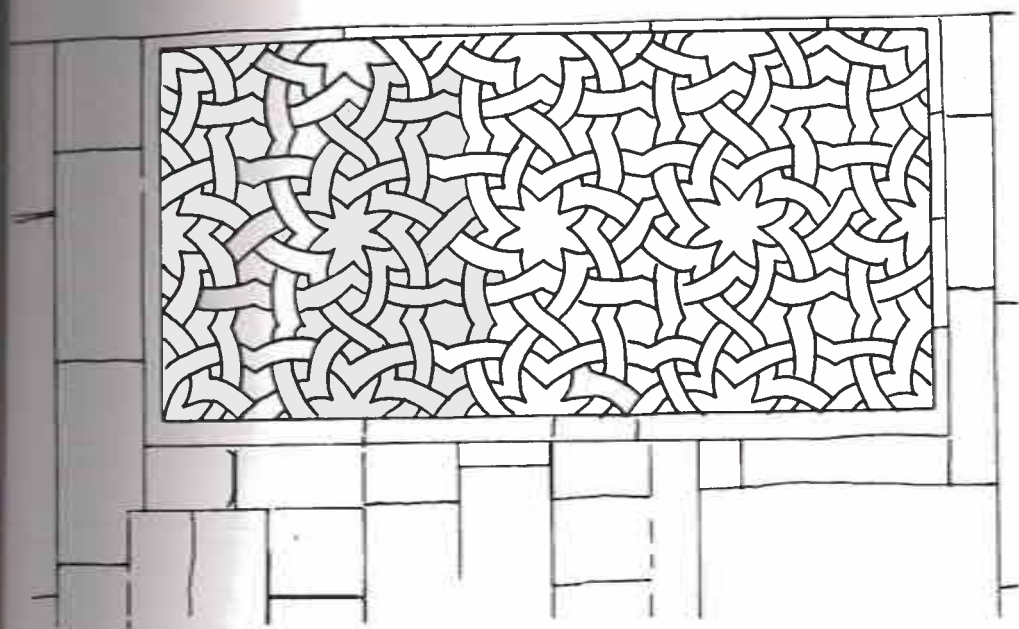


Fig. 10 Panels with curved geometric star patterns inlaid with turquoise tiles

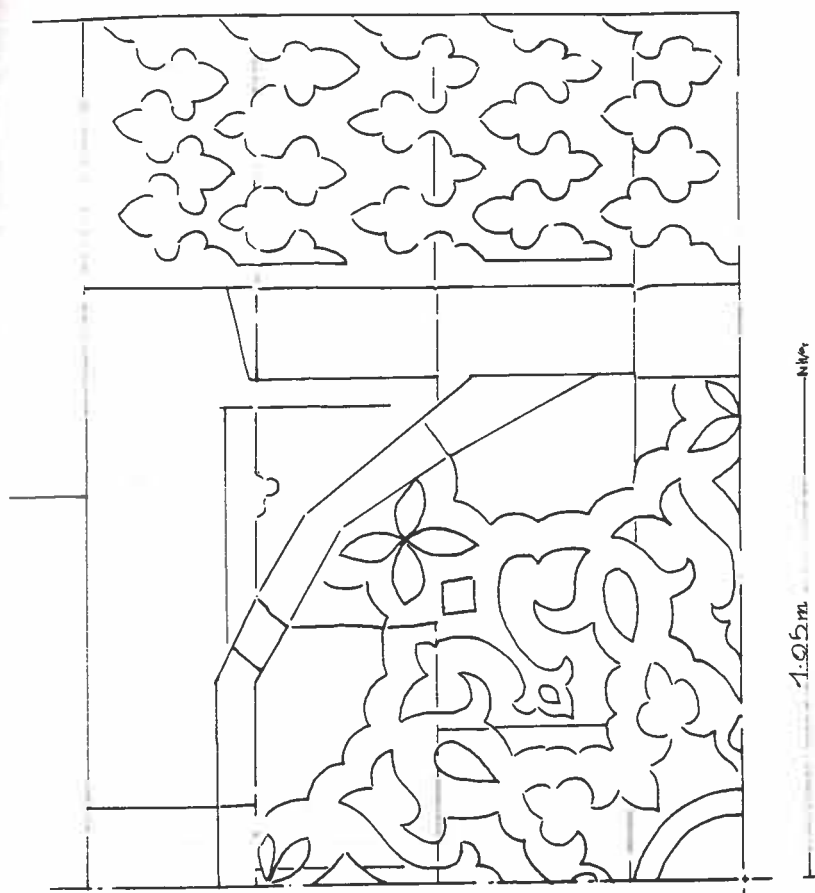


Fig. 11 Detail of one quarter of the roundel and a portion of the rectangular panels

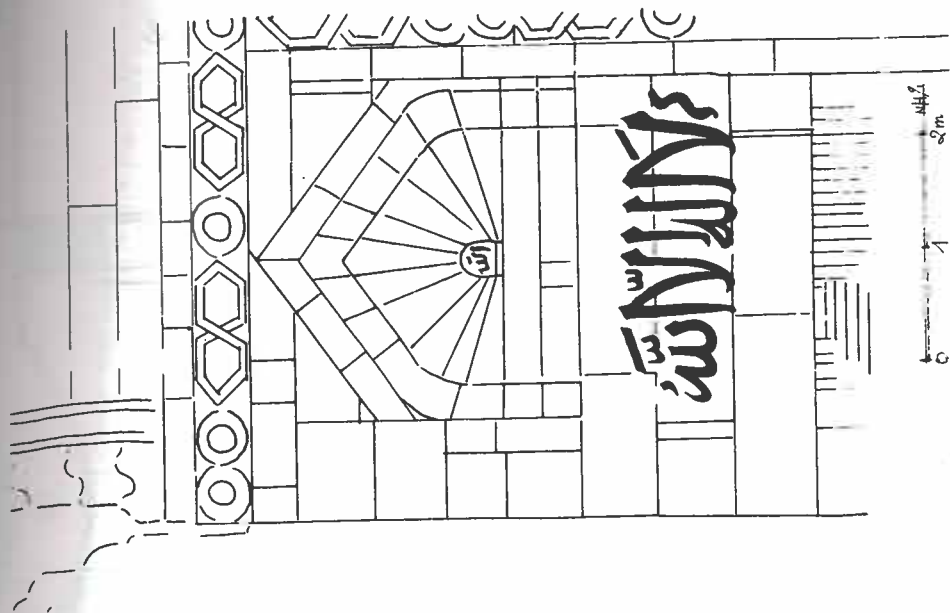


Fig. 12 Detail of keel arched panel flanking the monumental entrance

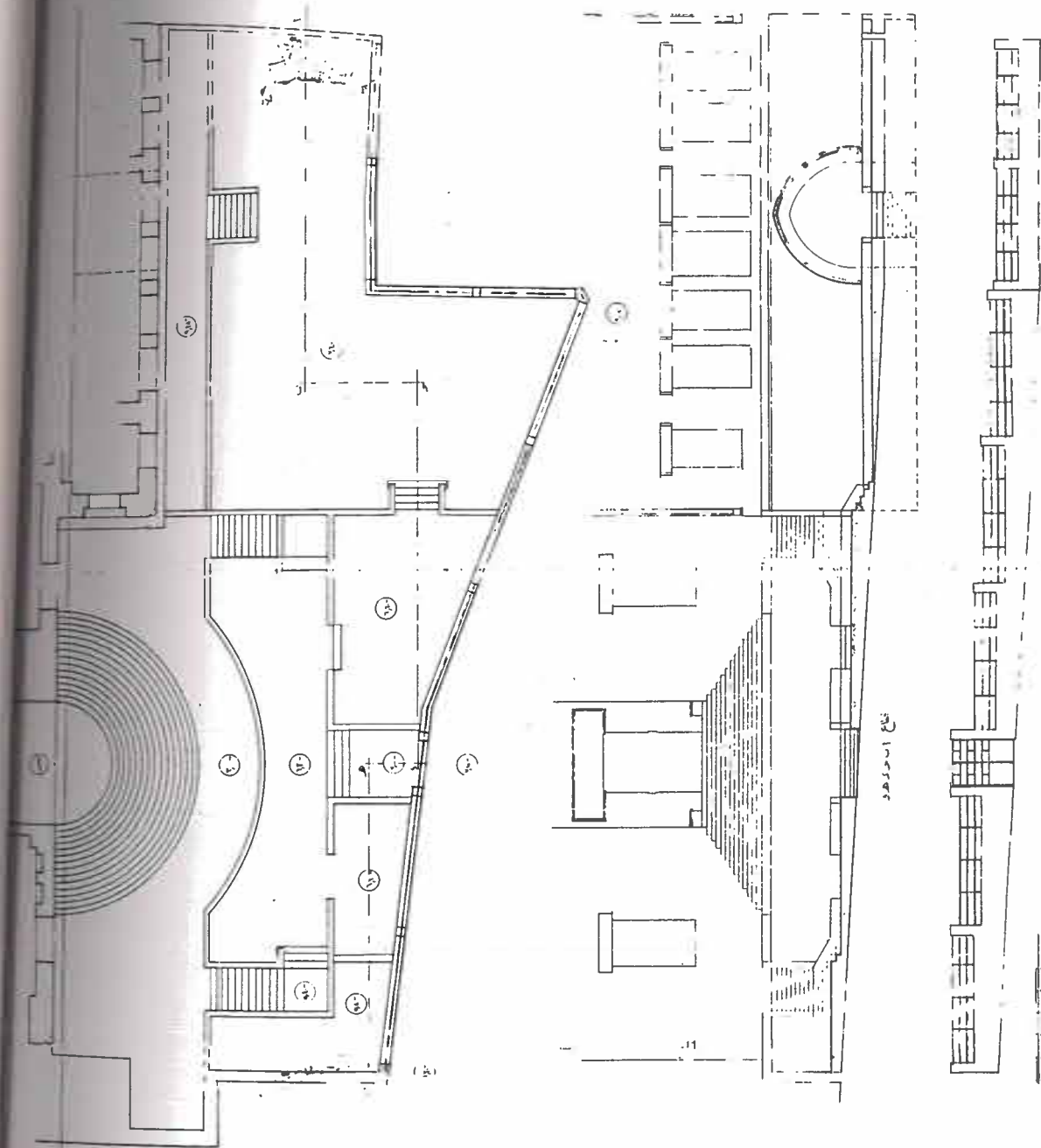


Fig. 13 The proposed projects for the staircase
(Comité)

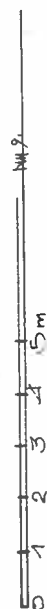
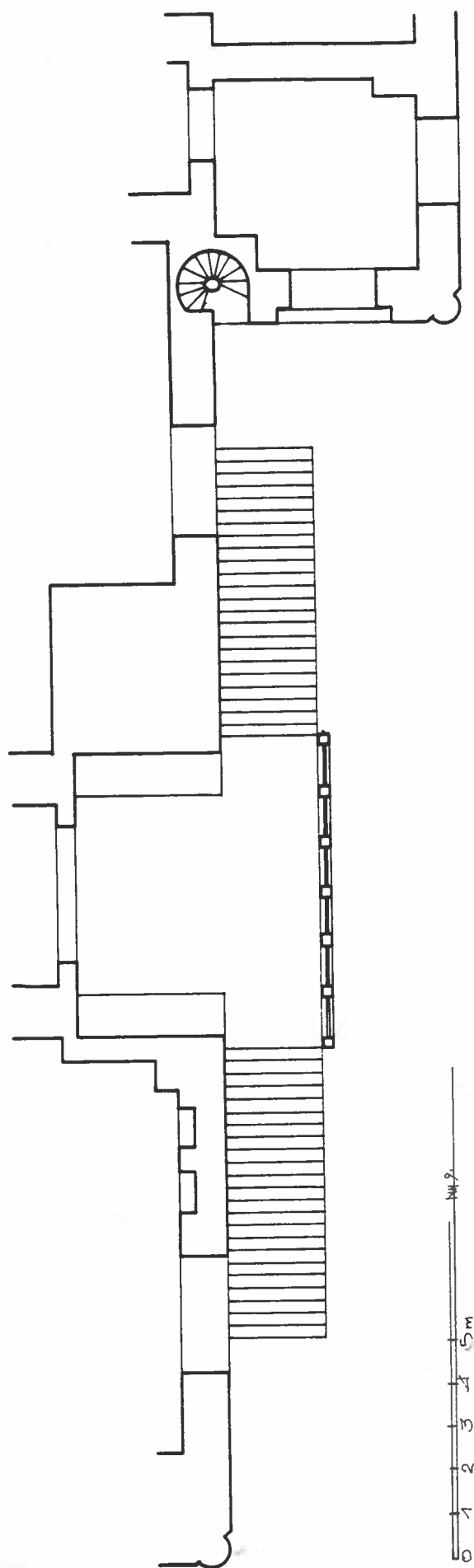


Fig. 14 The approved project of the staircase (from Center of Documentation)

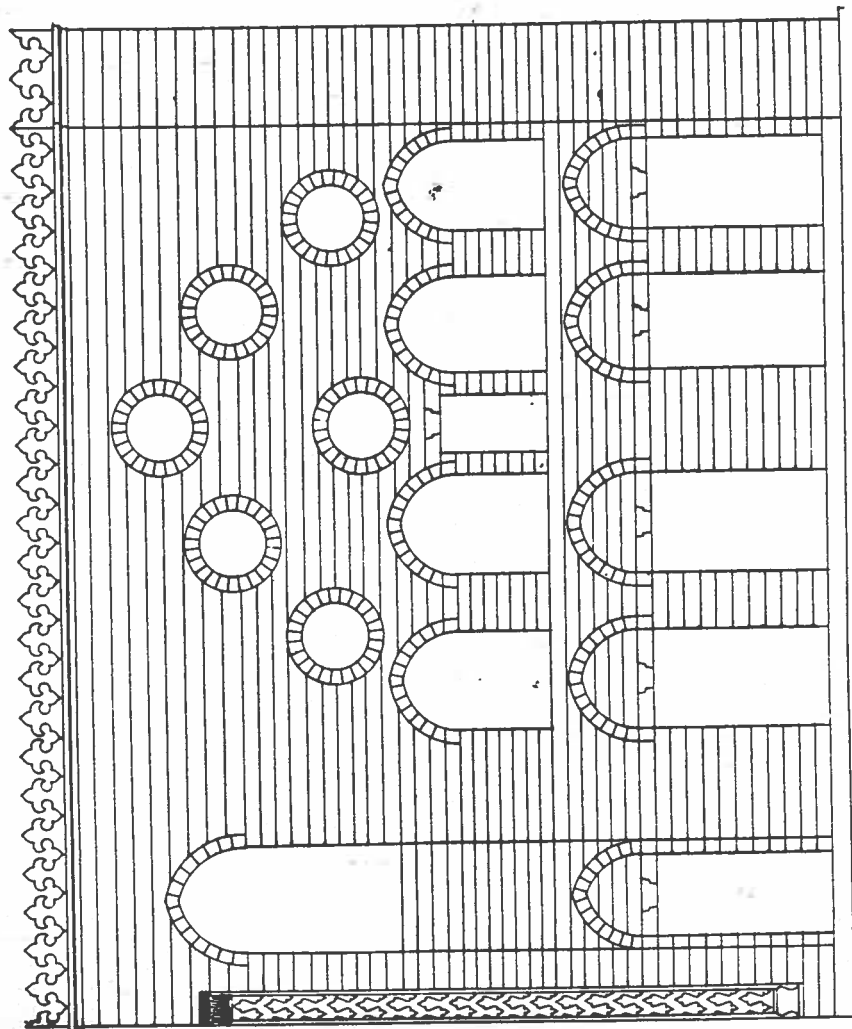
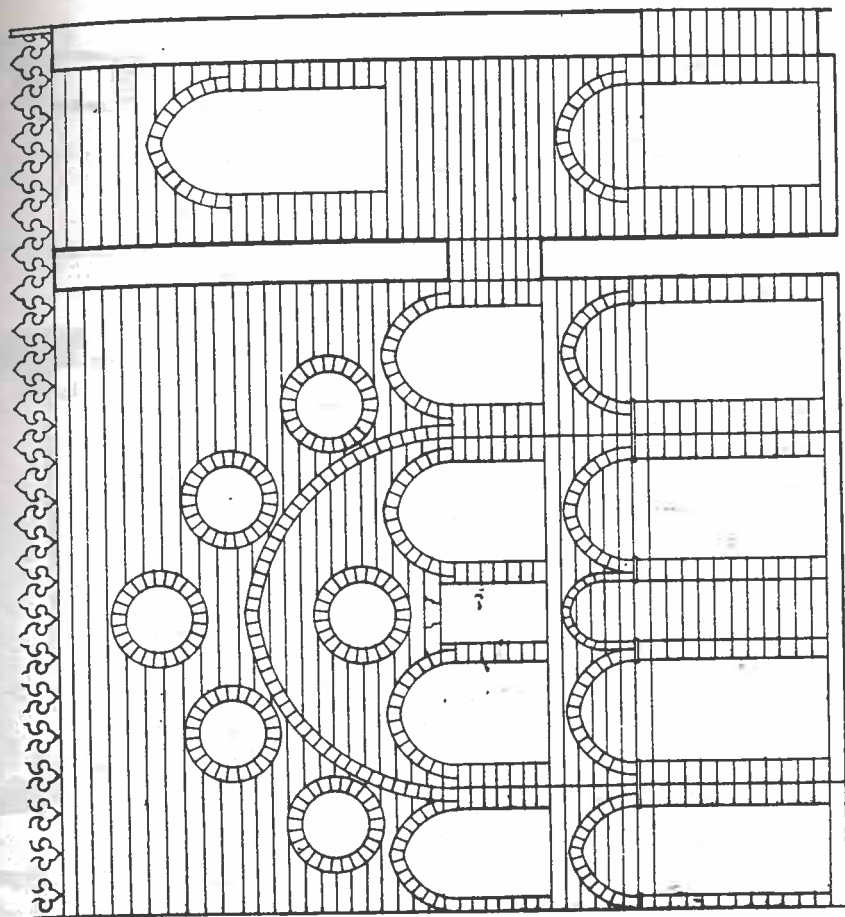


Fig. 15 Project of restoring the NW facade (from Center of Documentation)

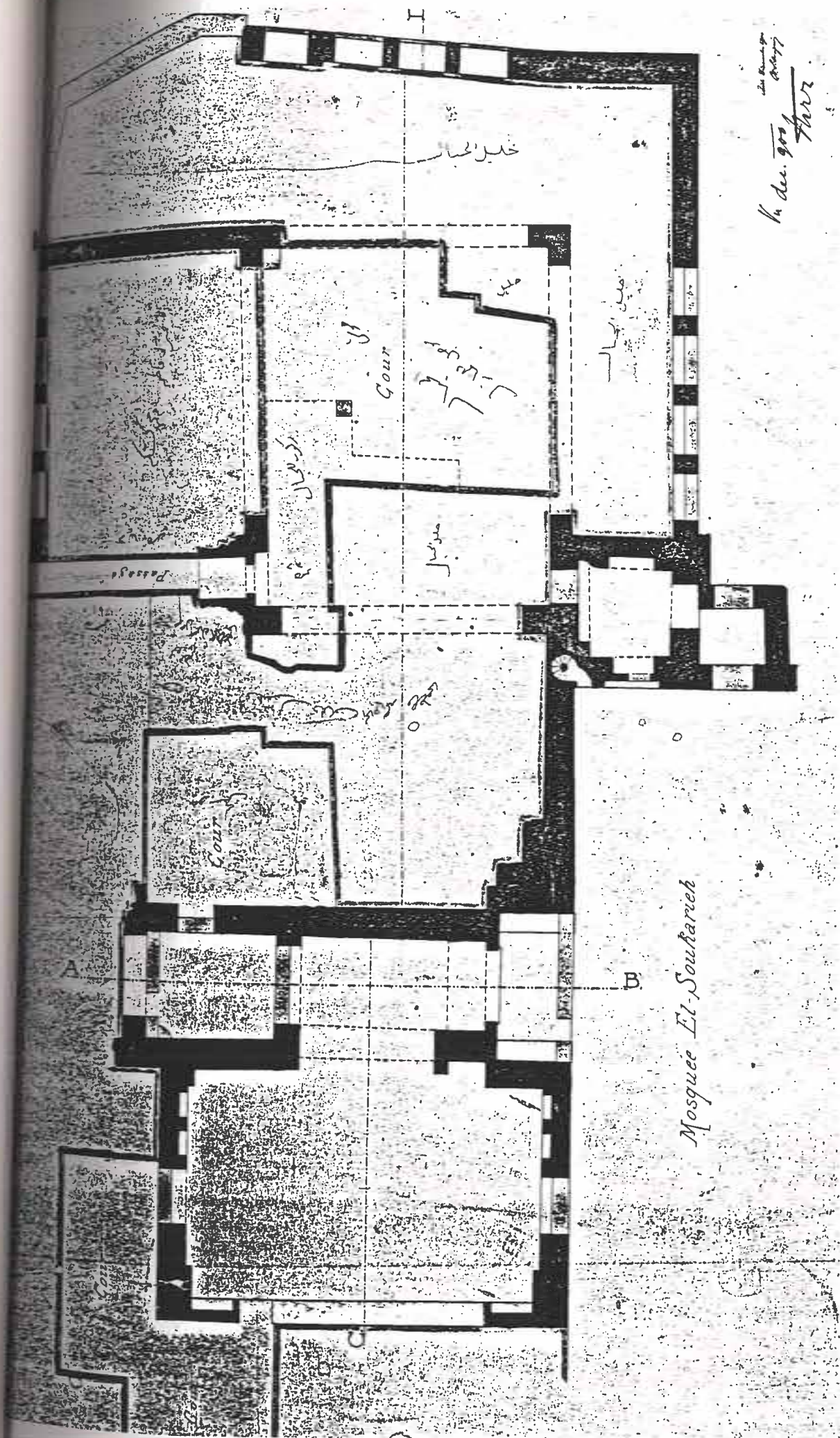


Fig. 16 Plan of the bīmārīstān (1900 by Hertz Bey - Center of Documentation)



شارع الحاجر

Fig. 17 Plan of the bīmārīstān and the surrounding streets (Center of Documentation)

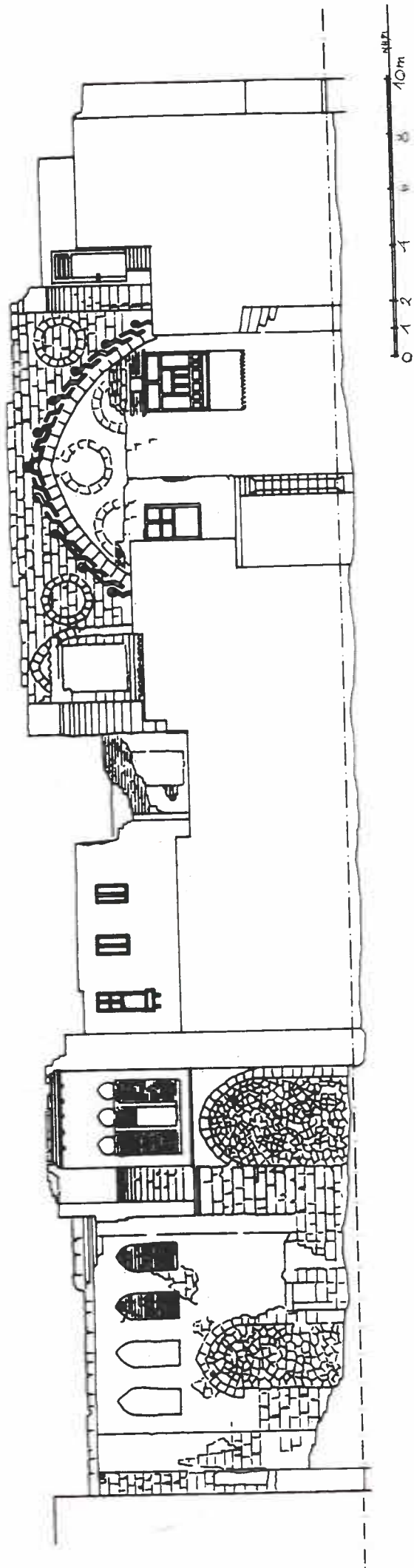


Fig. 18 Longitudinal section (1900 by Hertz Bey - Center of Documentation)

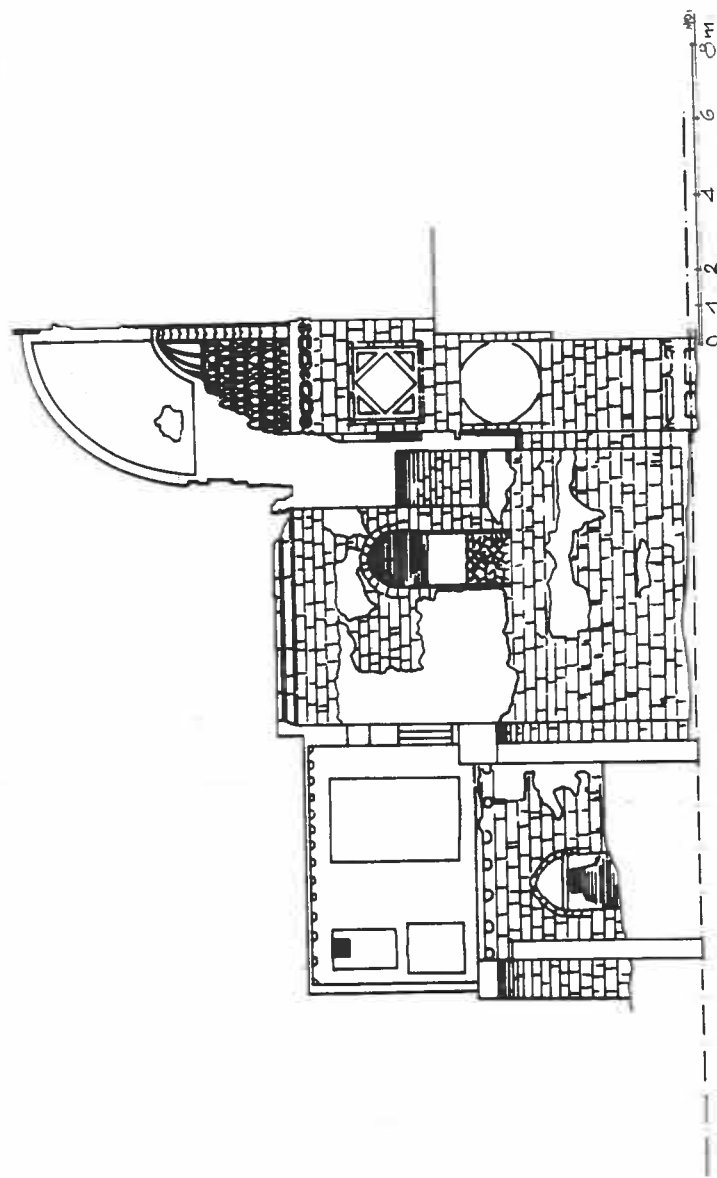


Fig. 19 Section through entrance (1900 by Hertz Bey - Center of Documentation)

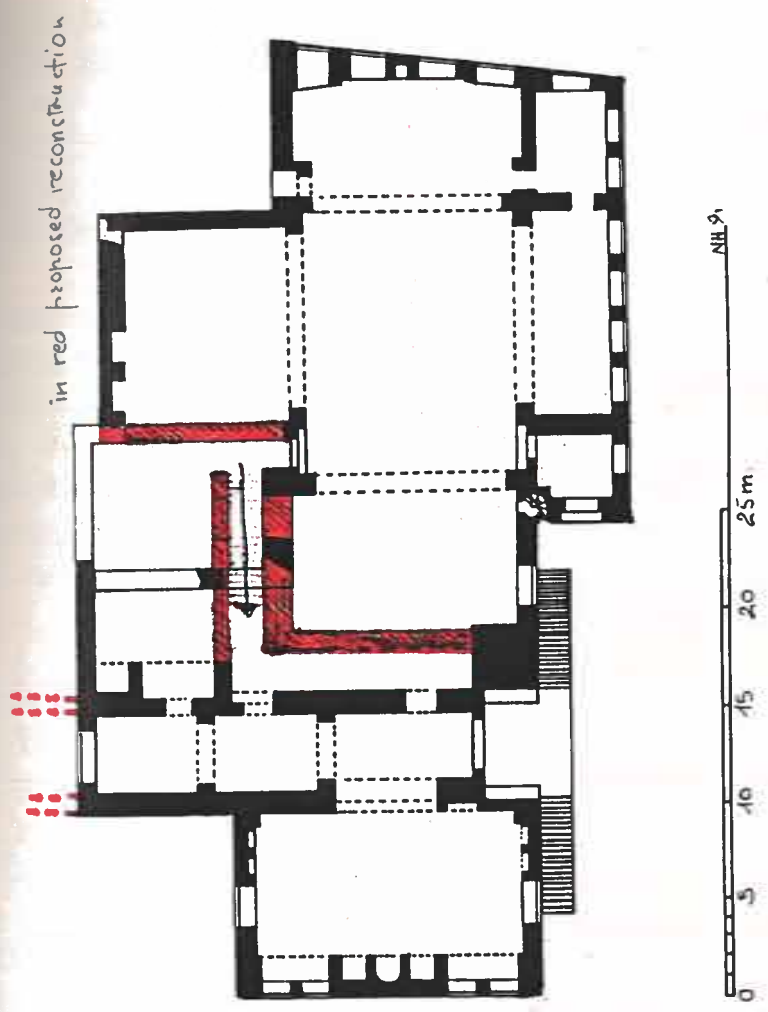


Fig. 20 Actual plan of the bimārīstān with our reconstruction

THE HISTORY OF THE CITY OF BOSTON

The history of the city of Boston is a subject of great interest to the people of this city. It is a city of many centuries, and its history is full of interest and instruction. The city was founded in 1630, and has since that time been a center of commerce and industry. It has been the seat of many important events, and has played a large part in the history of the United States.

In the year 1630, a group of Puritans, led by John Winthrop, came to the city and founded the city of Boston. They were seeking a place where they could live in accordance with their religious beliefs, and they found in Boston a place where they could do so.

1. The city was founded in 1630, and has since that time been a center of commerce and industry.
2. It has been the seat of many important events, and has played a large part in the history of the United States.

The city has a rich history, and its people are proud of their heritage. They are proud of the many achievements of their city, and they are proud of the many people who have lived and worked in the city.

1. The city has a rich history, and its people are proud of their heritage.
2. They are proud of the many achievements of their city, and they are proud of the many people who have lived and worked in the city.

The city is a place of many opportunities, and it is a place where people can live and work in peace and harmony. It is a place where people can find a better life, and it is a place where people can make a better world.

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CHAPTER TWO

THE WAQFIYYA DOCUMENT OF AL-MU'AYYAD SHAYKH

The waqfiyya document of al-Sultān al-Mu'ayyad Shaykh is preserved in the Ministry of al-Awqāf under the register 937. The complete text was studied and presented in Fahmī 'Abd al-'Alīm's unpublished doctoral thesis⁵⁸, where he uses the information compiled in the waqfiyya document to locate, describe, and sometimes reconstruct the history of the buildings founded by the Sultān.

In the case of the bimaristan under study, Fahmī 'Abd al-'Alīm proposes a logical reconstruction of the original borders of the building (Fig. 21). This he does by :

1. using the existing street pattern around the bimāristānas his horizontal distribution elements, and
2. placing around it the various sections of the bimāristān mentioned in the waqfiyya document of al-Mu'ayyad which no longer exist.

In the present thesis, we will present another reconstruction scheme (Fig. 22) and will give the reasons that made us build up these changes. The Chapter includes :

A. A reproduction of the part of the waqfiyya document concerning the bimāristān under examination (lines 85-104 and 506-509).

B. A diagrammatic reconstruction of the zoning and circulation of the bimāristān accompanied by an attempt to apply the theoretical reconstruction on the conditions of the site (Fig. 22).

Final decisions will be possible only after the accomplishment of the thorough investigation of the area around the bimāristān. Thus the

⁵⁸ 'Abd al-'Alīm Fahmī, Wathiqat al-Sultān al-Mu'ayyad Shaykh, unpublished doctoral thesis, Cairo university, 1988.

final reconstruction of the original borders of the bīmāristān will be presented only in the last Chapter.

To facilitate the understanding of the text :

1. The English translation accompanies the original Arabic text line by line simultaneously.

2. The technical Arabic word is underlined and is followed directly with its English translation (between red brackets)⁵⁹.

3. The sign (.....) is used to indicate a part missing in the original document.

4. The text in blue, included between the brackets [], represents parts which do not concern the bīmāristān.

The lines 506-509 are not translated as they add nothing to the architecture of the building. Thus they are included in Appendix II at the end of the thesis. The bahari (North) direction in the waqfiyya document is not an accurate description. Thus whenever it is mentioned, they really mean the true NW. Accordingly, one should correct also the other four directions mentioned in the text of the document.

⁵⁹The meaning of the terms are taken from :

M.Amin and L. Ibrahim, Architectural Terms in Mamlūk Documents, Cairo, 1990.

الفقرات التي تتحدث عن البيمارستان في وثيقة المؤيد
THE LINES CONCERNING THE BIMARISTAN IN THE
WAQFIYA DOCUMENT OF AL-MU'AYYAD SHAYKH

٨٦- المكان المستجد مرستانا* سفل القلعة المحروسة به و ينسب اليه و ذلك جميع المكان المستجد الانشاء مرستانا* الكائن بخط الرملة بالصوة تحت القلعة المحروسة المشتمل على بابين مربعين

86- The renewed place a māristān (hospital) below the Citadel; it is related to him; this includes the whole newly established construction [the māristān] which lies on khatt al-Ramla at al-Suwah under the Citadel; it comprises two square doors

٨٧- احدهما كبير يفلق عليه زوجا باب يعلوه شباك يصار اليه من علي سلم حلزون يدخل منه الي دهليز مستطيل مسقف نقياً

87- One of the two is big and has a pair of door leaves and a window above; it [the door] is reached by a spiral staircase; it [the door] leads to a rectangular dihlīz (vestibule) covered naqyan (by a wooden ceiling made of imported wood).

٨٨- علي يسره الداخل منه مسجد بخرگاه خشب خرط ماموني يفلق عليه زوجا خرط ماموني فيما بين ذلك عامودان من رخام يتوصل

88- On the left hand side there is a mosque with a kharkāh (vestibule/corridor) made of wood khart (small carved wood pieces that join to form geometrical window grilles) mamūnī (fine carving) closed by a pair of khart mamūnī; between them stand two marble columns; from it

٨٩- منه الي سلم يصعد من عليه الي طباق عدتها عشرة يفلق علي كل طبقة من ذلك باب و يشتمل كل الاطباق المذكورة علي منافع

89- one reaches a staircase which leads to ṭibāq (plural of ṭabaqa meaning upper units, usually residential) ten in number, each includes manāfi' (dependencies)

٩٠- و حقوق ثم يتوصل من الدهليز المذكور الى باب سر يخرج منه الى ساحة
مربعة سعة مساحتها طولها من القبلي

90- and ḥuqūq (services); then the mentioned dihlīz leads
to a bāb sirr (hidden door in the interior of the building)
which gives access to a square sahā (open space outside or
inside a building); the capacity of its area measures from
the South

٩١- الى البحري مائة ذراع و خمسة عشر ذراعا و في الشرقي الى الغربي
مائة ذراعا مدكوكة هذه المساحة المذكورة

91- to the North one hundred and fifteen zira' (length unit -
one zira'=0.52 meters) and from the East to the West one
hundred zira'; the floor of the mentioned area is covered

٩٢- بالحجر و بها محراب مبني بالحجر و يتوصل في الدهليز المذكور الى
مصطبة "....." بداربين خشب حولها خزائن كتب

by stone; and in it there is a stone mihrāb (niche indicating
the direction of Mecca); and the mentioned dihlīz leads to a
maṣṭaba (built platform) "....." with a wooden darabzīn
(balustrade) around it khazāi'n (plural of khazāna which is a
small room or chamber) for books

٩٣- احد عشرة خزانة و باب قاعة برسم ضعفاء النساء و يتوصل من الدهليز
المذكور الى قاعة برسم ضعفاء الرجال و هي تشتمل

93- eleven khazāna and the door of a qa'a (hall) for the
reception of the female patients; and the mentioned dihlīz
leads to the qa'a for the reception of the male patients
which includes

٩٤- على اربعة اووين كل ايوان بقنطرة معقودين مسقفين نقيا مدهون ذلك
شيخوني فيما بين الاووين المذكورة

94- four awāwīn (plural of īwān meaning a hall closed from
three sides), each īwān has a qanṭara (arch) and is covered
by imported madhūn (colored or clear varnished) shaykhūnī
(a type of vaulted ceiling) wood; between the mentioned
awāwīn

٩٥- بحرة مستطيلة و يصدر الايوان القبلي شادروان و بالايوان البحري ايضا شادروان و بالاواوين "الثلاثة البحري و الشرقي

95- there is a rectangular bahra (pool); the southern iwān has a shadirwān (kind of fountain), also in the northern iwan there is a shadirwān; in the three awāwīn - the northern, the eastern

٩٦- و الغربي ستة عشر شباكا حديدا و يتوصل من ذلك الى قاعات عدتها ثلاثة و يتوصل من بقية الدهليز المذكور الى خمس "....."

96- and the western there are sixteen iron shubbāk (fenestration with grilles); from this, qa'at (plural of qa'a) are reached, three in number; and from the remaining part of the mentioned dihlīz five "....." are reached

٩٧- برسم الضعفا و المبرورين و غيرهم كل من ذلك بمرافق و حقوق و يصدر الدهليز المذكور شراب خانا يعلوه "....."

97- for the reception of the weak, the cured, and others, each has marāfeq (services) and huqūq; in the mentioned dihlīz there is a sharabkhāna (small room for storing drinks, fruits) and above it "....."

٩٨- مقعد علي عامودين رخاما و ثلاث قناطر و يتوصل من الدهليز المذكور الى مiazza بها بيوت خلا عدتها احد عشر بيتا

98- a maq'ad (loggia - closed or open) on two marble columns and three arches; the mentioned dihlīz leads to a mayda'a (ablution place) where there are biyūt khala (small rooms or cells) eleven in number

٩٩- يتوسطها فسقية برسم "....." المiazza المذكورة مطبخ معقود سقفه بالحجر و يتوصل الى مدار سلم يصعد من عليه الى

99- at the center there is a fasqiyya (fountain) for the reception of "....." the mentioned mayda'a a kitchen with a vaulted stone ceiling, the newel of a staircase is reached from where one ascends to

١٠٠- خمسة و عشرين طبقة و اربع خلاوي كل ذلك بمرافق و حقوق و من حقوق المكان المذكور بئر ساقية كاملة العدة و الآلة

100- twenty-five ṭabaqa and four khalāwī (plural of khalwa which is small windowless cell or room) all with marāfiq and ḥuqūq; from the ḥuqūq of the mentioned place a bi'r (well) sāqiyya (water wheel) with its full equipment and machinery;

١٠١- و يحيط ذلك و يحصره حدود اربعة الحد القبلي ينتهي الي الصوه تجاه قلعة الجبل و فيه الباب الثاني من البابين

101- and this is surrounded and lies between four frontiers, the southern frontier ends at al-Suwah facing the Citadel and there lies the second of the two doors

١٠٢- المقدم ذكرهما و الحد البحري ينتهي الي بيت الجناب السيفي "ابي بكر بن سنقر" و يعرف قديما "بارغون تتر" و بعضه الي خرائب هناك

102- mentioned previously; and the northern frontier ends at the house of al-Janāb al-Sayfi "Abi Bakr Ibn Sunqur" known as Arghūn Tatar and some of it to khara'b (ruined buildings) existing there

١٠٣- و الحد الشرقي ينتهي الي ساقية الاشرف و فيه الباب الكبير و مكتب السبيل المعد للايتام و احد عشر حانوتا و سبيل

103- the eastern frontier ends at sāqiyya al-Ashraf and there lies the big door and maktab (primary school) of the sabil (public water dispensary) prepared for the orphans, eleven hanūt (shops) and a sabil

١٠٤- الماء و الحد الغربية [ينتهي الي سوق الخيل بحد ذلك وحدوده و حقوقه و ما يعرف به و ينسب اليه و في ذلك]

104- of water; the western frontier ends at the suq of the horses; [.....]

ANALYSIS OF THE INFORMATION GATHERED
FROM THE WAQFIYYA DOCUMENT
AND
THE RECONSTRUCTION OF THE BĪMĀRISTĀN

According to the waqfiyya document, it is clear that originally the bimaristan included :

1. A raised entrance reached by a spiral staircase.
2. Eleven shops below the uplifted entrance.
3. A passage (dihliz) which served as the basic horizontal distribution element.
4. A mosque with adjacent ten residential units with services..
5. A reception hall for male patients with four iwans around a courtyard with three halls (qa'at) attached to it.
6. An interior door leading into a saha with an area of approximately 60 X 52 meters.
7. A built up platform with eleven chambers to store books which led to the hall for female patients (qa'a type).
8. An ablution area (mayda'a) with adjacent eleven cells, a kitchen, eleven cells, twenty-five rooms with their services, and a well.
9. A room for storing drinks (sharabkhāna).

It is obvious that the remains of the bīmāristān represent only one small portion of the original building (only the raised entrance, the remains of the vaulted ceiling of one shop, a portion of the passage, the mosque, and the reception hall for the male patients with its four iwāns - See Section Four of Chapter One).

From the document and the hypothetical diagrammatic zoning of the various elements (Fig. 22), we observe that :

1. The bīmāristān is better described as a group of buildings rather than one construction.
2. The bīmāristān included three types of distribution - the horizontal linear type (dihliz), elements opening into a courtyard saha, and the vertical arrangement of residential rooms and their services

(staircases). This represents a basic difference between the reconstruction suggested in this thesis and the one introduced in Fahmi-ʿAbd al-ʿAlim's work where he only uses the linear horizontal distribution. In the present reconstruction the saha with its enormous dimensions plays a vital role (Fig. 24). A more detailed explanation will be given in the last Chapter.

From the examination of the remains of the bimāristān, depicted in detail in Section Four of Chapter One, we notice that the corner engaged columns of the NE facade of the bimāristān (Pl. 6-31) as well as the remains of the two engaged columns of the SE facade of the mosque (Pls. 51-53). These lead us to believe that the bimāristān could never have had any extensions in these directions. Thus we do not need to reconstruct the original borders of the bimāristān on these sides as we actually still have traces of the original corners of the building (Fig. 23 illustrates the corners in question). Finally one can deduce that the NE facade of the bimāristān had an acute staggered effect which corresponds with Cairene Islamic facade concepts - the creation of staggered and niched facades.

By some eliminations and some additions, it was possible to make a trial reconstruction at this stage of our investigation (Fig. 23).

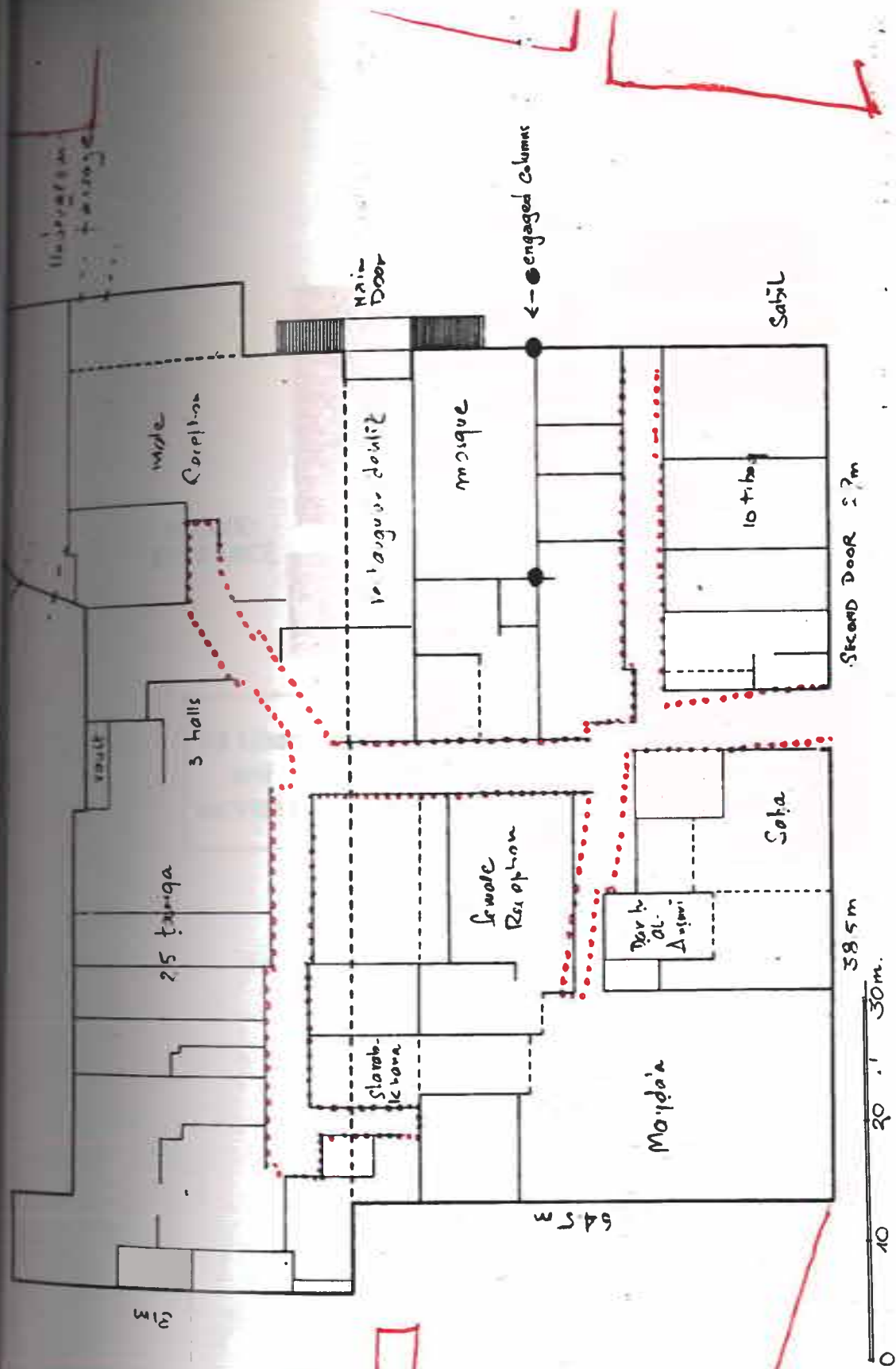
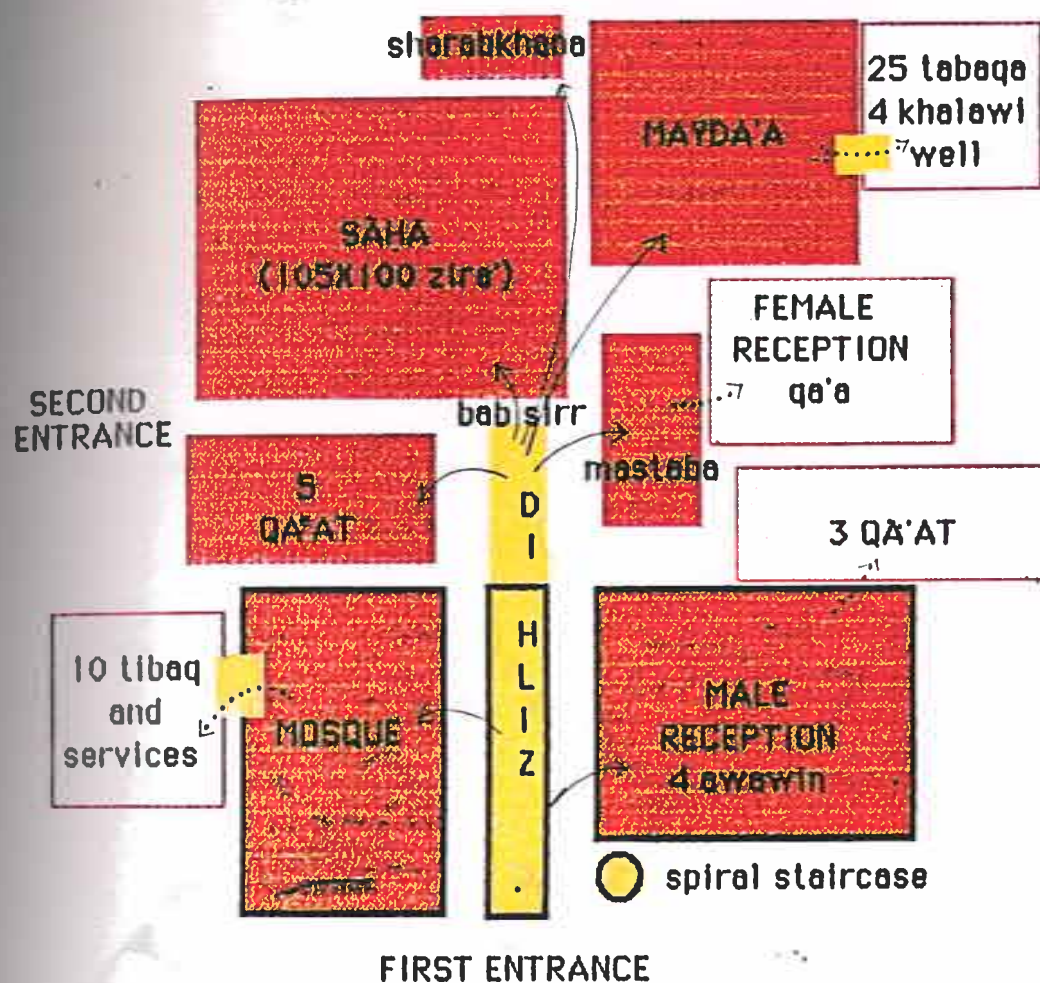


Fig. 21 Reconstruction of the bimārīstān according to Fahmī 'Abd al-'Alīm



ZONING AND CIRCULATION ACCORDING TO THE WAQFIYA DOCUMENT



horizontal and vertical distribution
 areas reached directly from the dihliz
 areas reached indirectly
 the existing portion of the bīmāristān

Fig. 22 Zoning of the various parts of the bīmāristān



Fig. 23 Plan showing the location of the two engaged columns

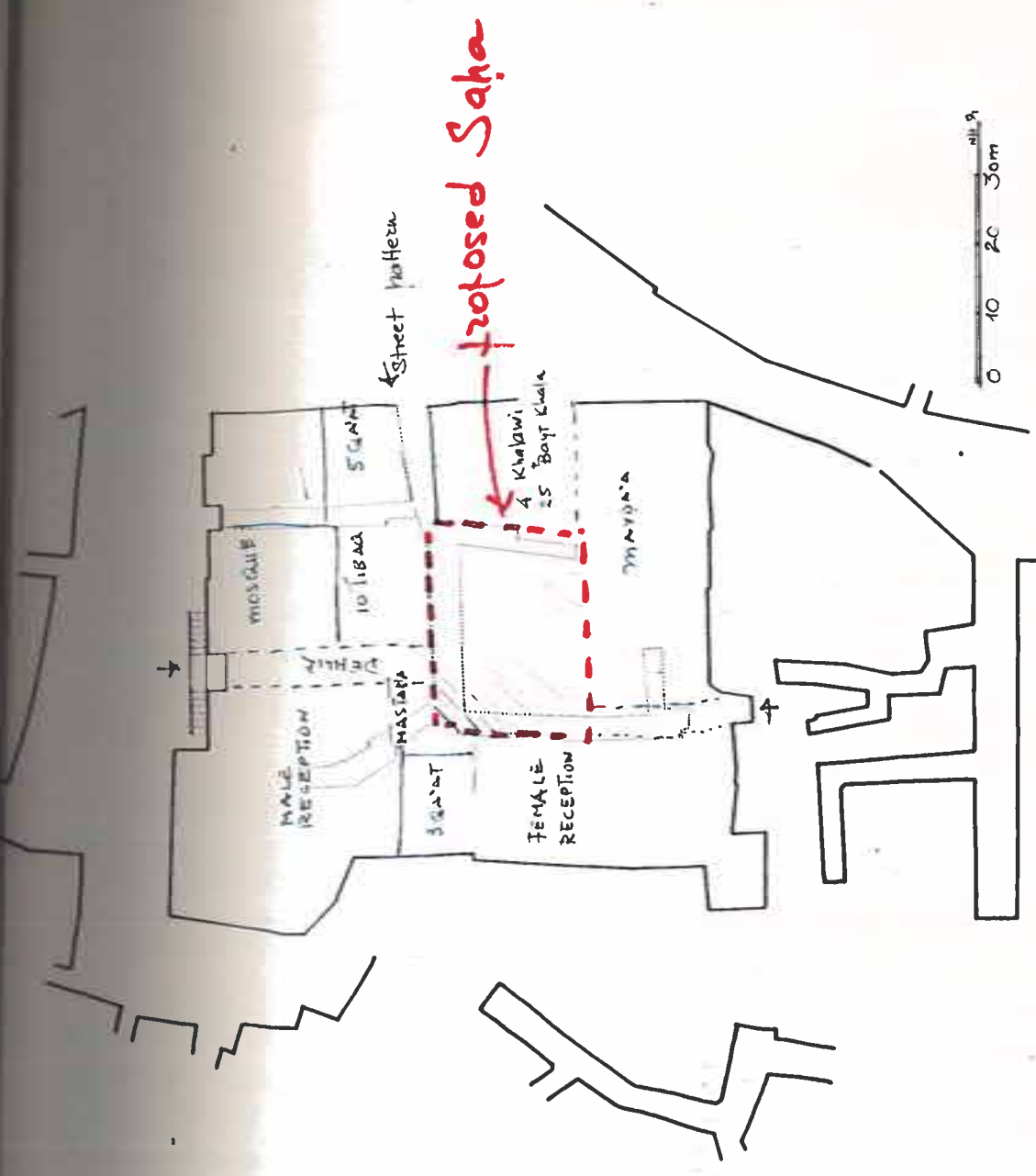


Fig. 24 A sketch showing our scheme of reconstruction in this stage

CHAPTER THREE

URBAN SURVEY OF THE AREA AROUND THE REMAINS OF THE BIMARISTĀN OF AL-MU'AYYAD SHAYKH

The examination of the waqfiyya document of al-Mu'ayyad Shaykh reveals that the original borders of the bimāristān lay far beyond the frontiers of the existing monument. In the previous Chapter theoretical borders were developed. The purpose of this Chapter will be the investigation of the area surrounding the bimāristān in search of any clues which can throw new light and help trace the reconstruction silhouette of the original bimāristān. The need to detect any remains of the bimāristān gave us the opportunity to carry out a complete survey of this portion of Islamic Cairo, which leads us to yet another aspect of no less importance than our main target - that of the urban problems of Islamic Cairo which is usually discussed on the basis of general observations, but seldom on any real survey.

As the complete survey of Islamic Cairo becomes more and more urgent, as mentioned in the Introduction to this thesis, we hope that the relatively small surveyed area in this Chapter brings its humble participation to that tremendous task.

The area surveyed is chosen on the basis of including the possible borders of the bimāristān discussed in the previous Chapter with the addition of a safety margin. It has an area approximately 15000 sq. meters and is bounded by sikkat al-Mahjar from the south, shari' al-Mahjar and sikkat al-Kūmi from the east, ʿatfat al-Labbāna and its new extension from the north, and darb al-Labbāna and sikkat darb al-Labbāna in the east.

A complete photographic survey is thus necessary which permits our observations on:

1. the street pattern and the historical background of the area accompanied by maps
2. the age of the buildings
3. the height of the buildings, and
4. the ground floor use
5. general conclusions
6. some architectural details which could have belonged to the bimāristān, accompanied by a map showing their location in the area.

Section One

PHOTOGRAPHIC SURVEY OF THE AREA AROUND THE BIMARISTAN

The area under survey lies at the southern end of Islamic Cairo on the northern skirts of the Citadel (Fig. 25). In order to facilitate both the process of surveying and presenting the results, the streets of the area are divided into four groups (Figs. 26-27):

A. The outermost (peripheral) streets (sikkat al-Mahjar, shari' al-Mahjar, sikkat al-Kūmi, new passage, 'atfat al-Labbāna, darb al-Labbāna, zuqāq al-Durqāh and sikkat darb al-Labbāna).

B. The area SW of the bimāristān (darb al-Māristān, zuqāq al-Māristān, zuqāq bāb al-Sirr, hārat al-Māristān and zuqāq Lāun).

C. The area NW of the bimāristān (darb al-Sūkkari, zuqāq al-'Aziz, 'Uthmān, 'atfat Yāssin and 'atfat al-Sūkkari).

D. The southern area facing the Citadel ('atfat Wālda Pāshā, hārat al-Hakim, zuqāq Khusrāuan and 'atfat al-Hakim).

The survey in the thesis deals only with physical features as further population, service, transportation and psychological aspects are not in our focus. Moreover, tackling all these urban problems will create a complete deviation from our main aim. Nevertheless, we hope to consider them in full detail during a subsequent study.

First of all, a complete photographic survey of the existing buildings in the area will be presented, street by street (Pls. 77- 96). This will be accompanied by a table for each street with basic information about each building.

The only survey of the area was carried out by the Survey Department in 1945 (Fig. 26 shows map No. 143 and a portion of map No. 144 which complete the area under examination in this thesis). The present survey led us prepare the actual map of the area (Fig. 27). To make the later analytic conclusion easier, a series of facts is traced on the actual map of the area.

- Fig. 28 shows the present street pattern
- Fig. 29 shows the age of the buildings, while
- Fig. 30 shows the height of the buildings, and finally,
- Fig. 31 shows the ground floor use of the buildings.

As a step further, Fig. 32 gathers the information in one table, while Figs. 33 and 34 demonstrate graphically the results mentioned above.

The analytic conclusions will be possible only after terminating this physical survey of the area.

(N.B. Some abbreviations are used in the tables and lists :

DEST..... destroyed or ruined buildings

MON..... monument

sh. shop

mech. car repair

spm. supermarket

hab. habitation area

light ind..... light industries based on aluminium, copper, and tin)

Section Two

ANALYTIC OBSERVATIONS

1. The Street Pattern

Comparing the actual street pattern with that in the map of 1945, we notice the following changes (Fig.35):

1. New constructions often leave an empty margin and break the street alignment inwards. This results in the enlargement of the width of the street confronting these new constructions. This is a serious problem, as in time the medieval street pattern comes under

the threat of complete deformation (Cases A, B, C, D, E, F, G, J which are superimposed on Fig. 35).

2. Zuqāq al-ʿAziz ʿUthmān is completely blocked and is used as an area for storage of wood (Case K and Pl. 90). This is one of the tricks in Cairo to establish ownership by force (wadi' al-yadd). Eventually, the owner of the store claims his ownership over this portion of the land. Afterwards he will start constructing a first floor, and so on. The result could be the erection of an illegal high rise building in an historical area.

3. A new passage is opened through the ruined building in the northern end of the area connecting ʿatfat al-Labbāna with sikkat al-Kūmi. The passage is created by the erection of a set of illegal workshops (aluminium, tin, wood) which are built haphazardly with cheap material (Case H).

4. Darb Rifʿat (Case I) no longer exists as it falls in the centre of a completely ruined area- an endangered territory ready for building high rise constructions.

5. The street pattern in Area B has undergone no change. It is worth analyzing the spot in search of the reason behind this fact.

The three maps in Fig. 36 represent respectively Cairo in 1821, 1913 and 1945. Area B appears on the three maps, while Area C is visible on the 1913 and 1945 maps of Cairo. This explains the need for taking urgent steps towards rescuing part B of the area under examination which has been left unchanged for at least 170 years. Area D has undergone great changes. This is obvious from its artificial physical texture. Shariʿ al-Mahjar must have also changed its whole physical appearance because of the changes in the Citadel itself. Fig. 37 shows a reconstruction of the Southern enclosure of the Citadel under the Mamluks. By tracing these borders on the actual plan of the Citadel (Fig. 38), we notice the basic changes in shariʿ al-Mahjar since the Mamlūk era⁶⁰. The hypothetical reconstruction of this area

⁶⁰The two maps are taken from Lyster William, The Citadel of Cairo, 1990 Cairo, p.18 and the general plan at the end of the book.

in al-Mu'ayyad's period will be presented in the last Chapter of this thesis.

2. The age of the buildings

The buildings fall into four categories :

A. Medieval and post-medieval monuments :

1. The bimāristān of al-Mu'ayyad Shaykh built in 821-23 H, 1418-20 AD (mon. No. 257) [The monument under examination in our thesis].

2. Bāb tikkiyyat and zāwiyyat Thaqī al- Dīn al-Bastāmi built in 847 H-1443 AD (mon. No. 326) and the gate of darb al-Labbāna built in 8th c. H-14th c. AD (mon. No. 325) [Pl. 97 a-c].

3. Qubbat al-Sultān Abū Sa'īd Qansūh built in 904 H-1499 AD (mon. No. 164) [Pl. 98].

4. Qubbat al-Kūmī built in 10th c. H, 16th c. AD (mon. No. 256) [Pl. 99].

5. Ḍarīḥ al- Anṣārī - an unlisted monument of the Turkish period [Pl. 100].

The area once included two other monuments : The mosque of Abū Ghaliya al-Sukkārī and the zāwiyyat and ḍarīḥ of Ḥasan al-Shashtārī. The first was demolished by the Comité as previously explained (pp. 19-21 supra), while the second lies in complete ruins. Fortunately, the Comité had prepared all the drawings of the first monument before demolishing it.

In this thesis a photographic survey of the various parts of each monument must suffice. I hope to examine them fully in a subsequent more detailed study of the area.

B. Dwelling units built during the last two centuries with traditional materials.

The buildings under this category are divided into three sub-groups:

1. Brick constructions which are not more than two floors. The buildings bear an organic feature being irregular both in plan and in elevation. Most probably these are the oldest existing habitation units. They are reminiscent of the 17th and 18th c. Ottoman houses; they may be later imitations. They are 6 in number and have general characteristics : an irregular pattern of openings, externally plastered, and a second protruding floor on a wooden corbel (Pls. 84b 3, 84c 4, 88a

2, 88b 3' and 8', 91b 8). One of these buildings (Pl. 88b 3) has an internal courtyard.

2. In this type the first floors are made in stone and are surmounted by brick ones (to a maximum of three). These are 20 in number and can be considered as a developed type of the first type. The stone foundation allows higher vertical expansion (Pls. 77b 16, 18; 79a 2; 79b 12, 14, and 16; 82b 21; 82c 2; 84b 7 and 11; 84c 14 and 16; 86 3; 88 4; 88b 13; 89 17, 16, and 14; and 91b 4 and 6). They were most probably built during the first half of the 19th century. Some of these buildings have elaborate entrance gates (Pl. 101).

3. A third type of dwelling units are those built completely in stone (Pls. 77a 10 and 84b 9a). They belong to an earlier period, most probably the Ottoman era.

4. The area has two samples of a fourth type belonging to the early twentieth century. Constructionally, they belong to the second type, but they bear fine European stucco decorations on their facades. The type represents the local mixed Islamic-European style (Pls. 93 3, 5 and 102).

C. New buildings of concrete skeletons and brick bodies (Pls. 79b 20; 82c 1 and 3; 85 3; 88b 5; 89a 1; 89b 10; 91b 10 and 92b 6). This is the category which threatens the traditional texture of the Islamic city.

D. Kharābas, which mean dilapidated or destroyed areas. One must consider them nothing but future C type buildings as each of them after a short time will be a ready ground for the erection of a new concrete building.

The age survey of the buildings in the area shows the following results:

1. The area includes 30 new and 58 old buildings. The destroyed kharabas, 28 in number, will soon join the total number of the new buildings. Thus, in the near future the area will have 58 new and 58 old buildings (50 %), which means a 50% intrusion in the historical urban fabric of the area. It is worth mentioning here that No. 1 in darb al-Sukkāri was erected in less than one year (Pl. 103).

2. The new constructions take no consideration of the site on which they are built. This is best demonstrated in the previous example which is built right across the NE facade of the bīmāristān, with no regard for the great efforts exerted by the Comité at the beginning of

the century to evacuate the approach to this majestic monument (Pl. 104).

3. Modern facades are either bare brick and concrete in texture or they are in the so-called 'Islamic style'. The first creates a monstrous presence in the heart of the harmonious old fabric, while the second represents a misinterpretation of using Islamic elements in an unsuccessful melange where neither the material nor the form correspond to the Cairene Islamic concept of facade. The result is an ugly reality (Pl. 105).

3. The height of the buildings

The height of the buildings in Islamic Cairo has become a real problem where in some instances the monuments are left under their shadow. Up to four floors is tolerable, but buildings with more than four floors are unacceptable as not only do they break the general scale of the area, but they also add tremendous pressure over the already burdened sewage, water supply, electricity, and transportation services in the historical areas. The portion of Islamic Cairo under investigation here has 6 buildings which have more than four floors (Fig. 31; in violet). It is estimated that this number will, in the near future, rise to 34 as all kharābas will soon give birth to high rise buildings, unless enforced preventive laws are established to rescue the remaining old fabric.

4. The ground floor use

The survey in this direction showed that the area under examination is starting to be contaminated by intruding light industries, while there is a general absence of basic needs as doctors, pharmacies, educational institutions, cultural centres, etc. The area still witnesses some pure habitation enclosures (Fig. 32). With the great speed of the rate of change, these also are under the threat of complete extinction.

Section three GENERAL CONCLUSIONS

The inhabitants of the area are destroying what we have come to call the human scale, by the uncritical and uncontrolled introduction of images and ideas transferred from elsewhere. One believes that certain well planned intrusions can satisfy both the inhabitants of the area as well as the preservation of the historical fabric of Islamic Cairo.

We have been told over hundreds of years what to do, and now we are trying to find what we must not do:

1. We are destroying what we have come to call the human scale, by the uncritical and uncontrolled introduction of images and ideas transferred from elsewhere. Thus we must stop the erection of any building which goes higher than four floors.

2. Stop the use of the false so called 'Islamic style' buildings and try to study the buildings of the last two centuries of Islamic Cairo (the type B mentioned in the survey), in order to develop from them, as well as from the Islamic monuments around them, an appropriate style which could be followed whenever the need for building new constructions in the area is called for.

3. Stop illegal constructions. The methods are well known to everybody, but we need the necessary laws preventing their enforcement. In our area, we came through a number of illegal actions which are all about erecting new buildings:

- a. The dilapidated area in *ʿaṭfat al-Labbāna* is being rebuilt in great secrecy where the owner of the old house is erecting new concrete constructions inside the old enclosure without legal permission - he is doing this under the pretext of undergoing 'some reparations' (Pl. 81).

- b. A similar illegal construction is on its way in *zuqāq Lāun* where the new concrete first floor sprang up in one week (Pl. 88b 11).

- c. The carpenter who created a workshop for himself in the middle of *darb al-Sukkārī*, already has a concrete ceiling in preparation for building a second floor (Pl. 89b 12).

- d. Another carpenter has started covering *zuqāq al-ʿAziz ʿOsmān* with a temporary aluminium light covering in preparation to take over the *zuqāq* and start constructions on it (Pl. 90).

e. At the end of ʿatfat al-Sukkārī, concrete beams and columns are erected to 'repair' the entrance of a one storeyed house? (Pl. 92b 8)

We mentioned these examples to show the urgent need for legal action to stop these illegal constructions which are so abundant in Islamic Cairo that it has become the normal way of doing things.

Section Four

DETECTION OF ARCHITECTURAL DETAILS WHICH COULD HAVE BELONGED TO THE BĪMĀRISTĀN

Fig. 39 demonstrates the location of some architectural remains which could have belonged once to the original texture of the bīmāristān of al-Muʿayyad Shaykh. In this section we will only hint at these areas and make a photographic survey. The last decisions will be given in the next Chapter where we will present a hypothetical reconstruction based on the material gathered through the various sections of this thesis. Therefore we will only mention here the following doubtful areas :

A. The masonry wall behind the brick wall reached from the tikkeyat Thaḡī al-Dīn al-Bastāmī (Pl 106 a).

B. The masonry detail at the left corner of zuḡāq al-Durkāh (Pl. 106b).

C. The remains of a masonry wall forming the meeting point of darb al-Māristān and zuḡāq Bāb Sīrr (Pl 106 c).

D. The blocked vaulted passage in ʿatfat al-Māristān and the big masonry blocks around it (Pl 106 d).

E. The strange masonry wall on shariʿ al-Mahjar between No. 18 and 20 (Pl 106 e).

Having produced yet another piece of the puzzle of the original borders of the bīmāristān, we will try to get all the pieces together and theoretically reconstruct the building.

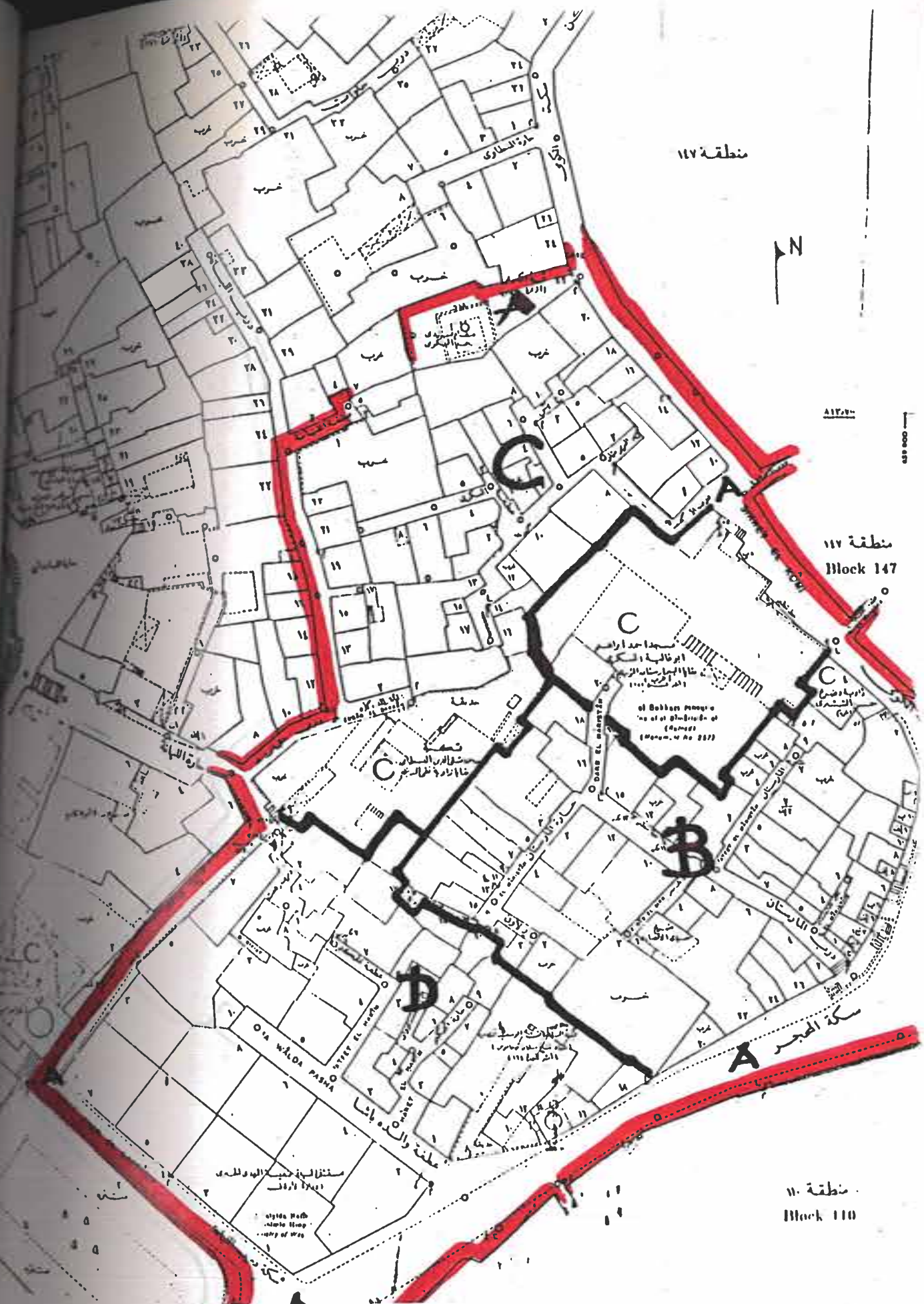


Fig. 26 The surveyed area (1:1000)
[maps No 143 and a portion No 144 prepared by The Egyptian Survey
Department in 1945]

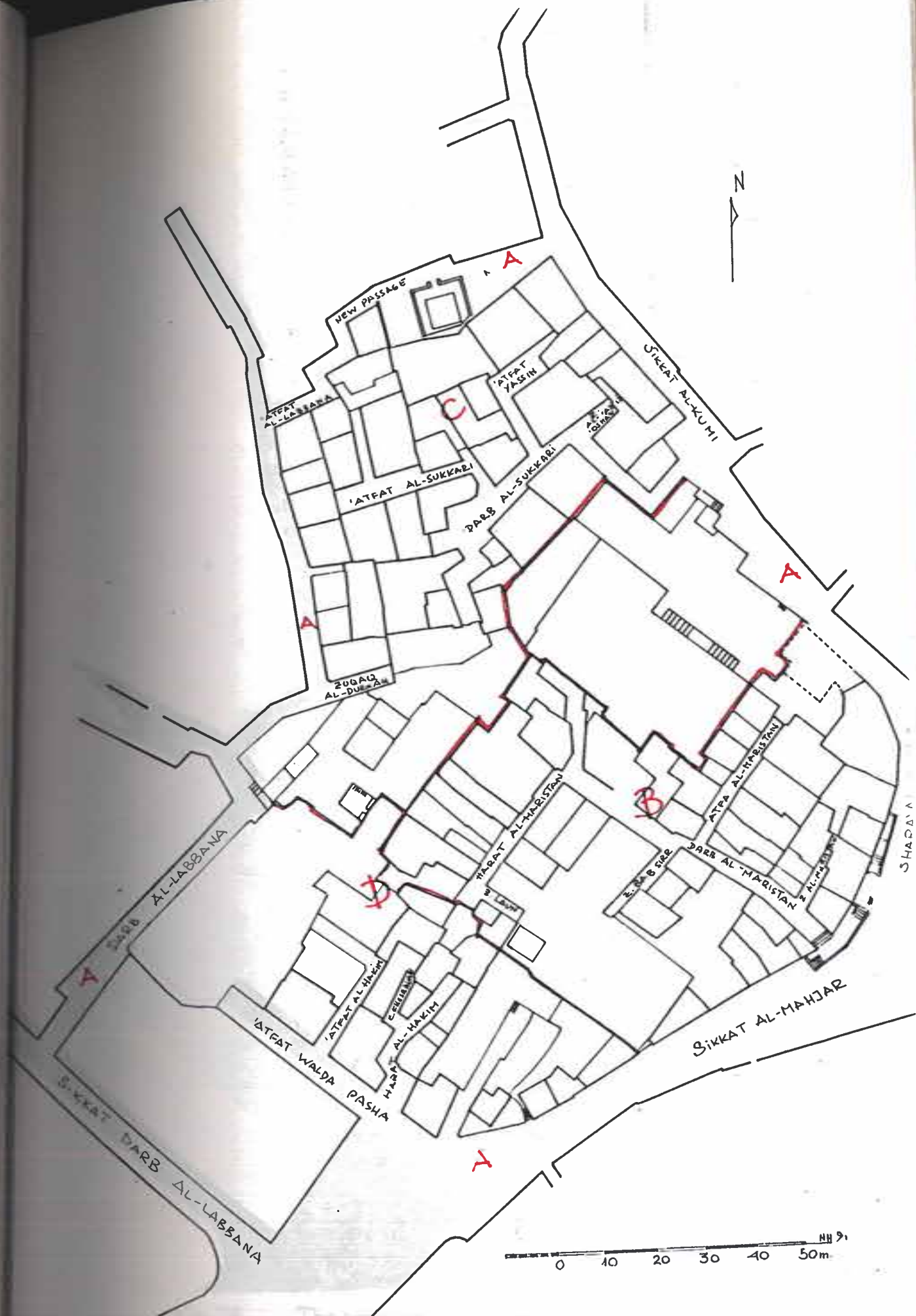


Fig. 27 The actual map of the area-1991(1:1000)

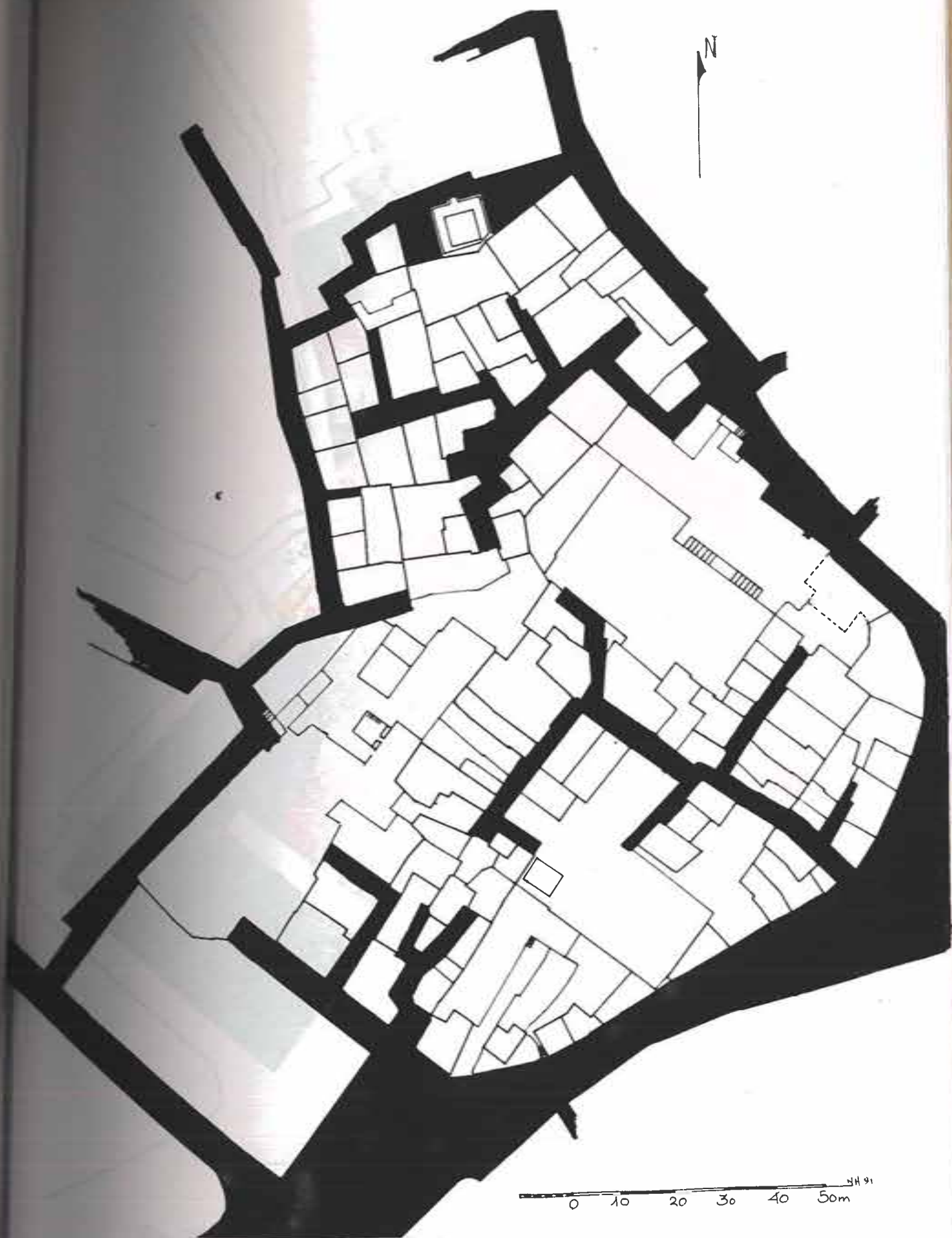


Fig. 28 The actual street pattern-1991(1:1000)

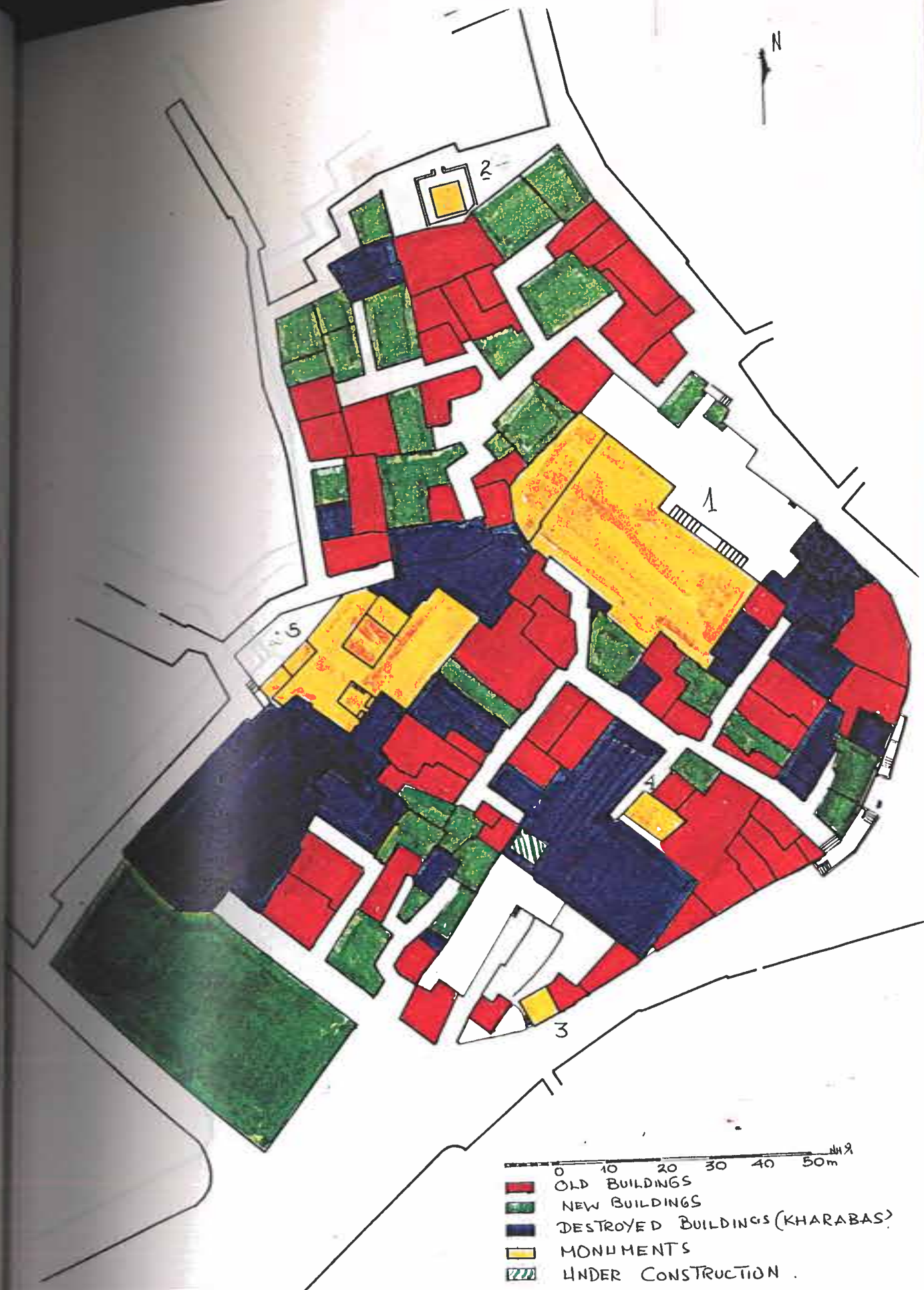


Fig. 29

The actual age of the buildings-1991(1: 1000)



Fig. 30

The actual height of the buildings-1991(1:1000)

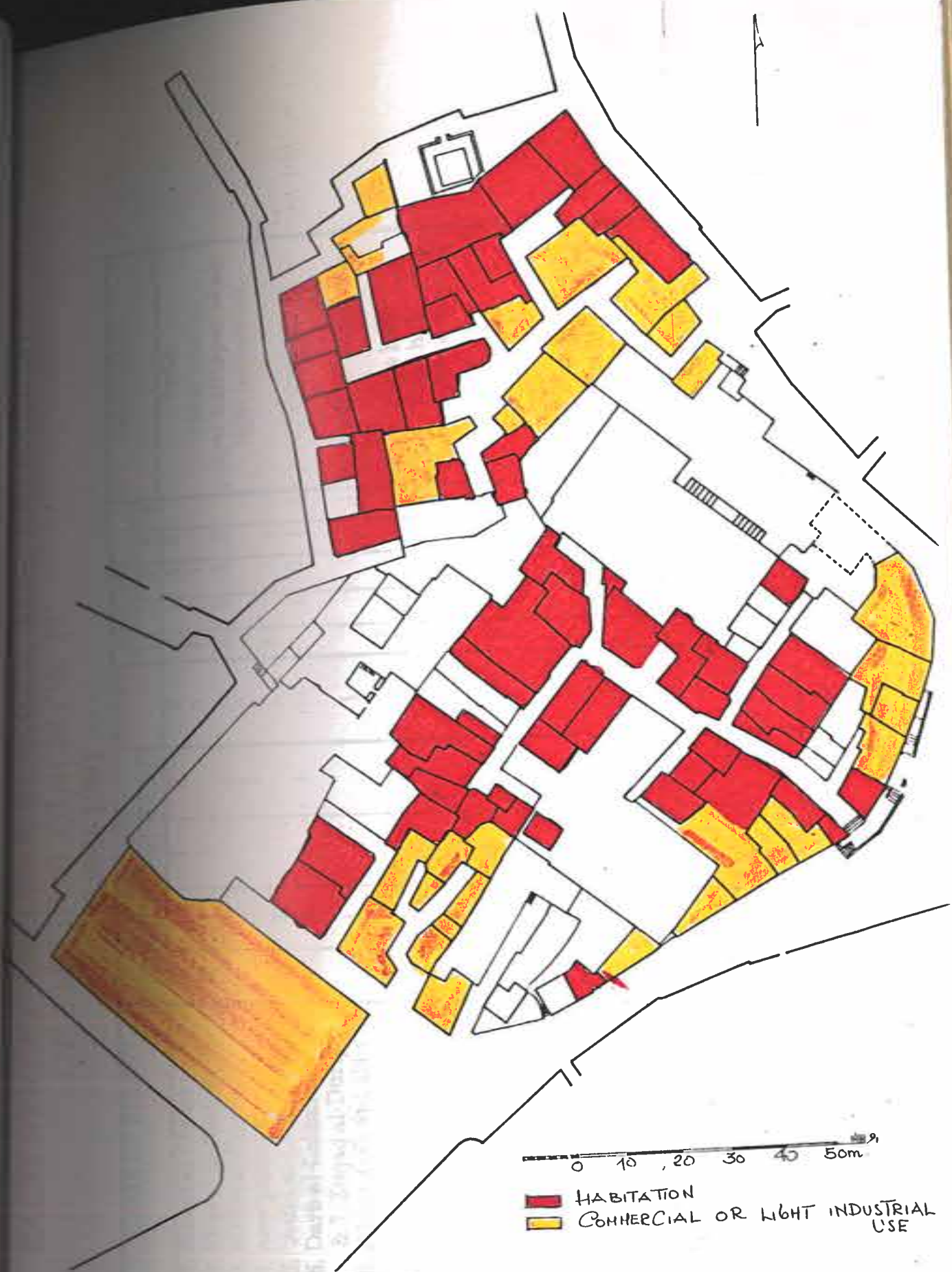


Fig. 31

The actual ground floor use of the buildings-1991
(1:1000)

EACH STREET AND THE NUMBER, AGE, AND HEIGHT OF THE BUILDINGS ON IT 1990-1991

AREA	NAME OF STREET	NO. OF HOUSES		TOTAL HEIGHT	GR. FLOOR						
		OLD	NEW								
A	1. Sikket al-Mahjar	7	1	8	7 shs.						
	2. Shara' al-Mahjar	2	1	3	3 shs. \ mech.						
	3. Sikket al-Komi	7	1	8	prayer hall \ spm. \ 4 sh.						
	4. new passage			0	light industries						
	5. 'Atfat al-Labbana			2							
	6. Darb al-Labbana	4	4	12	Pure hab.						
	& 7. Zuqaq al-Durqah										
	8. Sikket darb al-Labbana		1	1	14 w. shs. \ 7 comm. shs.						
B	9. Darb al-Maristan	10	4	18	Pure hab.						
	10. Zuqaq al-Maristan		2	3	Pure hab.						
	11. 'Atfat al-Maristan	2	5	9	Pure hab. \ pottery sh.						
	12. Zuqaq bab al-Serr	2	1	3	Pure hab.						
	13. Harat al-Maristan	6	5	14	Pure hab.						
	& 14. Zuqaq Laun										
C	15. Darb al-Sukkari	4	4	9	5 shs.						
	16. Zuqaq al-Aziz 'Osman			0	Storage						
	17. 'Atfet Yassin	3	2	5	Pure hab.						
	18. 'Atfet al-Sukkari	4	2	7	Pure hab.						
D	19. 'Atfet Walda Pasha	2	1	4	hab. \ light ind.						
	20. Harat al-Hakim	2	3	6	hab. \ light ind.						
	21. Zuqaq Khusrauan			0	light ind.						
	22. 'Atfet al-Hakim	3	1	4	hab.						
TOTAL		58	30	28	5	116	20	25	26	12	5

Fig. 32 Table with the complete information on the area

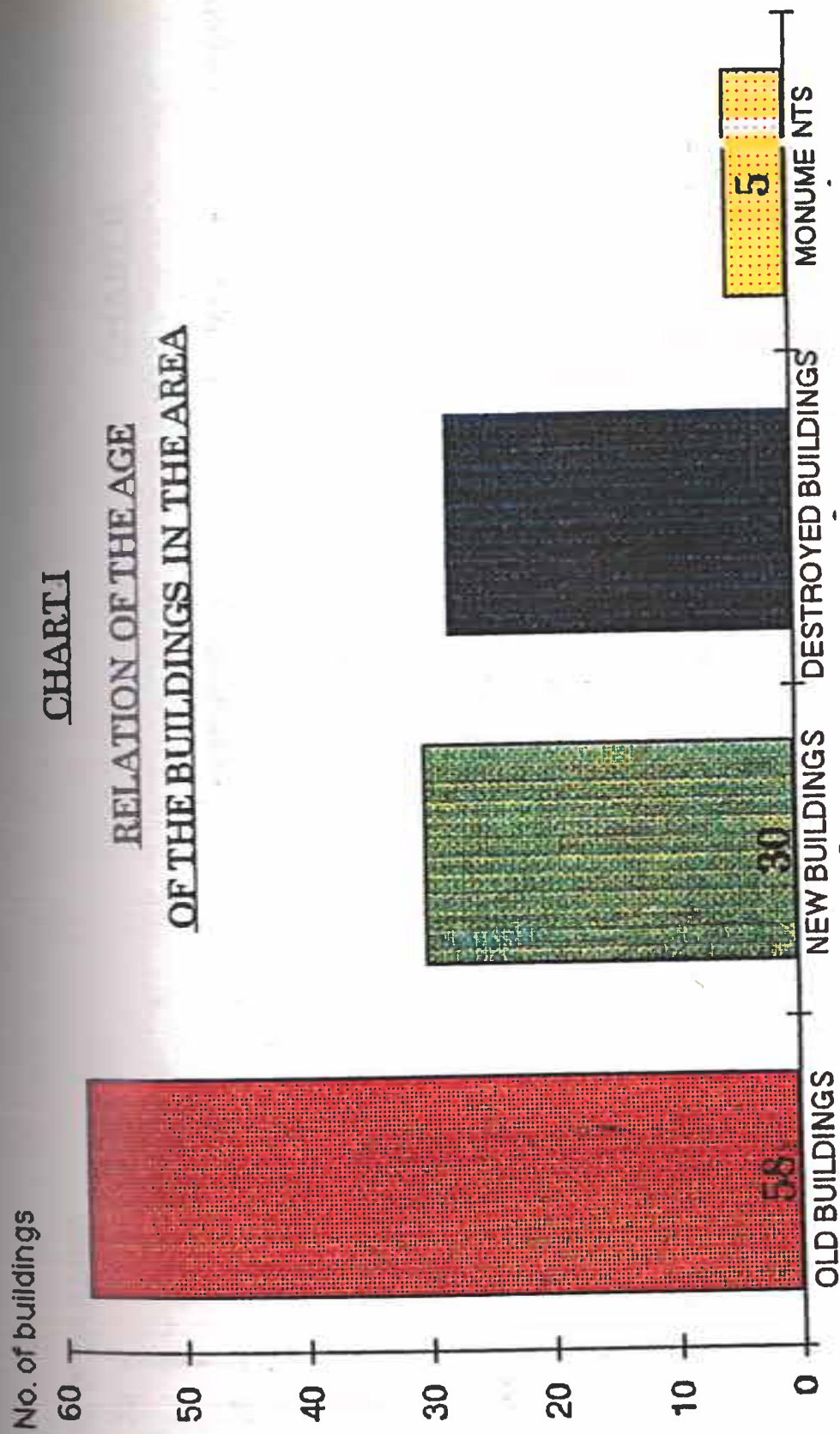


Fig. 33 Graph showing the relation between the No of the buildings and their age (1991)

No. OF BUILDINGS

CHART II

RELATION OF THE HEIGHTS OF THE BUILDINGS IN THE AREA (88 BUILDINGS)

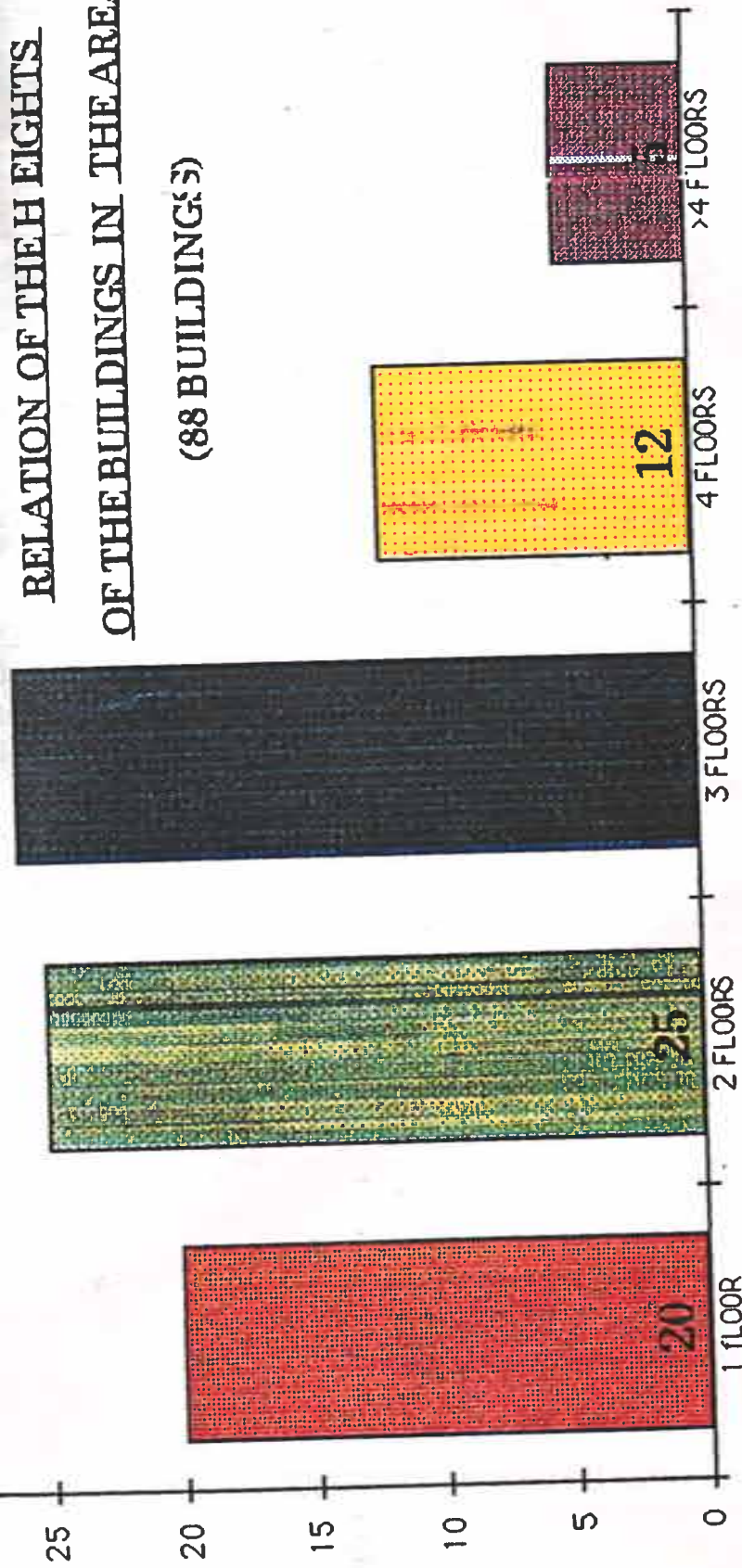


Fig. 34 Graph showing the relation between the No of the buildings and their heights (1991)

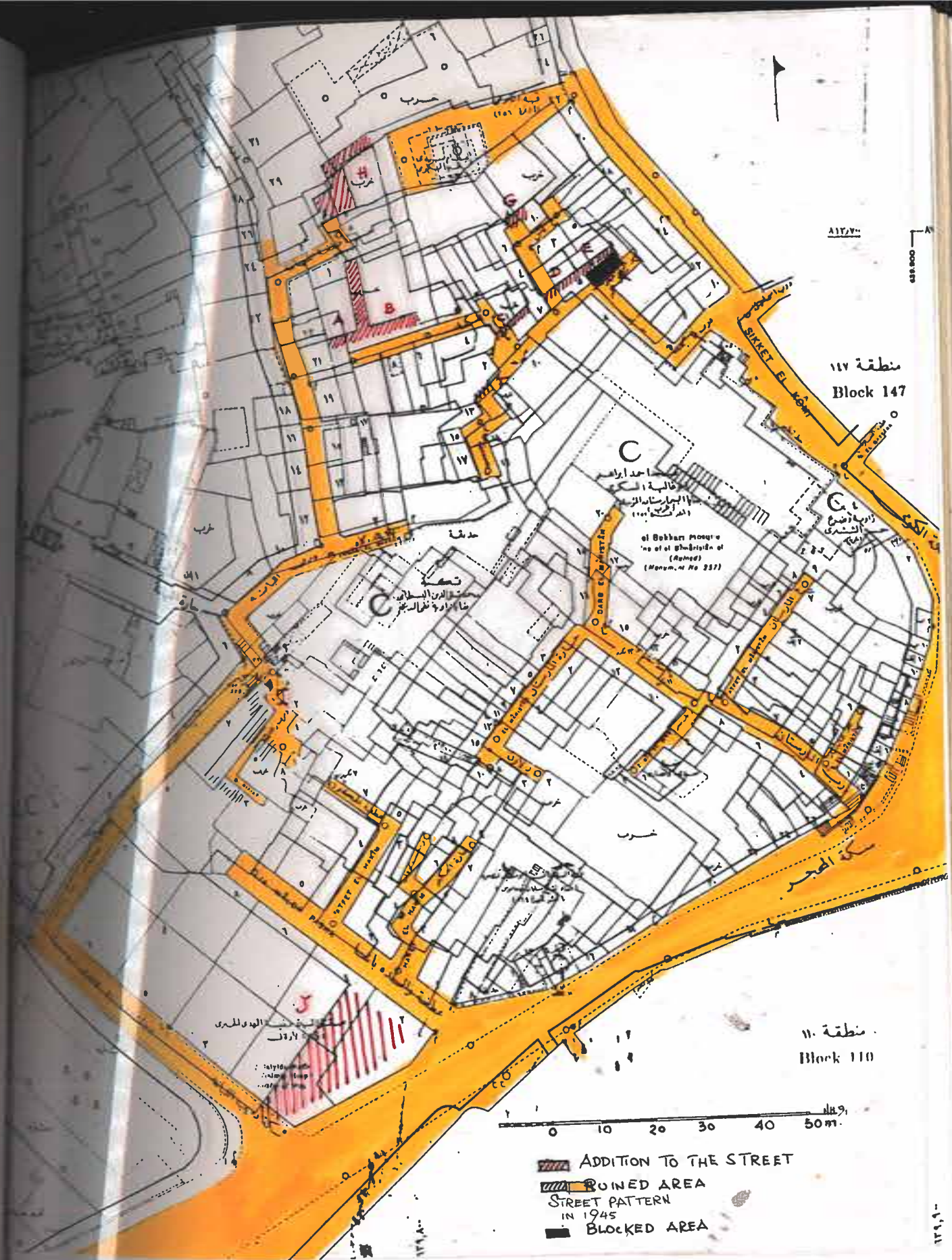
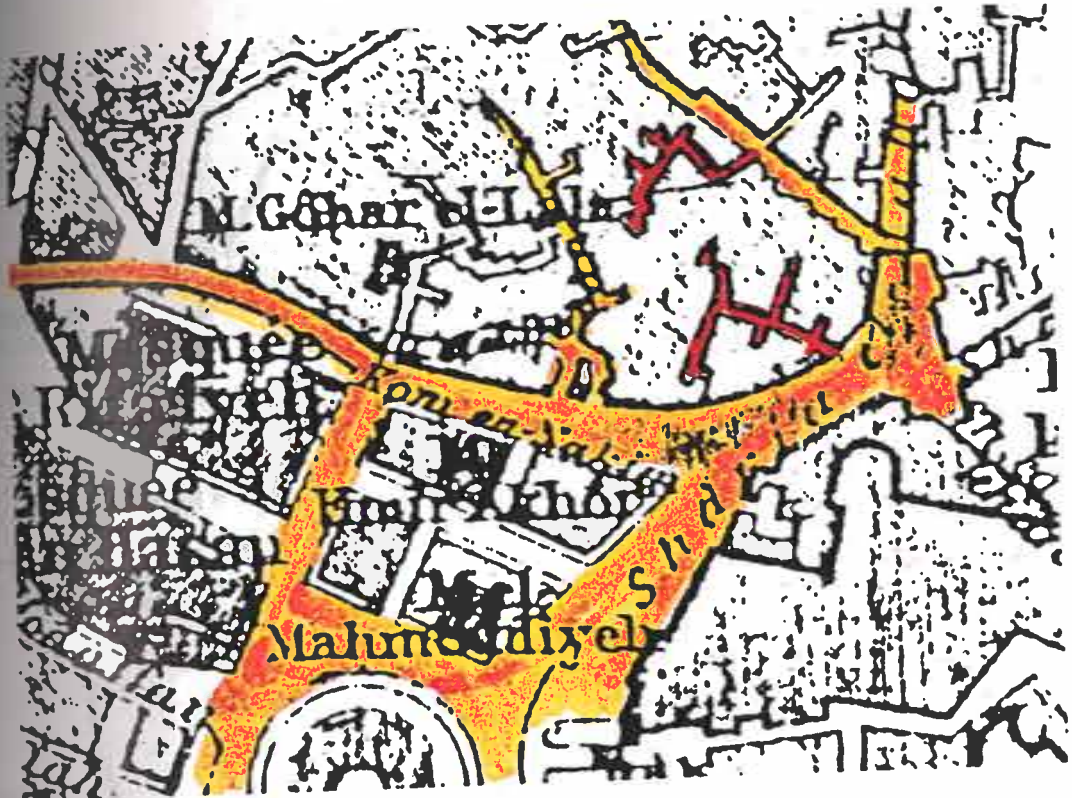
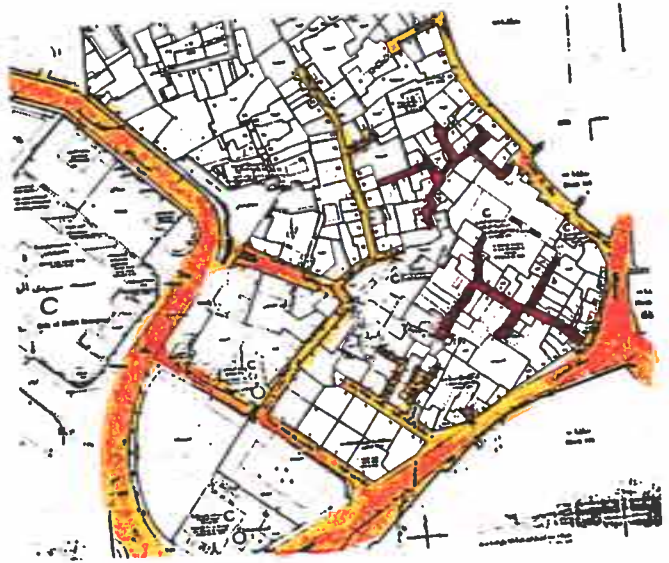


Fig. 35 Change in street pattern between 1945 and 1991

1821
Description d'Égypte
Gomart



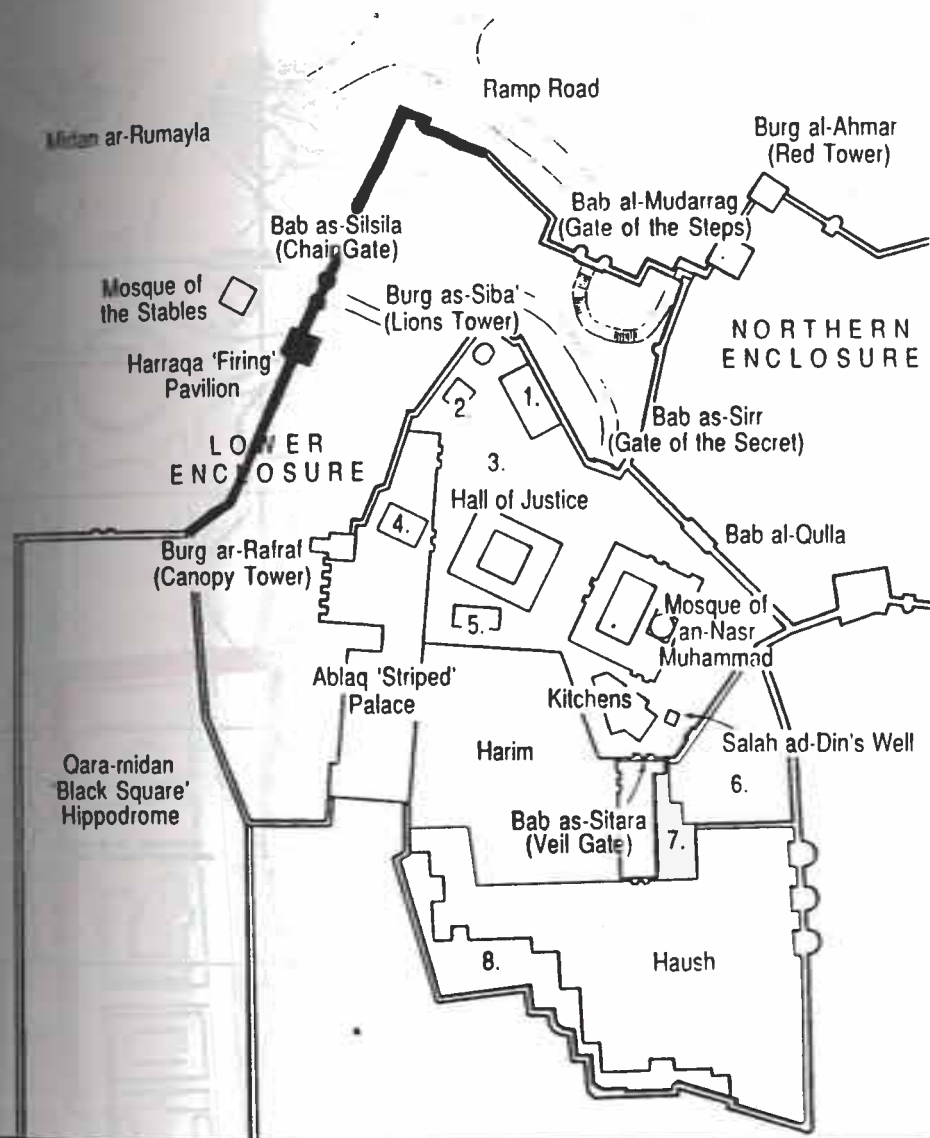
1931
From Velkoff Oleg,
"1000 Jahre Kairo"



1945
(Fg. Survey Dep)

Fig. 36

Maps of Cairo in different periods focused on the area under examination



The Southern Enclosure under the Mamluks

KEY

- | | |
|------------------------------------|------------------------------------|
| 1. Barracks of Palace Guard | 5. Arsenal |
| 2. Treasury | 6. Cattle Stockade |
| 3. Rahbat al-Hamra (Red Court) | 7. Eunuchs' Quarters |
| 4. Surviving Liwan of Ablaq Palace | 8. Palaces of Qa'it Bay & al-Ghuri |

Fig. 37 Map of the Southern enclosure of the Citadel under the Mamluks (from Lyster William, *The Citadel of Cairo*)

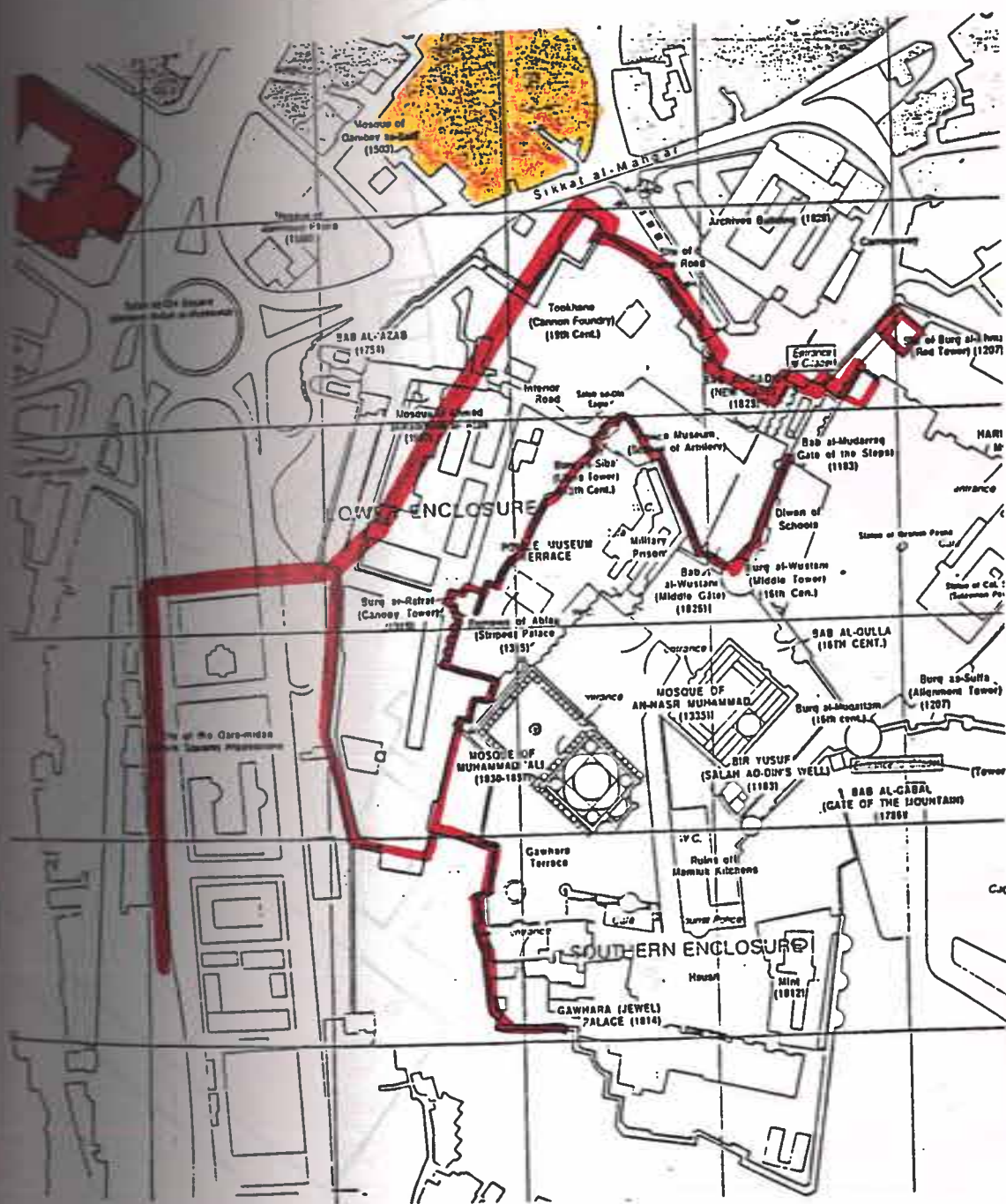


Fig. 38

The actual plan of the Citadel (from Lyster William, The Citadel of Cairo), with the borders of the Southern enclosure under the Mamlûks traced in red

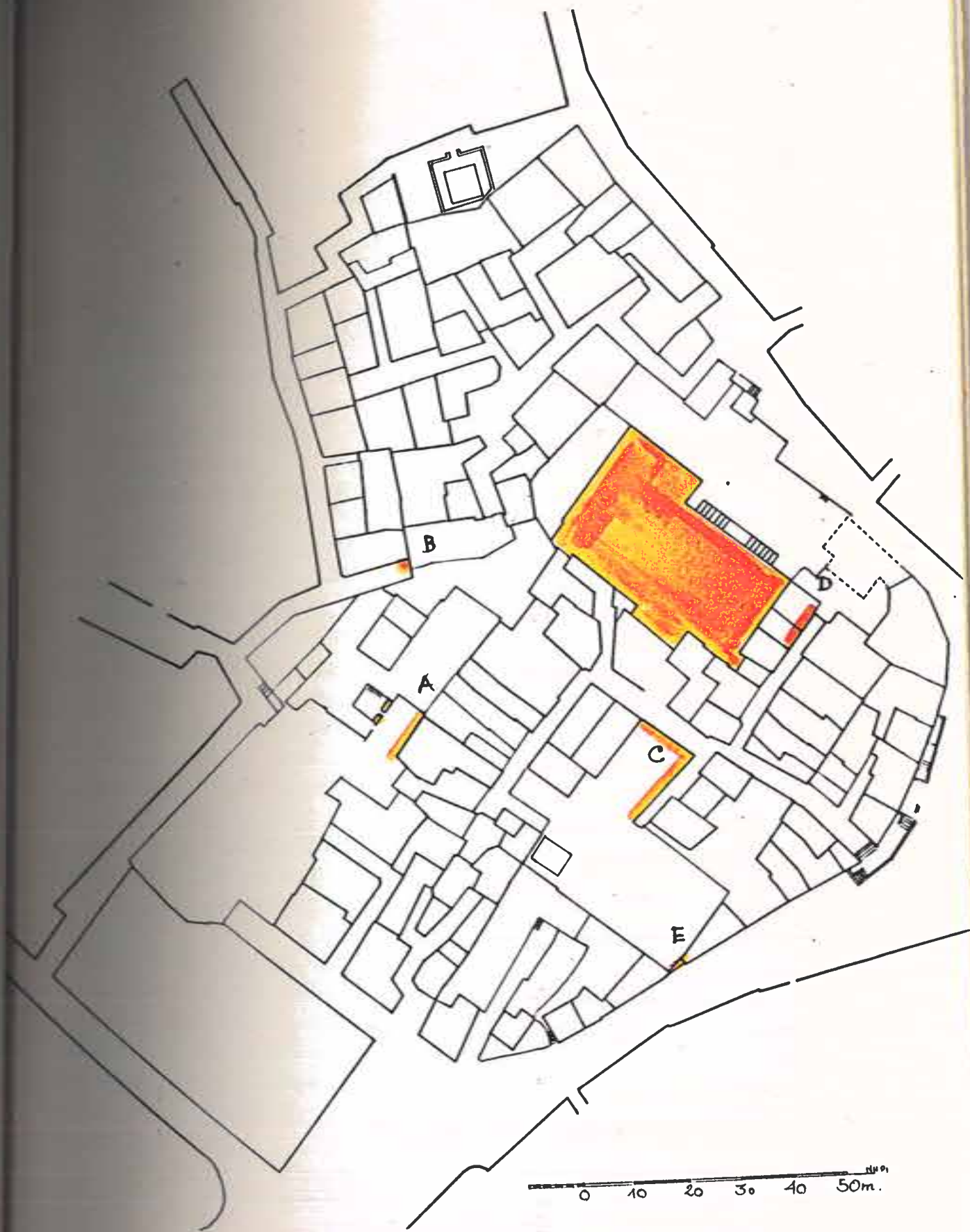


Fig. 39

Map showing some remnants of the bīmāristān in the area

CHAPTER FOUR

RECONSTRUCTION OF THE BĪMĀRISTĀN

From the study of the waqfiyya document of al-Mu'ayyad Shaykh and a thorough examination of some of the remains, we will try to reconstruct the original borders of the bīmāristān.

Figs. 40-41 show the different steps which were taken towards such a reconstruction:

- The map of the southern enclosure of the Citadel referred to in Chapter Three coincides with the NE-SW axis of the building. Judging from the personality of Sultān al-Mu'ayyad and from the site possibilities, we assume that Mu'ayyad Shaykh created his bīmāristān on the NE side of the maydān al-Rumaylā in order to compete with the then existing madrasa mausoleum of al-Sultān Ḥasan. This could be one of the possible reasons which made the Sultān choose this particular site to erect so monumental a construction.

- The location of the bāb al-Sirr mentioned in the waqfiyya could not coincide with the present zuqāq bāb al-Sirr. Instead, we assume that this gate existed on the ruins of No. 10 of darb al-Māristān. Consequently, we assume that the dihliz must have extended further than the present borders of the remains of the bīmāristān, ending in bāb al-Sirr and leading to the saha.

- The area of the saha mentioned in lines 90-91 of the waqfiyya is traced in Fig. 41. On the other hand, the two remnants examined in the previous Chapter and shown in yellow in Fig. 41 confirm that they represent the NW-SE borders of the original bīmāristān. The distance between them is 63.00 meters which is nearly equal to the 115 zira' mentioned in the waqfiyya. Therefore, we conclude that the saha mentioned in the waqfiyya document is not an open space, but one within which the other elements of the original elements of the bīmāristān were built.

- By adding the other dimension of the saha (100 zira' which is the equivalent of nearly 52.00 meters) as mentioned in the waqfiyya

document, we have reconstructed the SW border of the original bimāristān.

- On examining the block inclosed by zuqāq bāb al-Sirr, the central part of darb al-Māristān, hārat al-Māristān and zuqāq Lāun, we believe that it was the original saha of the bimāristān, around which the other elements were distributed.

- Following the zoning map (Fig.22) which we had previously prepared according to the sequence of the various sections of the bimāristān mentioned in the waqfiyya, we have distributed these sections around the proposed saha.

- The southern corner of the reconstruction we propose protrudes from the real borders of the street alignment of sikkat al-Maṭṭar. It seems unrealistic if we follow the present street pattern, but it corresponds to the reconstructed direction of the northern walls of the southern enclosure as demonstrated on the map.

From the information gathered in Chapter One, the external appearance of the bimāristān was reconstructed with the help of an isometric view (Fig. 42), while an internal view of the original bimāristān is shown on a longitudinal sectional isometric drawing (Fig. 43). Fig. 44 represents the reconstruction of the original borders of the bimāristān according to the information gathered in the thesis.

We hope to have resurrected the building under examination in this thesis and glorified a medieval monument which was once built to honour its founder to serve the people. We wish that this study will be followed by a project of restoration and excavations in order to help the monument regain its past majestic visage.

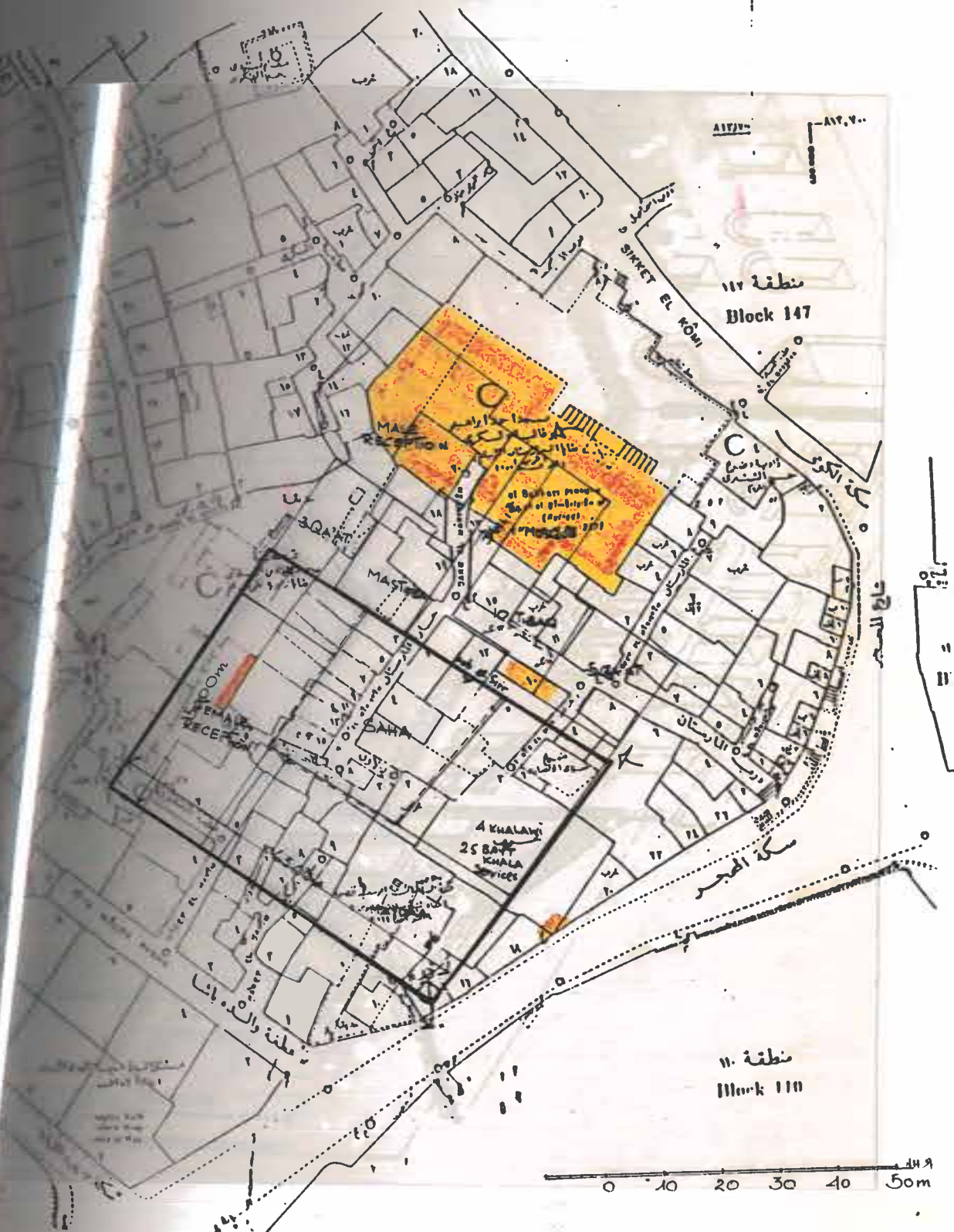
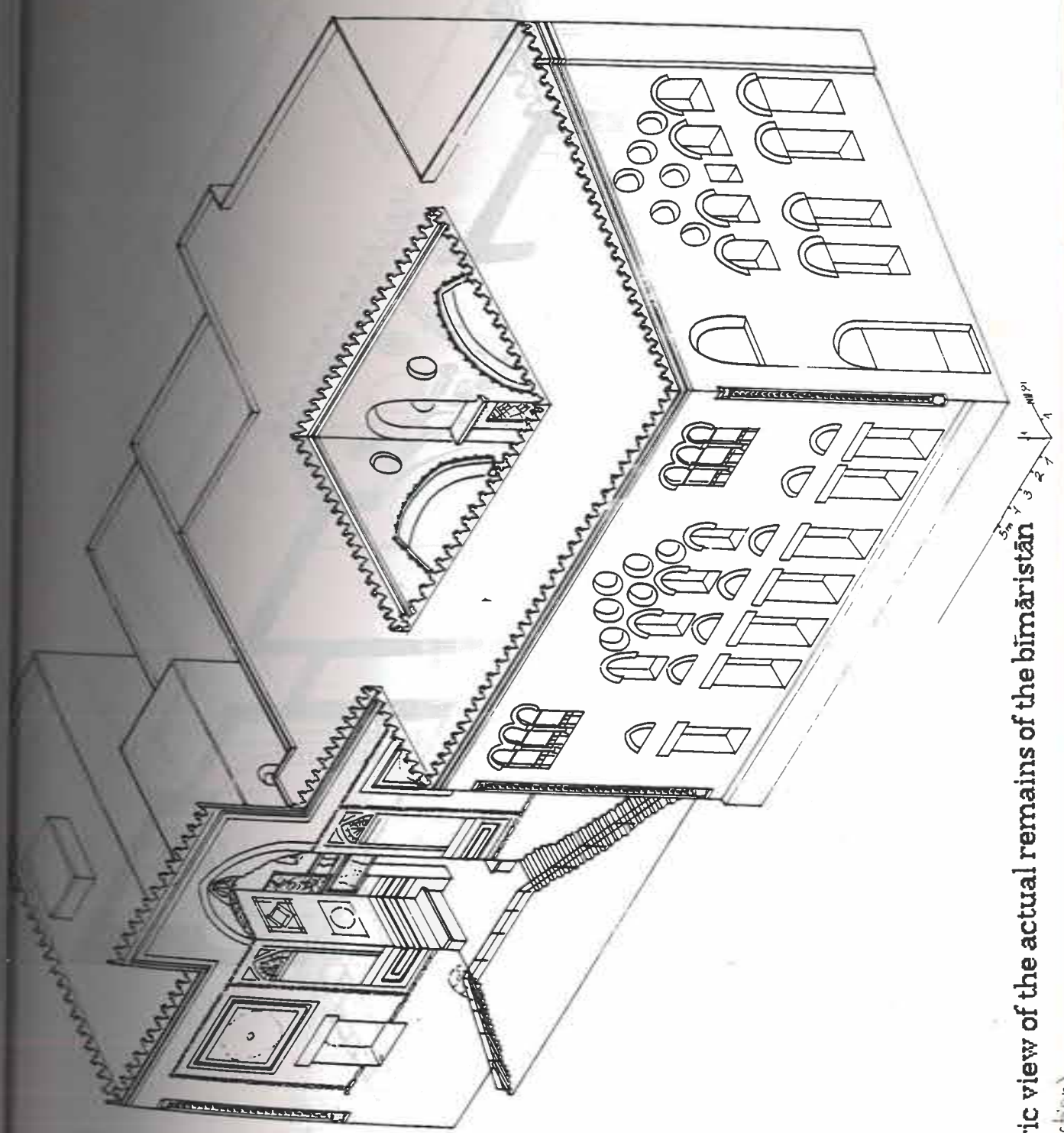


Fig. 41 Steps showing how we reconstructed the bīmāristān



3m 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Isometric view of the actual remains of the bimārīstān
(Reconstruction)

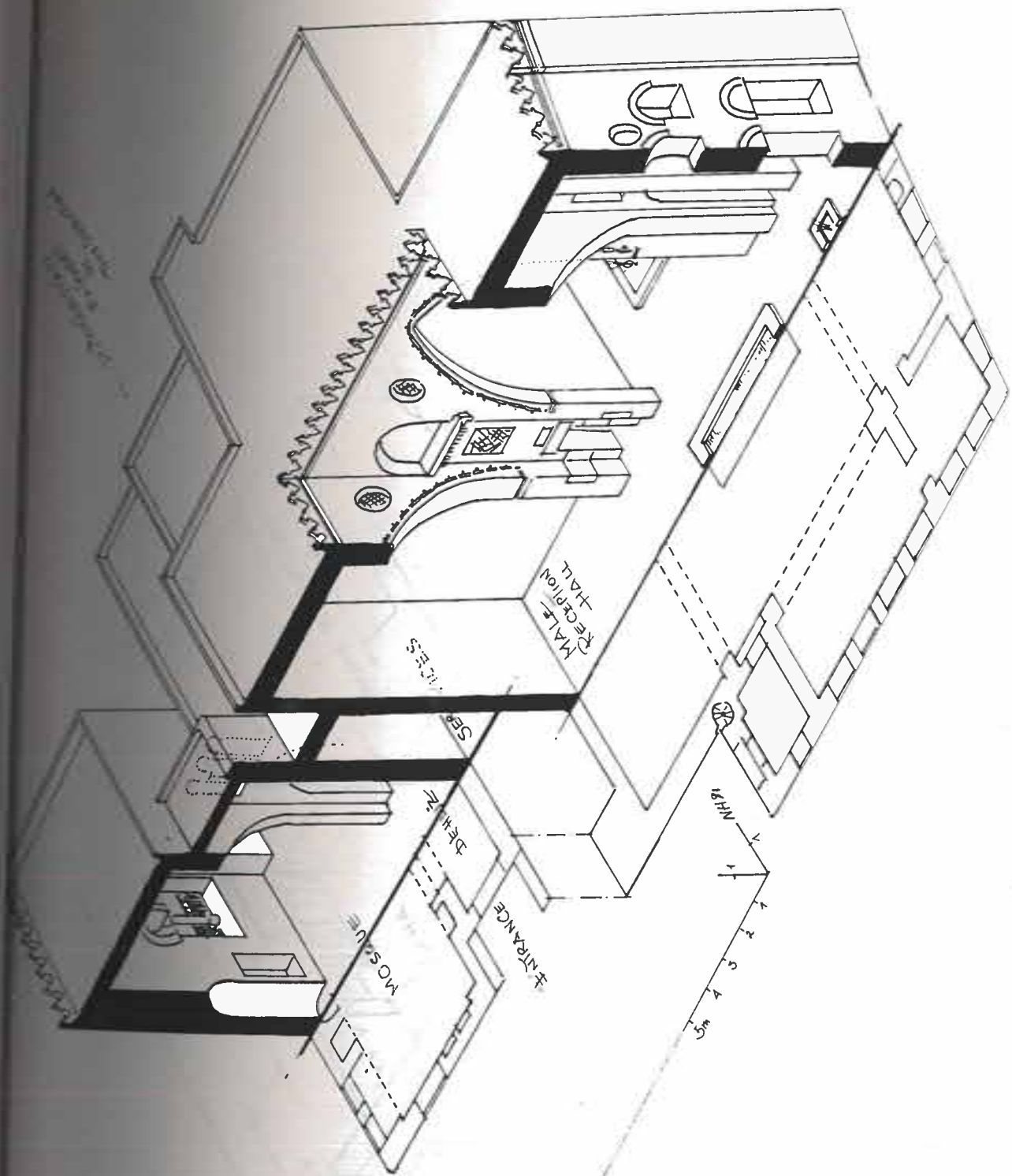


Fig. 43 Longitudinal sectional isometric view inside the bimârîstân
(Reconstruction)

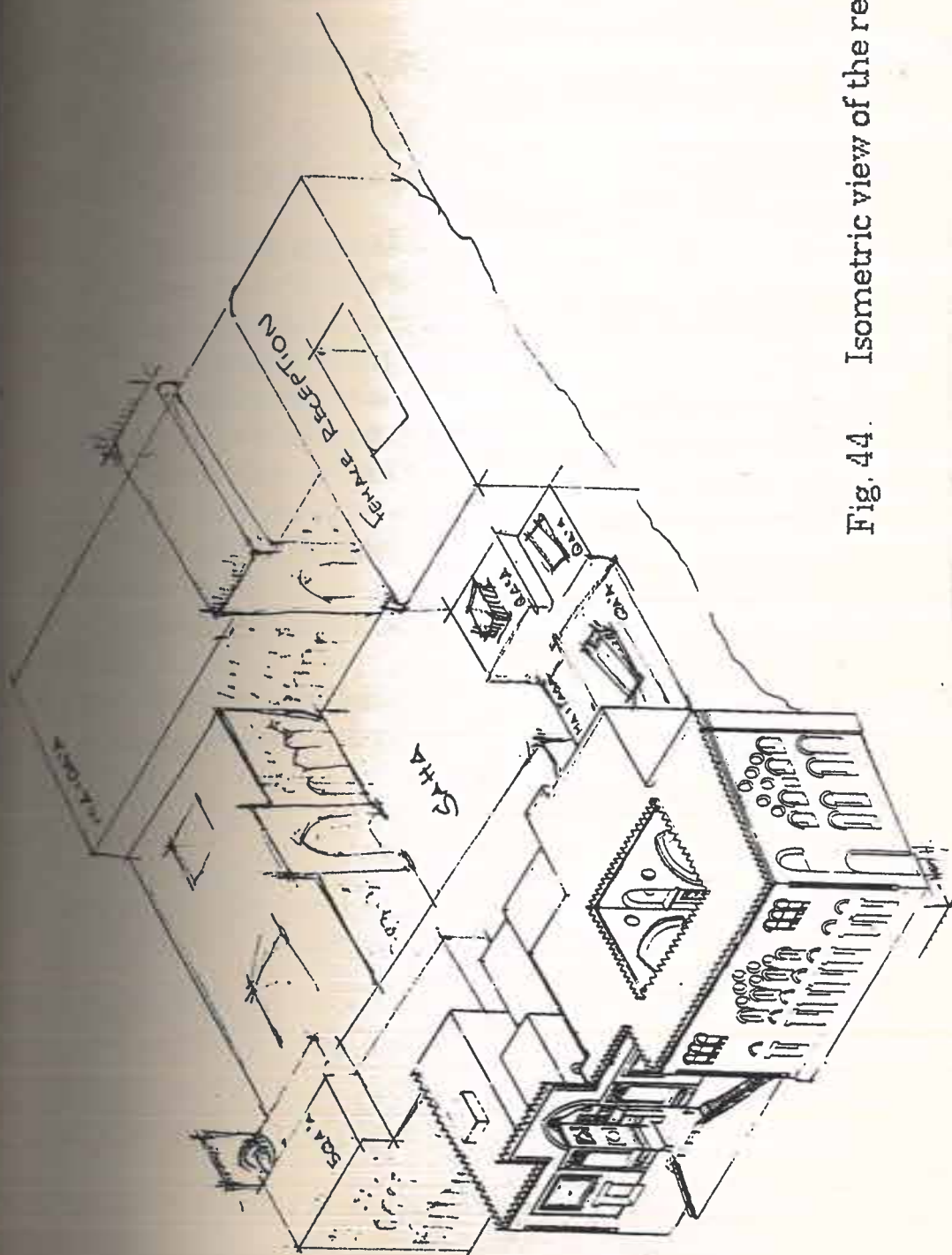


Fig. 44. Isometric view of the reconstructed bīmāristān

APPENDIX I

LIST OF THE BIMARISTANS IN EGYPT

The list is formed according to the information gathered from:

Aḥmad ʿIsā Histoire des bimāristāns (Hôpitaux) à l'époque Islamique.

Al-Maqrīzī, Kitāb al-mawāʿiz wa'l iʿtibār fi zikr al-khitat wa'l

ḡhār, and
ʿAlī Muḥarak, al-khitat al-tawfiqiyya al jadida li misr al-qāhira wa
mudunihā wa bilādiḥā al-qadima wa al-shahira.

1. Bimāristān zuqāq al-Qanādil (founder is unknown).
2. Bimāristān al-Maʿāfer - Built by al-Faṭḥ Ibn Khaqān during the reign of the Caliph al-Mutauakkil.
3. Bimāristān al-ʿAtiq - Built by Aḥmād Ibn Ṭulūn in 259 H/ 872 AD.
4. Bimāristān al-Asfal - Built by al-Khāzin in 346 H/ 959 AD.
5. Bimāristān al-Qashāshin (founder is unknown).
6. Bimāristān al-Saḡṭiyīn - Abu al- Ḥajāj transferred another bimāristān to this new location outside the Bāb al-Zuwāyla.
7. Bimāristān al-Nāṣiri or al-Ṣāliḥi - Built by al-Sultān Ṣalāḥ al-Dīn in 567 H/ 1171 AD.
8. Bimāristān in Alexandria - Built by al-Sultān Ṣalāḥ al-Dīn in 577 H/ 1180 AD.
9. Bimāristān of Qalāūn built in 682 H/ 1283 AD.
10. Bimāristān of al-Mu'ayyad Shaykh - Built in 823 H/ 1418 AD.

APPENDIX II

LINES 506-509 OF THE WAQFIYYA DOCUMENT OF

AL-MU'AYYAD SHAYKH

٥٠٦- [و الاذكار و التسبيح و الصلاة و السلام علي سيدنا محمد و آله في
الاسحار و ليالي الجمع و غيرها علي عادة المؤذنين] و اما المكان المستحد
لانشاء

٥٠٧- مرستانا المذكور فانه وقفه مرستانا و جعله معدا لماوي الضعفا و الرمد
و للمبدورين و من ابتلاه الله تعالى بمرض يمكن مداواته منه

٥٠٨- بملاطفة الاطباء المقررين بالمكان المذكور فيه من المسلمين و جعل الاماكن
التي من حقوق المكان المذكور معدة للمذكورين لكل منهم ما

٥٠٩- يناسبه علي الوجه الشرعي لاقامته فيه الي حين برئه من مرضه علي
العادة في ذلك [و اما الصهريج الكائن بظاهر القاهرة]

GLOSSARY

cafat	alley
bib	door, gate
bib sirt	hidden door in the interior of the building
balra	pool
bayt	room, closed architectural space
himristān	hospital
b'ir	well
darāwin	balustrade
darb	gate of a city quarter
darfa	window/door leaf, door
darīh	grave
dihān	colored or clear varnish
dihlīz	vestibule
durqāh	trial area
dūr	storey
fāsiyya	fountain, burial niche in collective tomb
bānūt	shop
hā'a	alley
haddūd	boundaries, limits (sing.: hadd)
huqūq	services
hwān	hall, a recessed covered space open to the center of a qa'a
khāi'āwī	(see Khilwa)
khārāba	ground with ruins; ruined building
khart	small carved wood pieces that join to form geometrical window grilles
khazāna	small room, chamber
khazā'in	(see: khazana)
khilwa	small windowless cell or room
khārqaḥ	open wooden screen

madhān	(see: dihan)
madrasa	religious college (institution and building)
maḥmūn	(see: khart)
maḥsir	dependencies
maḥṣṭān	(see: bimaristan)
maṣṭaba	built platform (usually outside a building)
mayḍ'a	ablution place
miḥrāb	niche indicating the direction of Mecca
minbar	"pulpit" in a mosque
qā'a	hall
qantara	arch
qubba	domical form
ruḥayn fi jasad	pair of small intertwining columns
sabīl	public water dispensary
sāna	open space outside (or inside) a building
saḥyā	water wheel
shā'ir	street
sharabkhāna	small room for storing drinks
shaykhūnī	type of vaulted ceiling (adj.)
shubbāk	fenestration with grilles
sikkat	pathway
sirr	(see: bāb sirr)
tabaqa	upper units (usually residential)
ṭibāq	(see: ṭabaqa)
waqf	a religious endowment which cannot be alienated. The western legal equivalent to the concept of waqf (which comes from the root meaning to stop) is mortmain.
zāwiyya	sufi institution; decorated triangular wooden corner piece; area in a mosque reserved for a Shaykh
zira'	(length unit - one zira' = 0.52 meters)
zuqāq	small alley

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943
photo

TITLE

THE BIMĀRISTĀN
OF
AL-MU'AYYAD SHAYKH

and
THE AREA AROUND IT

PLATES

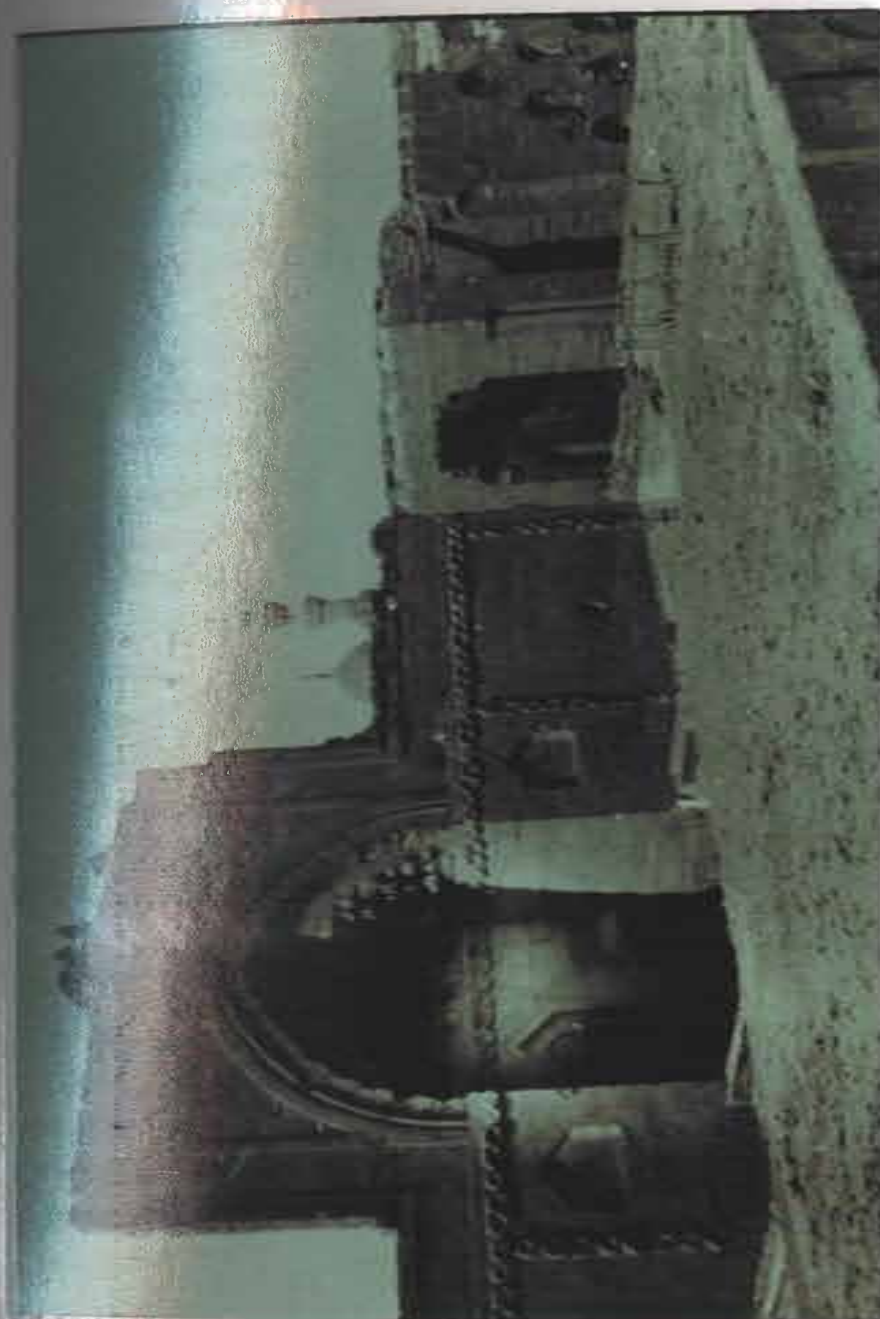
A THESIS SUBMITTED TO:

THE DEPARTMENT OF ARABIC STUDIES
OF THE
AMERICAN UNIVERSITY IN CAIRO
IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS

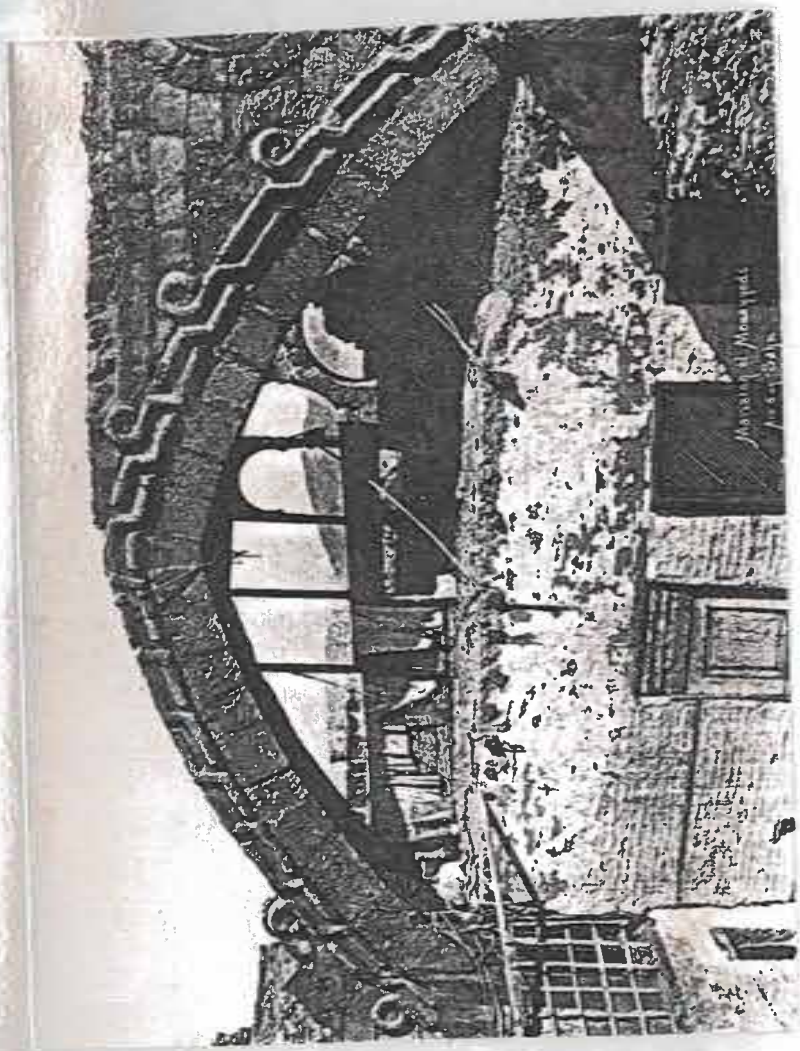
BY
NAIRY HAMPIKIAN
DECEMBER 1991



Pl. 1 NE facade before evacuation (photo DAI)



Pl. 2 NE facade before evacuation (photo DAI)



Pl. 3 Interior of Iwān before evacuation (photo Cahier Comité)



Pl. 4 Interior of bīmārīstān before evacuation (photo DAI)



Pl. 5 Interior of bīmārīstān before evacuation (photo DAI)



Pl. 6 NE facade of the bīmārīstān



Pl. 7 NE facade - main block



Pl. 8 and 9 NE facade - Central monumental entrance



Pl. 10

NE facade - Detail of the double-arched window (Ruqayyah al-Jasad)



Pl. 11

NE facade - Detail of entrance seen from below



Pl. 12

NE facade - Detail: fragment of monumental entrance



Pl. 13

NE facade - Detail: Chain like moulding



Pl. 14

NE facade . Detail of stalactite hood



Pl. 15

NE facade - Detail: half dome behind stalactite hood



Pl. 16 and 17 NE facade - Detail of stalactite hood



Pl. 18 NE facade - Detail of decoration on the recess flanking
monumental entrance (Photo DAI)



Pl. 19-20 NE facade - Panels on the recess flanking the monumental entrance



Pl. 21

NE facade - Detail: door sill and moulding of mastaba



Pl. 22

NE facade - Detail: Mastaba on SE side of recess



Pl. 23 NE facade - NW side of main block - detail of keel arched panel (Photo DAI)



Pl. 24

NE facade - Detail of square kufic ("Allāh Muḥammad")



Pl. 25

NE facade - Detail of SE corner of the facade



Pl. 26 Corinthian capital and roundel



P1.27 NE facade - The protruded face of the second block of the NE facade



Pl. 28

NE facade - Detail: inlaid marble with name of founder of the būmārīstān

Pl. 29

NE facade - Remains of the original spiral staircase





Pl. 30

NE facade - The second block heavily restored by the Comité

Pl. 31

NE facade - Remains of engaged column on the NW corner





P1. 32

NE facade - Detail showing crenellation (restored by the Comité

P1. 33

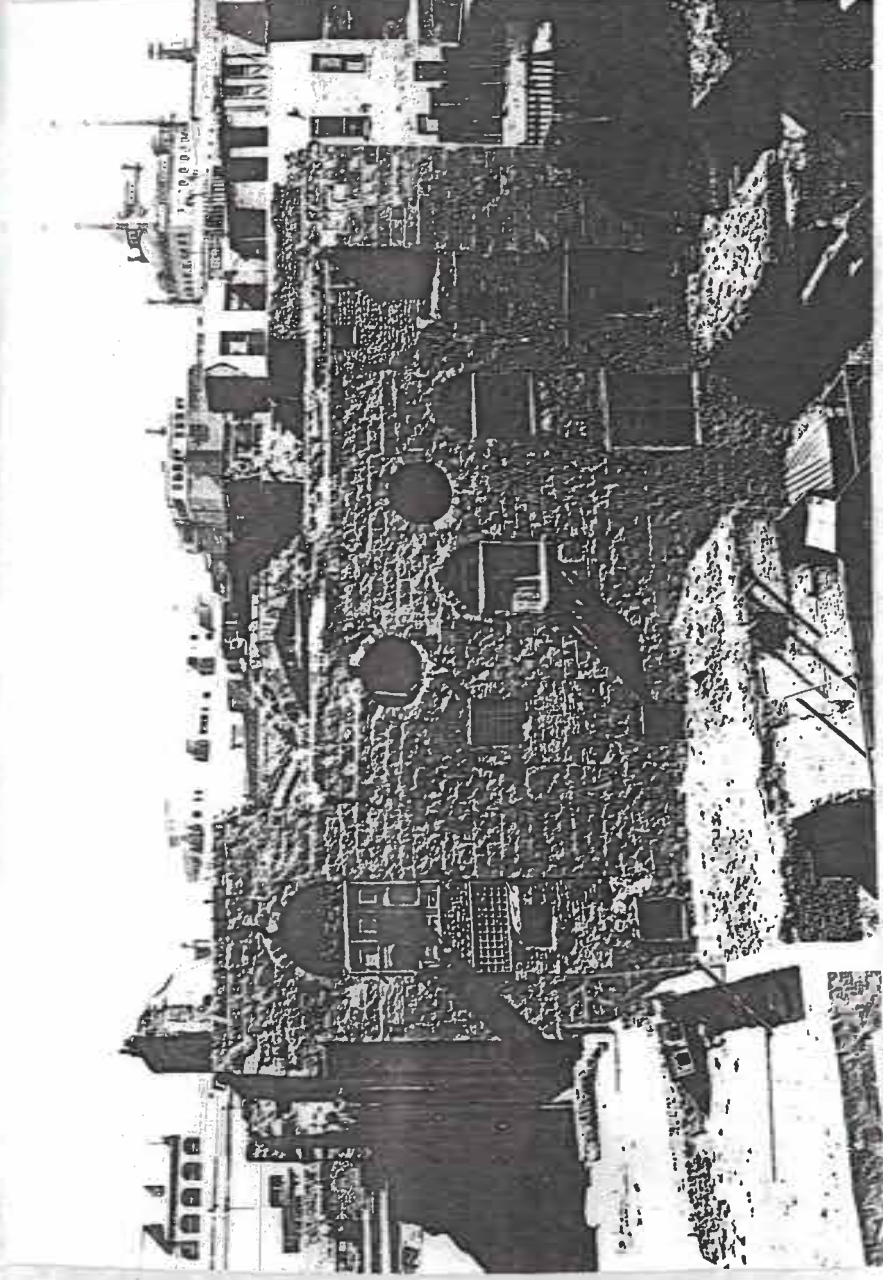
NE facade (second block) - Detail showing the capital of the engaged column (restored by the Comité)





NE facade - Detail showing traces of one of the ten shops situated under the main entrance

Pl. 34



Pl. 35 NW facade (photo DAI)



Pl. 36

First room of vestibule looking NE



Pl. 37

First room of vestibule looking SW



Pl. 38

First room of vestibule looking NW



Pl. 39

First room of vestibule - Detail showing remains of springing of arch



Pl. 40 First room of vestibule - Detail showing cornice



Pl. 41

Second room in vestibule looking S



Pl. 42

Second room in vestibule looking W



Pl. 43 Second room of vestibule looking NE



Pl. 44

Third room in vestibule looking SW

Pl. 45

Traces of the door





Pl. 46

Pl. 47



Mosque SW view

Mosque north view



Pl. 48

Mosque NE view



Pl. 49

Mosque SE view



Pl. 50

Mosque - detail of spring of arch viewed from the interior



Pl. 51

Mosque - detail of spring of arch viewed from the exterior



Pl. 52

Mosque viewed from SE



Pl. 53

Mosque - detail of southern corner



Pl. 54



Pl. 55



Pl. 56

Reception hall for male patients (NW Iwān)

Reception hall for male patients (NE Iwān)

Reception hall for male patients (SE Iwān)



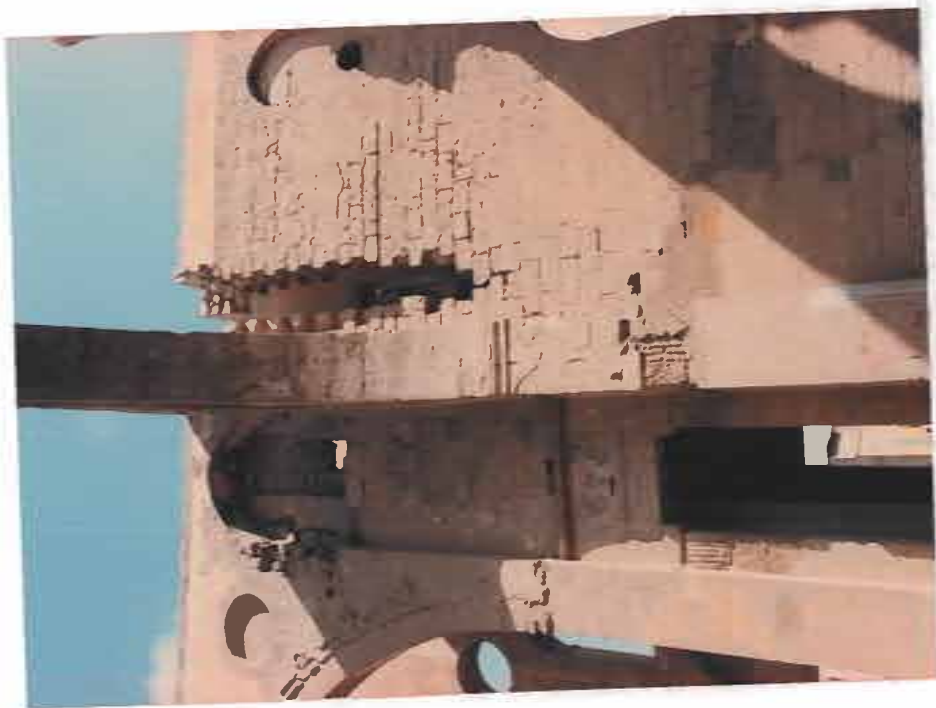
Pl. 57 Reception hall for male patients (SW Iwān)



Pl. 58 Reception hall for male patients - various stages of construction



Pl. 59-61 Reception hall for male patients - southern corner of courtyard)



Pl. 62-63 Reception hall for male patients - eastern corner of courtyard



Pl. 64 Reception hall for male patients - detail of eastern corner of courtyard



Pl. 65

Reception hall for male patients - northern corner of courtyard



Pl. 66

Reception hall for male patients - western corner of courtyard



Pl. 67 - 68 Reception hall for male patients - side rooms in the NW iwān



Pl. 69 SE wall behind the vestibule



Pl. 70-72 Details of the SE wall behind vestibule

Pharaonic blocks
↓ (madrasā al-Ashrafīya)



Comité reconstruction



1911 c.
invasions

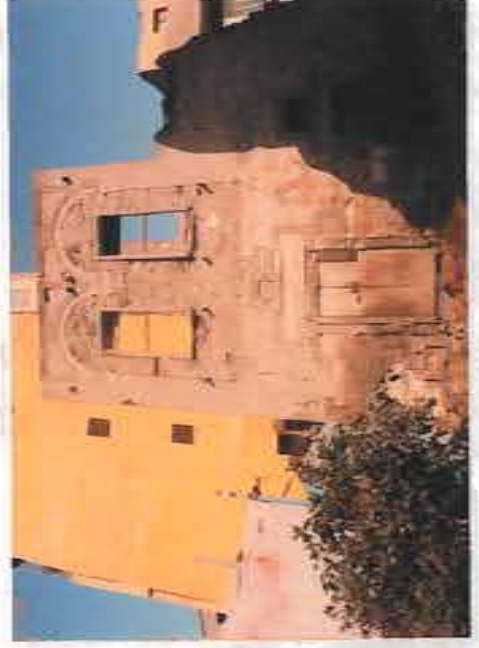
Bimānistān



- Pl. 74 Triangular tympanum of the pointed arch
 Pl. 75 Band running around the doorway
 Pl. 76 Rectangular joggled lintel on the entrance

SIKKAT AL-MAHJAR

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new	dest.	1	2	3		4
Sikkat al-Maḥjar	8	*							***
	10	Maqām al-Shaykh Sulaymān Jamus							
	12		*						
	14	Qubat al-Sultān Abu Saʿīd Qansūh							
	16	*				*			***
	18	*						*	1 shop
	20	*						*	3 shops
	22	*						*	1 shop
	24	*						*	1 shop
	26	*						*	1 shop
	TOTAL	8	7	1		1	4	2	7 shops





16



20



24



26



22



SHARA' AL-MAHJAR

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new	dest.	1	2	3		4
Shara' al-Mahjar	6	*				*			car mechanic fruits
	8	*					*		
	10			*	*				
TOTAL	3	2		1	1	1	1		Only the entrance exists and 2 shops

6



8



10



SIKKAT AL KŪMĪ

NAME OF STREET	No.		AGE		HEIGHT				GROUND FLOOR USE
	old	new	dest.		1	2	3	4 >4	
Sikkat al-Kūmī	2	*					*		3 shops
	4	Zawiyat Hassan al-Shashtari							
	6	Bīmārīstān al-Mu'ayyad Shaykh							
	8	*			*				prayer hall and supermarket
	10	*			*				***
	12	*				*			1 shop
TOTAL	14	*				*			***
	16	*				*			***
	18	*				*			***
	20	*				*			***
	8	7	1		2	1	3	2	prayer hall \ supermarket \ 4 shops



2



4





20



18



16



6-8



14



Pl. 79b Sikkat al-Kūmī

NEW PASSAGE

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
New passage		old	new	des.	1	2	3	4	Light industries
			*			*			
Maqam Sidi Mohammad al-Kūmī									
TOTAL	0								



Pl. 80 a New passage



Gubbat al-Kūmī





21.80b New passage

21.80b New passage

21.80b New passage

ʿATFAT AL-LABBĀNA

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE		
		old	new	dest.	1	2	3		4	>4
'Aḥḥat al-Labbāna	5\3 1		*			?				(still under construction)
TOTAL	2		2							

5/3/1



DARB AL-LABBĀNA AND ZUQĀQ AL-DŪRQAH

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE			
		old	new	dest.	1	2	3		4	>4	
Darb al-Labbana	25		*						*	habitation	
	23		*						*		^
	21	*							*		^
	19	*							*		^
	17	*				*					^
	15		*						*		^
Zuqaq al-Durkah	13			*						^	
	2	*							*	^	
	3			*						^	
Darb al-Labbana	9	Tikiyet Muhammad Thaqi Al-Din al-Bustami (mon.No. 326-325)									^
	7			*						^	
	5			*						^	
	3		*						*	^	
	12	4	4	4	4	1	5	1	1	A PURE HABITATION AREA	



13



15



17



19



Pl. 82b Darb al-Labbāna and zuqāq al-Dūrqaḥ



Tikkayat



2

Tikkayat



5



Tikkayat



3/1



Pl. 82c Darb al-Labbāna and zuqāq al-Dūr qāh

AL-ARABICA
S. 1000

SIKKAT DARB AL-LABBĀNA

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE		
		old	new	dest.	1	2	3		4	>4
Sikkat darb al-Labbāna			*						6	14 workshops & 7 commercial shops
One block with two entrances & commercial-light industrial shops										



Pl. 83 Sikkat Darb al-Labbāna

DARB AL-MĀRISTĀN

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new/dest.	1	2	3	4	>4	
Darb al-Māristān	3	*			*				habitation
	5	*	*						^
	7	*			*				^
	9a	*			*				^
	9b	*	*		*				^
	11	*			*				^
	13	*	*		*				^
	15	*	*		*				^
	2	*			*				^
	4	*			*				^
	6	*		*	*				^
	8	*	*	*	*				^
	10	*	*	*	*				^
	12	*			*				^
	14	*	*		*				^
	16	*			*				^
	18	*		*	*				^
	20	*	*	*	*				^
TOTAL	18	10	4	4	3	11			A PURE HABITATION AREA





5



11



9b



13



15



Pl. 84 b Darb al-Māristān

الدارب المارستان
الدارب المارستان

ZUQAQ AL MARISTAN

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE
		old	new dest.	1	2	3	4 >4	
Zuqaq al-Maristan	3		*			*		habitation
	4/6			**				> >
TOTAL	3		1	2		1		A PURE HABITATION AREA

3



ATFAT AL MARISTAN

NAME OF STREET No.	AGE		HEIGHT				GR. FLOOR USE		
	old	new	dest.	1	2	3		4	>4
Atfat al-Māristān	3	*					*		hab.
	5	*			*				^
	7a	*							^
	7b		*						pottery shop
	9		*						^
	8		*						^
	6		*						^
	4		*						^
2		*			*			^	
TOTAL	9	2	2	5	2	1	1		HAB. AREA

1/3



1/5



1/9/8



6/4/2



Pl. 86 Atfat al-Maristan

Hārāt al-Mārīstān	old new dest.										habitation A A (still under construction) A
	2	4	6	2'	3'	8'	10'	15	13	11	
Zūqāq Lāūn	*	*	*	*	*	*	*	*	*	*	
Hārāt al-Mārīstān	*	*	*	*	*	*	*	*	*	*	
TOTAL	14	6	3	5	2	3	4				A PURE HABITATION AREA

2



4



Pl. 88 a Hārāt al-Mārīstān and zūqāq Lāūn

PLATE 88 a
HARAT AL-MARISTAN AND ZUQAQ LAUN

2



3



8/



40'

15



11



5



3



9/7



Pl. 88 b Hārat al-Mārīstān and zuqāq Laūn

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE		
		old	new	dest.	1	2	3		4	>4
Darb al-Sukkari	1									
		Rear side of No 12 Sikkat al-KUMi								
	5		*		*					2 shops
		7 and adjacent #1 'Afet al-Sukkari form one								
	13\15		*						*	storage
	17	*					*			one new block
	16	*					*			habitation
	14	*					*			>>
	12			*						>>
	10		*						*	>>
	8	*				*				carpenter's workshop
									3 shops	
									
TOTAL	9	4	4	1	2		3	1	2	5 shops

2 shops
storage
one new block
habitation
>>
>>
>>
carpenter's workshop
3 shops
.....
5 shops



Rear of #12 sikkat al-Kumi

1.89 a Darb al-Sukkari

1.89 a Darb al-Sukkari

ZUQĀQ AL-ʿAZIZ ʿOSMAN

NAME OF STREET	No.	AGE		HEIGHT					GROUND FLOOR USE	
		old	new	dest.	1	2	3	4		>4
Zuqāq al-'Aziz 'Osman										The passage is covered and used as a store for a carpenter
TOTAL	0									



Pl. 90 Zuqāq al-ʿAziz ʿOsman

Pl. 90 Zuqāq al-ʿAziz ʿOsman

Pl. 90 Zuqāq al-ʿAziz ʿOsman

ATFAT YASSIN

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE		
		old	new	dest.	1	2	3		4	>4
Atfet Yassin	4	*						*		habitation
	6	*						*		^^
	8	*					*			^^
	10		*				*			^^
	Rear side of No 18 Sikket al-Kumi									
	5\3		*		*					^^
TOTAL	5	3	2		1	1	2	1		A PURE HABITATION AREA

1.91a ATFAT Yassin

1.91b

1.91c

TY

8



10



Rear side of #18 sikket at Kumi



12



12



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12



ATFAT AL-SUKKARI

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new	dest.	1	2	3		4
Afet al-Sukkari	1		*		*				habitation ^ ^ ^ ^ ^
	3	*			*				
	5	*				*			
	Two new blocks with a passage between and a chalk factory								
	Rear side of No 21 Darb al-Labbana								
	8	*			*				^ ^ ^ ^ ^
	6		*			*			
	4	*			*				
	2			*					
TOTAL	7	4	2	1	4	1	1	1	HABITATION & CHALK FACTORY

HABITATION & CHALK FACTORY

1



Pl. 92 a Afat al-Sukkari

11.00 Darb al-Labbana

TY

2



4



6



8



107



Pl. 92b Afat al-Sukkari

11.00 11.00

ATFAT WALDA PASHA

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new	dest.	1	2	3		4
Atfat Walda Pasha	1	*						*	
	3		*						7
	5	*					*		
	10			*					
TOTAL	4	2	1	1		1	1	1	MIXED



#1.



#3



#5

HARAT AL-HAKIM

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new	dest.	1	2	3		4
Haratal-Hakim	3	*				*			hab.
	5	*			*				
	7		*				*	*	
	9		*				*	*	
	8			*					
	6		*				*		
TOTAL	6	2	3	1	1	1	1	2	MIXED

leather shop

6-9-7



3-5



ZUQĀQ KHUSRAUĀN

NAME OF STREET	No.	AGE		HEIGHT			GROUND FLOOR USE	
		old	new	dest.	1	2		3
Zuqāq Khusrauān								Nothing is reached from this passage

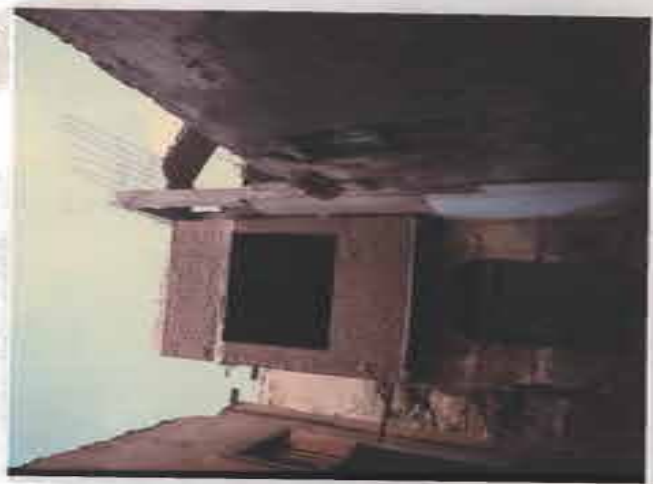
AṬṬAT AL-HAKIM

NAME OF STREET	No.	AGE		HEIGHT				GROUND FLOOR USE	
		old	new	dest.	1	2	3		4
Afṭat al-Hakim	3	*				*			
	5	*			*				
	7			*					
	4	*			*				
TOTAL	4	2		1	2	1			

3



5



4





Pl. 97a Tikkiya Thaqi al-Din al-Bastami built in 847 H - 1443 AD (mon. No. 326)



1



3



5



2



4



6

Pl. 97b Zāwiyya Thaḳī al-Dīn al-Bastāmī built in 847 H - 1443 AD (mon. No. 326)



Pl. 97c The gate of darb al-Labbāna built in 8th c. H - 14th c. AD (mon. No. 325)



Pl. 98 Qubbat al-Sultān Abu Sa'īd Qānṣuh built in 904 H-1499 AD (mon. No. 164)



Pl. 99

Qūbbat al-Kūmi built in 10th c. H, 16th c. AD (mon. No. 256)

SITY

الجامعة



Pl. 100 Darîh al - Anşari anŭnlisted monument of the Turkish period



1



2



3



4



5



6

Pl. 101 Some elaborate entrances in the second type of the old buildings



Pl. 102 Details of the local mixed Islamic-European style

Oct. 1990
↓



Dec. 1990 ->



← June 1991



Pl. 103 Details of No. 1 in darb al-Sukkari

RSITY

انجام



Pl. 104 No. 1 in darb al-Sukkari blocks a great portion of the bīmārīstān

The so-called 'Islamic style'



Bare facade



Pl. 105 The so-called 'Islamic style' (No. 1 in darbal-Sukkari)



A



B



Pl. 106 a Some architectural remains which could have belonged once to the original texture of the bīmāristān of al - Mu'ayyad Shaykh



(C)



(D)



(E)



Pl. 106b Some architectural remains which could have belonged once to the original texture of the bīmārīstān of al-Mu'ayyad Shaykh



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