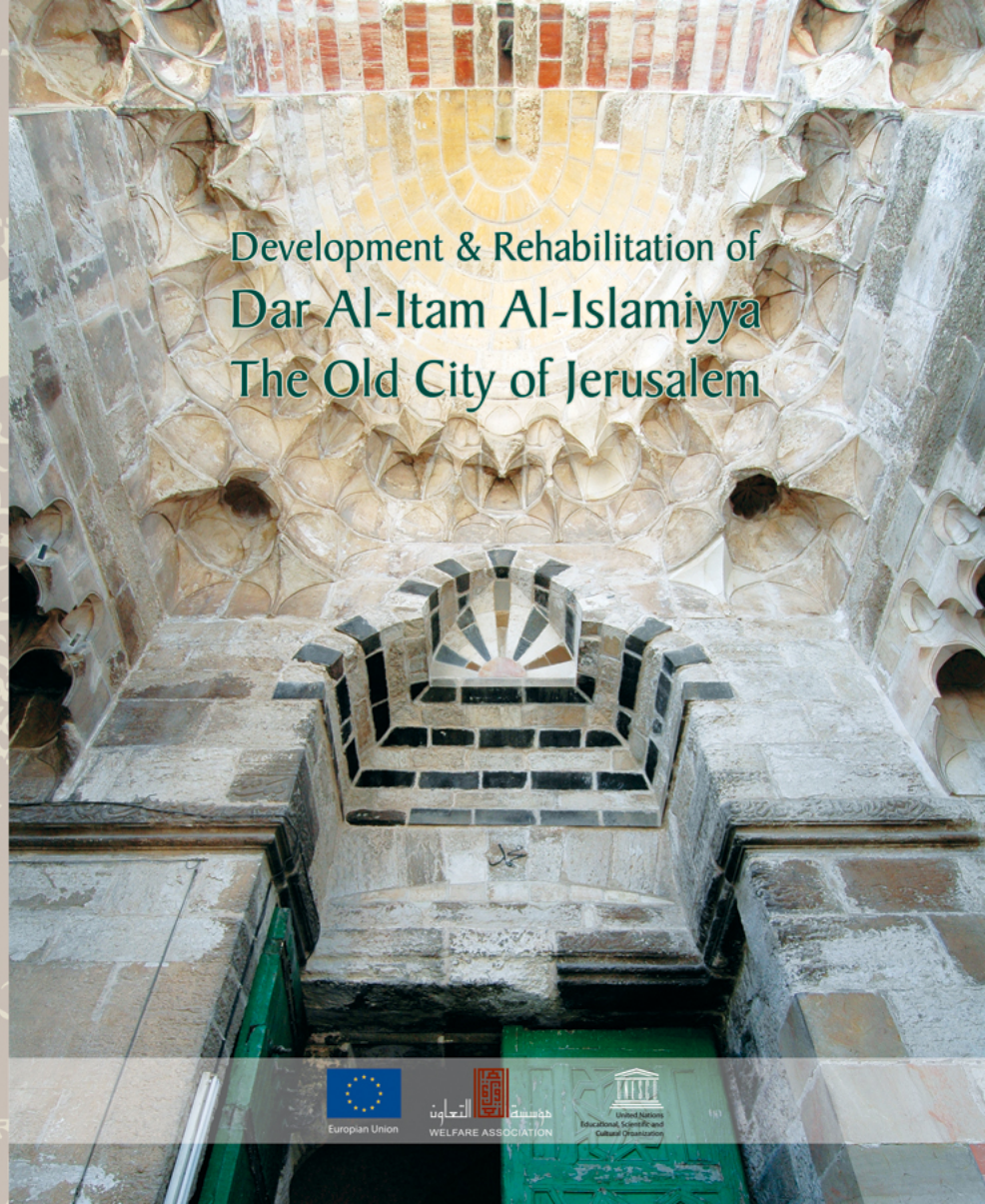
Development & Rehabilitation of Dar Al-Itam Al-Islamiyya - The Old City of Jerusalem



Development & Restoration *of* Dar Al Aytam Al Islamiyya Complex

Old City *of* Jerusalem

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Part I: "Historical & Architectural Development of the Complex"

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Contents

Introduction

Jerusalem, a city which has been continuously habituated since its foundation throughout its long history, like other cities, has formed a dynamic social and cultural heritage memory for its population. The city of Jerusalem was characterized from other historical and religious cities as being sacred to the three monotheistic religions: Judaism, Christianity, and Islam. This is not found in ancient or current cities as the majority of religious cities are specific to one religion.

In fact, the religious status of Jerusalem has overshadowed other aspects: while the city's architectural characteristic had key developments, and has many buildings of heritage, most efforts were concentrated on studying religious monuments, therefore most studies were on buildings of worship like synagogues, churches, mosques, schools and institutions directly or indirectly related to its religious status.

Perhaps this explains the lack of studies in secular and social aspects. To date, for example, and despite its importance and stature, there is no comprehensive study on the ancient Wall of Jerusalem, nor was there a serious study to examine the residential buildings, which harbored the inhabitants of Jerusalem through the ages, and this applies to some extent to the city's markets, and many of its non-religious private facilities. To bridge the gabp, and out of a desire to increase some modest knowledge of the buildings of Jerusalem, the *Dar al-Itam al-Islamiyya* was chosen to be the subject of this book.[1]

Dar al-Itam consists of two parts: industrial and academic. In terms of architectural history it is composed of four buildings: two for the industrial section - Dar al-Sitt Tunshuq and al-Imara al-Amira, and two in the academic department – al-Mawardiyya School and *ribat* Bairam Jawish. This is however not conclusive. *Dar al-Itam al-Islamiyya* has great importance and on several levels: on the architectural level, it includes buildings dating to the Mamluk, early and late Ottoman periods, representing varied Islamic architecture. Dar al-Sitt Tunshuq is a unique example of Mamluk architecture of Jerusalem, unrivaled in the architecture of Jerusalem, not only in terms of planning, but also in its rich architectural and decorative elements.

al-Imara al-Amira, as well, has no equivalent in terms of size or architectural design or decorative elements representative of the Ottoman architecture in the 16th century, or even in terms of richness.

It is important to note that both buildings were constructed thanks to the efforts of women: the first as the name signifies, by Lady Tunshuq al-Muzaffariyya , while al-Imara al-Amira was founded by Khassaki Sultan, wife of Sultan Sulaiman the Magnificent. They are, therefore, good examples of buildings which were established by the efforts of virtuous ladies, who loved Jerusalem, noted its religious and social importance, and wished to give it great models of architecture.

The compound is of great importance by its strategic location, as it is in the heart of the Old City of Jerusalem, close to al-Aqsa Mosque and the axis of the main roads. The site is significant until the present time, being at the center of the Muslim Quarter and close to the Church of the Resurrection. Surrounding the compound with pockets of settlements very close-by alerts to the dangers and greedy plans surrounding it.

1 Note that the archive of the Welfare Association in the Program of Reconstruction of the Old City contains detailed information about the history and evolution and description of this architectural complex, in addition to a big collection of pictures and diagrams that cover all aspects of the complex. Therefore, this book contains a simple section of this archive, which is a summary that achieves its set goal. Those who wish to obtain more information should contact the office of the Welfare Association's office of Reconstruction of the Old City.

Despite the importance of this architectural complex[2] what has been published about it in Arabic is not proportionate with its importance, and the little information available in Arabic about this complex, which mostly revolves around duplicated historical information which has been extracted many times from the endowment of al-Imara al-Amira without new information or architectural analysis.

What was undertaken recently[3] is either

1. Not published or
2. Only briefly describes the architecture without trying to discuss history or analyze the sections of the complex. Authentic sources were not relied on to follow historical information, but the availability of information in the folds of secondary references, especially the writings of the late Kamel al-Asali[4]. Therefore, there were many instances of errors and confusion about the sections of the compound.
3. It was a brief study originally developed as a prelude to physical and mechanical studies.

What is available and written in English, is limited to what Burgoyne[5] wrote on Dar al-Sitt Tunshuq and what was written about al-Imara al-Amira lately is limited and available for a few interested observers[6]. Therefore, the publication of a historical, architectural study in Arabic, will work first to fill a gap in the library of Jerusalem's architecture, and will form the basis of focused information about the history, components and elements of this complex and act as role model that will help to clarify the scientific and academic steps that have been undertaken to implement the ambitious project to rehabilitate and restore this complex by the Welfare Association in cooperation with the Department of Islamic Waqf in Jerusalem.

This complex is of great importance in the past and present, and there is promising potential for its exploitation, commensurate with the needs of the people of the Old City of Jerusalem, and in line with its architectural heritage. This makes it worthy of detailed study, covering the historical and architectural aspects in addition to the methodology in restoration applied to in the recent campaign undertaken by the Welfare Association in cooperation with the Department of Islamic Waqf in Jerusalem.

In response to these objectives, the study includes two broad categories: the first includes the Introduction and four chapters and a conclusion and a list of technical terms and the major sources and references. The second part reviews the efforts and steps, work, rehabilitation and restoration methodology applied by the Welfare Association, which has been named here as The Project.

In conclusion, the authors sincerely hope that the study achieves its desired objectives, and contribute to the development of awareness of the architectural heritage of Jerusalem, and to be a historic manuscript that documents this important building at an important stage of the history of Jerusalem, and that it be a catalyst for specialists and scientists to come up with more studies on Jerusalem and its Arab-Islamic heritage.

2 Check what was written in the preface under title Importance of Complex.
3 Lami'i, 1999.
4 aL-Asali, 1981, al-Asali, 1983, al-Asali, 1989.
5 Burgoyne, 1987, 485-504.
6 This refers to what is contained in a Doctoral thesis of the present researcher Natsheh (Natsheh, 1997, 189-226), which was re-revised and expanded in (Natsheh, 2000, ii, 747-790), and there is another article by Myers (Myers, 2000, 539 -582). It is worth mentioning that both studies were published in the book of Ottoman Jerusalem, which despite its importance, has limited circulation as only 2000 copies were printed, and it is expensive as a copy in Jerusalem is about $400.

Part I Historical & Architectural Development of the Complex

Development & Restoration *of* Dar Al Aytam Al Islamiyya Complex

Part I: "Historical & Architectural Development of the Complex"

Preface

1. Name and emergence of the compound

In 1340H/1921-1922AD, al-Imara al-Amira (Khassaki Sultan) and Dar al-Sitt Tunshuq, were combined to carry the name Industrial Muslim Orphanage School when the Islamic Council took over the two building to house, shelter, and train of a group of Muslim orphans.

The year 1969 and the subsequent years, witnessed the rehabilitation of the al-Mawardiyya School building which was part of the dormitory for students of the industrial school - and most of the units of Ribat Bairam Jawish, to form an academy of preparatory and secondary schools, known as the *Dar al-Itam al-Islamiyya*, teaching the Jordanian Arab curriculum [7] in opposition to the curriculum imposed by the Israeli occupation authorities[8]. And thus, the *Dar al-Itam al-Islamiyya* Complex consists of two parts, industrial, and academic. A third small section, which is not part of the rest, is run by the Department of Islamic Awqaf, and is known today at *takiya*. This is in terms of use and functionality currently. On the other hand, from the historic and architectural structural side, the industrial complex consists of Dar al-Sitt Tunshuq al-Muzaffariyya and what is left of the units of al-Imara al-Amira. The academic department is made up of al-Mawardiyya School and Ribat Bairam Jawish.

2. The other names of the complex

Dar al-Itam al-Islamiyya, in its industrial and academic sections, is the name often given to the complex, but other sections are called "Saraya" a reference to the headquarters of the governor of Jerusalem in the late Ottoman period, or "*takiya*" a reference to the soup kitchen of the al-Imara al-Amira, which, in the idioms used by the people of Jerusalem [9], is given to a place where free food, especially soup, is given out. Sometimes, some parts of the complex are called by the original names of the architectural units that make up the complex such as Dar al-Sitt Tunshuq or Khassaki Sultan.

3. Location and boundaries

Dar al-Itam al-Islamiyya (Fig.1.1) is located in the heart of the Old City, about 150 meters to the east of al-Aqsa Mosque. It is surrounded from the north by *takiya* road, and the West by a group of residential buildings, and from the South by the Saraya, and from the East by al-Wad Road and a group of buildings.

4. The evolution of architectural complex

It seems that Sitt Tunshuq, was the first to build in this street 794H/1391-1392AD, where the name of the building (Dar al-Sitt) replaced the former name of the road[10]. The second step in the evolution of the complex is the establishment of al-Mawardiyya School (al -Rasasiyya) to the east of Dar al-Sitt Tunshuq, after nearly a century. Building al-Mawardiyya on two levels suggests the scarcity of available spaces near al-Aqsa Mosque and demonstrates how to deal with the architectural topography in practical ways. This enabled the school to overlook the junction close to the al-Aqsa Mosque, and be easily accessible.

The third step in the architectural development of the complex of the *Dar al-Itam al-Islamiyya* , were the efforts of Bairam Jawish when he decided to build a Sufism Hospice (Ribat) in 947H/1540AD near the lower section of 'Aqabat al-Sitt (*takiya*). One would expect that some kind of construction was located in the *Ribat*, as Mamluk Jerusalem had reached a stage of development at the end of the Mamluk period, that it was not possible to leave a site, such as the *Ribat* without building with it. The records of the Jerusalem Religious Court have provided ample documentation of the situation, which demonstrate that the site of Bairam Jawish was used as ruined *hushe* endowed to feed the poor of Jerusalem. Upon inspection by a team of Jerusalem master builders, it was recommended to demolish it and build it again. Bairam won the sensitive site overlooking two important routes through the 'Aqabat Sitt (*takiya*), and through the Wadi al-Tawaheen (Mills Valley) in addition to being close to the road of Bab al- Nazir leading to the al-Aqsa Mosque.

When Khassaki Sultan decided to establish a group of buildings in the city of Jerusalem which was called al-Imara al-Amira on 30 May 959H/24 May 1552-1553AD, the evolution of the complex of the *Dar al-Itam al-Islamiyya* was completed and reached its peak so that it consisted of four buildings. This last step had a clear impact on the area and influenced changing the name of the road to become 'Aqabat *takiya* instead of 'Aqabat al-Sitt and history repeated itself once again. This significant development to Dar of al-Sitt Tunshuq made it annexed to al-Imara al-Amira.

5. Components of the complex and the subsequent additions and restorations

The complex of the *Dar al-Itam al-Islamiyya* was a result of several construction projects that date back to the Mamluk period, and mostly to the early Ottoman period. But the development of the compound did not stop at this point. Monitoring stages of the current composition shows that the complex had several additions throughout its history; the most recent was in the past decade. The complex consists of the following basic architectural buildings (Fig.1. 2):

1. Dar al-Sitt Tunshuq al-Muzaffariyya
2. al-Mawardiyya School
3. Ribat Bairam Jawish
4. al-Imara al-Amira

In addition to these large buildings, there were several important additions throughout the extensive restoration campaigns, especially in the upper sections:

1. Adding a second floor to Dar al-Sitt Tunshuq (four rooms), undated, but after the year 1744 AD and is likely to have been built in the restoration campaign of Khalil Agha in the year 1167H/1753AD.

7 Remained so until the setup of the Palestinian National Authority and adoption of Palestinian curriculum
8 For more details about this see Natsheh, 1999, particularly pages 31 -33
9 al-Asali, 1982.23
10 Mujir al-Din, 1973, vol.2, 54.

2. The addition of four rooms to the south of the four rooms that is adjacent to the reception hall from the south on the first floor of Dar al-Sitt Tunshuq. These are also undated but it is likely that they were built at the time of construction of the northern corridor of the Khan of al-Imara al-Amira960 H/1552-1553AD.
3. Adding a second floor of al-Mawardiyya (Ottoman), undated, probably the 2nd century H/ 8th century AD
4. Adding a second floor in Ribat Bairam Jawish, (Ottoman), undated, likely the 12th century H / 18th century AD
5. Expanding the kitchen of al-Imara al-Amira and adding new chimneys on 6 Rabi' Awwal 967 H/ 6 December 1559 AD
6. Adding an hall to the west in al-Imara al-Amira in 973 H/1565 AD
7. Adding a mill in al-Imara al-Amira (stable of Sitt Tunshuq) in 1077 H/1598-1599 AD
8. Restoration of Khalil Agha in al-Imara al-Amira1167 H/1753 AD
9. Repairs of Mohammad Rashid in the year 1286 H/1869-1870 AD, and the Department of Justice building in al-Imara al-Amira
10. Renovations and additions of the Higher Islamic Council in the year 1342 H/1923-24 AD
11. Concrete additions in the second half of the last century

In fact, some studies[11] show that the premises of this complex are integrated, to the point that it became one of the most complicated buildings of Jerusalem, and difficult to differentiate between its various sections for those not specialized. But thanks to newly discovered very important information in the records and documents of the Jerusalem Religious Court on al-Mawardiyya[12] and Ribat Bairam Jawish, which are only second to the importance and scale of the Waqf of al-Imara al-Amira[13], we were able to differentiate between the original parts of the building.

6. The original and current function of the complex

The complex's units had a variety of functions in the past: Dar al-Sitt Tunshuq was the used as a residence; al-Imara al-Amira for the poor and Sufism as well as a place of residence for merchants and travelers; and al-Mawardiyya School to teach students and as a residence for some of them with their teachers; and the *Ribat* was used like al-Imara al-Amira to provide shelter and food for a group of Sufis and the poor with certain arrangements.

Accordingly, these units had numerous and varied functions in the past as is today, and some of these units have maintained their original function to this day but only partially, in line with current needs.

A part on the ground floor in *Ribat* was used a decade ago as a facility for the academic school and now a residence; most parts of al-Mawardiyya School are used to teach students; the mosque was used until recently, as a classroom, and was used a decade ago as a mosque; and an important part of al-Imara al-Amira still maintains its original job as a soup kitchen.

11 Lami'i, 1999, 34
12 Sijil 57: 537, 868, 2000 Natsheh
13 Sijil 56: 647-650, Natsheh, 1997, 158-160

The nature of usage of the rest of the sections has changed like the Khan of al-Imara al-Amira today houses administrative offices and a workshop for binding and offset. The ground floor of Dar al-Sitt Tunshuq became a carpentry workshop, and the Mezzanine floor into a shoe workshop while the first floor relatively kept its original function as a dormitory for boarding students until the end of the 20th century. Currently, there are no students in a dormitory, because the students come from towns and villages in the West Bank, and do not have access to reach or reside in Jerusalem. The first floor in the *Ribat* of Bairam Jawish was transformed into a residence.

Thus we find that the complex has undergone several changes to its functions, and this in turn led to several interventions through repeated attempts to rehabilitate the architectural units, commensurate with the new functions which, in turn, imposed accumulated burdens and changes on the fabric of the architecture

For units occupied by the three main sections of the *Dar al-Itam al-Islamiyya*, the industrial section covers Dar al-Sitt Tunshuq to Khan al-Imara al-Amira, the Adliyya Building, the Shrine Room, and half the room with four areas. You can enter this section from the southern entrance, and the middle door of Dar al-Sitt Tunshuq is used to move materials to and from the carpentry workshop. The academic department uses the *Ribat* Bairam Jawish with the exception of the first floor, and all facilities and units of al-Mawardiyya School, and is entered today from the northern entrance of the al-Imara al-Amira. The *takiya*, which is accessible from the northern entrance of al-Imara al-Amira also comprises the kitchen, a water basin, a bakery which is intended to be transferred to a computer lab for students, warehouses, and the north-eastern square of al-Imara al-Amira.

7. Problems of the complex

The complex of the *Dar al-Itam al-Islamiyya* suffered several problems, despite the good efforts made over time to care for it. Its most prominent problem is its size and overlap between the architectural units, and the presence of multiple architectural layers. The complex is one of the most intricate architectural buildings of Jerusalem, and the distinction between the original and added sections is not easy.

In addition to the technical problems faced by any restoration team in any architectural and archaeological location, such as the provision of raw materials, appropriating the necessary funds for restoration, the complex has suffered throughout its history from haphazard restoration, and the absence of a periodic maintenance program of the complex's architecture units after restoration.

What restoration was undertaken in the past and until recently was a response to the destruction or the desire for expansion and not part of a clearly defined program, both at the level of maintenance or restoration.

It is striking that most of the renovations and developments that have occurred in the compound were not documented in a scientific manner. Only a few expansions and restorations were documented despite that the complex goes back several centuries. Documentation was inadvertent, concise and confined to the archaeological inscription praising the patron of the project more than mentioning the work done.

It is worth mentioning that the first survey of some elements of the complex was in the eighth decade of the 20th century by Burgoyne [14] when he published maps of this survey, which included Dar al-Sitt Tunshuq al-Muzaffariyya in 1987. This was followed by interest of the Islamic Archaeology Department in the Waqf of Jerusalem, where an initial survey was conducted for Ribat Bairam Jawish and al-Mawardiyya School.

Finally, in 1994, work was undertaken on al-Imara al-Amira by the British School of Archeology in collaboration with the Islamic Archaeology Department and was published in the book "Ottoman Jerusalem" [15]. None of the attempts addressed the complex as architectural whole, and did not link its parts with a comprehensive vision.

Therefore, a comprehensive survey and multi-faceted scientific study undertaken by the Welfare Association are an essential step to document and understand the complex and take care of it.

8. The importance of the complex and its role in the history of Jerusalem

Dar al-Itam al-Islamiyya complex is of great importance on several levels. At the architectural level, it includes buildings dating from the Mamluk, early and late Ottoman periods, representing a unique Islamic architectural variety. On the social level, especially with regard to kitchen in the al-Imara al-Amira, it has provided frees meals for over four centuries, to a large group of poor and Sufis in Jerusalem who wanted to stay close to this holy city, and to al-Aqsa Mosque. Providing lodging to 55 Sufis, and 16 others in the Ribat of Bairam Jawish with accommodation and free meals, encouraged the establishment of a group of Sufis in Jerusalem, and helped give the city one of the most prominent religious manifestations, as one of the centers of mysticism and science in the Levant. This kitchen still provides the needy residents of Jerusalem with soup every day, and full meals in Ramadan consisting of rice, vegetables, and meat.

Some of the people of Jerusalem still have the soup out of the belief that it a blessing as one of the characteristics of the city over the decades and years. When the academic school started in the complex recently, the efforts of the benevolent people of this people provided chances for education based on a nationalist vision to resist the Zionist dismantling of Palestinian society. These efforts were successful as students graduated from this school and completed their education in different universities and came back and took over cultural and academic posts in the society in Jerusalem, completing the cycle of resistance and community development in the city resisting occupation.

The rich endowment of the al-Imara al-Amira, Dar al-Sitt Tunshuq, and Ribat Bairam Jawish, helped the prosperity of the economic situation of the Holy City, by providing periodic income for a long time and securing many jobs and a steady income to a number of community groups that were employed in these facilities. This continued to this day when the units of this complex became the headquarters of the *Dar al-Itam al-Islamiyya*. The majority of graduate "orphans" have made their way successfully working in Palestine and in the countries of the Persian Gulf after training in professions such as printing [16] and binding, carpentry and other trades, and some graduates did not lose connection with these institutions and founded their own projects.

It is enough to point out that this complex has been associated with important historical figures have had a significant and leading role in the history of the city of Jerusalem. Some of these figures were at the top political and administrative hierarchy in the Ottoman era, like Khassaki Sultan, wife of Sultan Sulaiman the Magnificent. The family of Tunshuq al-Muzaffariyya shows her affiliation to the famous family in Islamic history, and Bairam Jawish was of the most prominent personalities of Jerusalem in the 10th century and among those who contributed to the development of the city of Jerusalem, architecturally and economically.

On the administrative level, the finest qualified and distinguished scientists of the Ottoman period assumed management roles [17]. The complex is therefore closely linked to the history of Jerusalem and forms an important part of the continued history of this ancient city.

14 Burgoyne, 1987, 490, 494,496-497
15 Natsheh, The Architecture of Ottoman Jerusalem, in *Ottoman Jerusalem, The Living City 1517-1917,* Eds. Sylvia Auld and Robert Hillenbrand London, 2000.

16 It is worth mentioning that the Printing Press of the *Dar al-Itam al-Islamiyya* was one of the rare printing houses which used to print the Qur'an.
17 See the detailed study of the al-Amara al-Amira. Among those who took over the Industrial Department *Dar al-Itam al-Islamiyya*, public figures, in the sixties of the last century, was the late Sheikh Asad Bayoud al-Tamimi, an outspoken preacher of al-Aqsa Mosque, one of the leaders of the Islamic Liberation Party and founder of the Islamic Jihad Movement in Amman. The academic school's first founder and principle with a group of respected educators, my teacher the late Tawfiq Abu Su'd, and Ahmad Abdul-Latif, and later for a long time the management of this school and other schools was undertaken by the late Hosni al-Ashhab in coordination with the Ministry of Education of Jordan, and since early 1993 with Palestinian National Authority institutions.

CHAPTER I
Dar al-Sitt Tunshuq al-Muzaffariyya

1.1 Preliminary information on the building

1.1.1 Name

The original name by Mujir al-Din[18], and in some religious documents [19] has various forms, like Dar al-Sitt, 'Imaret (Building of) al-Sitt, al-Dar al-Kubra (Grand Home), *'imara 'azeima* (Great Building). The current name known to the public is the Industrial of *Dar al-Itam al-Islamiyya*. The name known to specialists [20] is the Palace of Sitt Tunshuq or Dar al-Sitt Tunshuq al-Muzaffariyya

1.1.2 History

Dar al-Sitt Tunshuq was founded in the Mamluk period before the year 794H/1391-1392 AD

1.1.3 Waqf

Sitt Tunshuq arranged a generous endowment to her home before her death ensuring the expenses of this unique place (see details below).

1.1.4 Boundary and location of the building

Dar al-Sitt Tunshuq lies to the south side of the 'Aqabat Takiya road, forming the northwest portion of the complex of *Dar al-Itam al-Islamiyya*, overlooking the 'Aqabat Takiya road with a pretty large facade, constituting the northern side of Dar al-Sitt. To the west it is bounded by buildings which are unrecorded, and to the south by the Khan of al-Imara al-Amira and to the east by the entrance and north-west courtyard of al-Imara al-Amira (Fig.1. 3).

1.1.5 Brief description of the building

Dar al-Sitt Tunshuq consists of a large palace with two floors, and between them a mezzanine floor, a second small floor was newly added in a later period. Dar al-Sitt Tunshuq has a grand northern façade with geometrical and floral stone decorations to perfection, with three monumental entrances that lead to the floors and units of Dar al-Sitt (only the Eastern one is open now). The ground floor contains the main hall of large rectangular cross-vaults, today occupied by the carpentry workshop, which was previously a stable. This hall is surrounded to the west and east by a series of rooms. The mezzanine floor, located in the north-eastern side, is reached by the eastern entrance, and consists of three small rooms.

The first floor, reached by the western entrance has a large reception hall and consists of an *iwan* hall surrounded to the south, east and west range of rooms, and a courtyard to the north. The second

18 1973 part 2.54, 65.
19 Sijil 32: 341, 58, 600
20 Burgoyne, 1987, 485

floor is not part of the original building but a later addition consisting of four simple rooms[21]. Thus, in addition to the main hall on the ground floor, and reception hall on the first floor, the building includes more than twenty-five rooms, and has three entrances, and several staircases.

1.1.6 Function of the building

Of the names given to this building, it is understood that Sitt Tunshuq wanted to build a luxurious house (palace) as a residence. But it is not clear what function it played after her death. Evidence suggests after the establishment of al-Imara al-Amira by Khassaki Sultan, Dar al-Sitt Tunshuq became part of it. This situation lasted until the late 13th century H/ 19th century AD.

When the Supreme Islamic Council established the orphanage and factories, and to date the ground floor of Dar al-Sitt housed the carpentry workshop, while the first floor was accommodation for students and orphans.

1.1.7 Ownership

The building is an Islamic Waqf, administered and supervised by the Department of Islamic Awqaf for hundreds of years, which corresponds with the conditions and details of the trust, as stipulated by Tunshuq al-Muzaffariyya, in the event there are no immediate descendants then the Waqf will serve poor Muslims.

1.2 The historic section

1.2.1 Date

Mujir al- Din [22] noted that Sitt Tunshuq lived in Jerusalem in the year 794H/1391-1392 AD, and noted some of her architectural efforts, such as the well-built Dome to her brother Bahadir in Qalandariya in the cemetery of *mamilla*, and built the *hushe* in that area in 794H/1391-1392 AD. Therefore, it can be assumed that the Sitt Tunshuq established her palace around 794H/1391-1392 AD or a little before that. What supports this assumption is the existence of a Mamluk document [23] in the Islamic museum's collection in al-Aqsa dating to the year 795H/1393 AD mentioning the name of "the road of 'Aqabat al-Sitt", which indicates that the architecture was in place before this year, and her fame had spread to give the road a new name to become '"Aqabat al-Sitt" instead '"Aqabat al -Souq."

21 Will not describe this floor, but for those who wish to identify the architecture please review the archive of the Program of the Rehabitilation of the Old City, file of detailed historical studies.
22 1973 part 2.65.
23 Burgoyne, 1987, 485; and note 5

1.2.2 Founder

Little is known on the biography of the Sitt Tunshuq, and the composition of the name "Tunshuq Bint Abdullah al-Muzaffariyya raising several interpretations. The first is the possibility that she was originally a slave [24] .

al-Muzaffariyya had two explanations[25]: the first that she was owned by or wife to one of the *airs* or kings called Muzaffar al-Din or King Muzaffar, so she was called after him, or belonging to family of al-Muzaffariyyun that ruled in Persia, Kirman, Kurdistan (713-795H/1313-1393AD) , and that she came to Jerusalem through Syria, accompanied by her brother Bahadir following the catastrophe that befell the royal family at the hands of Tamerlane in 789H/1387AD. It seems that the latter view is more likely than the first, due to the fact that the Sitt Tunshuq gave Sheikh Ibrahim Qalandri [26], the chief of a Sufi sect belonging to the Baktashiyya Sufism order that flourished in Persia and Turkey. And the name "Tunshuq," common and acceptable among some scholars [27], was thought to mean a 'rumbling river' or 'precious' or 'excellent' [28].

It is established that Sitt Tunshuq was a wealthy lady, who wanted to live in the city of Jerusalem, and had many reasons, because of the status of Jerusalem in the Islamic faith, and thus gave the city and its people a rare architectural masterpiece. She did not only have that intention to be link to the city of Jerusalem in her lifetime, but also after death, where she wanted to be buried in the city of Jerusalem, adjacent to the saints, who chose Jerusalem as place of burial [29], believing in its sanctity and being the land of the resurrection . When she passed away on a Saturday in Thul Qi'da 800 H/ July –August 1398 AD, she was buried the place she prepared for this purpose, providing another architectural masterpiece still standing opposite her palace, attesting to the wealth and taste of this lady[30].

It seems that the Sitt Tunshuq did not leave behind any children, which is clear in the conditions of her Waqf, instead of her property going to offspring, she bequeathed to some of her relatives. This view finds support in the Quranic inscription on the western entrance to Dar al-Sitt , which was recorded by Van Berchem [31] in the early last century[32].

1.2.3 Waqf

Burgoyne explained [33] based on Islamic documents that Sitt Tunshuq had arranged to buy a third and then a fourth village of Beit Safafa in Jerusalem, through her legal agent for a total amount

24 Lami'i, 1999, 5, Burgoyne, 1987, 485
25 Van Berchem, 1923, 307-312; Burgoyne, 1987, 485-486
26 Mujir al-Din, 1973, part 2.45, Asali, 1981.93 -94, Lami'i, 1999.5
27 Burgoyne, 1987, 486, Lami'i, 1999.5
28 The reason for this is due to the variations of the name in the manuscript of Mujir-al- Din between "Tunshuq" and "Tunsuq," In another document different spelling again with the third letter in Arabic .
29 For more information on Jerusalem and its status as a place of burial, and burial of the scholars and Sufis and personalities see Asali, 1981
30 For this, see Burgoyne, 1987, 505-512, and see Bieberstein and Bloedhorn, 1994, 2, 310-311.
31 Van Berchem, 1923, 307
32 See description of western entrance in north façade
33 Burgoyne, 1987, 486

of 100100 dirhams, and transferred ownership to Amir Baha' al-Din bin Abdullah Amir Sayf al-Din Manjak. The Amir Baha' al-Din kept the property for the benefit of Sitt Tunshuq for the duration of her life, then to her free slaves , and to the Amir Baha' al- Din, and later to his children, and in case of no offspring the endowment shall be for Muslim poor.

1.2.4 Additions and developments in subsequent periods

When establishing al-Imara al-Amira, Dar al-Sitt Tunshuq was combined to this new institution, and this is clear in some documents and records in the Islamic Shari'a Court [34] of Jerusalem, Burgoyne [35] pointed out to two. The first [36] dating back to in 963H/1555-1556 AD, describes a dilapidated house adjacent to "a building located near the deceased Sitt Tunshuq al-Muzaffariyya House and now the woman of charity and good works Khassaki Sultan." And the other in a document dated 985H/1578 AD [37] talking about the two houses, described to be bordered to the east by "what was previously known as Dar al-Sitt and now al- Amara al-Amira." In a book chronicling the foundation for the restoration of extended roofs in the compound of the Dar al-Itam al-Islam*iyya* in the year 1167H/1753 AD, the name al- Amara al-Amera is mentioned as well.

1.3 Architectural Section - Description of Dar al-Sitt & architectural analysis

1.3.1 The north façade (Fig.1.4, Pl. 1.1)

The northern facade of Dar al-Sitt Tunshuq, is located directly to the west of the northern entrance of the al-Imara al-Amira, it is dominated by three monumental entrances (Western and Middle and Eastern), a large circular window, and a modern architectural addition on upper part of the western side. The western entrance is currently closed and is not used, while the eastern entrance was blocked by stones placed in front it in unspecified time, but it is likely that it took place in the late 19th century after 1860, as Pierotti [38] noted in the 7th decade of the 19th century.

> **"The stairway to the North entrance of Dar al-Sitt Tunshuq is topped with a large amount of dirt, thus preventing entry from there, and requires going around the Valley and crossing from the southern entrance to [the entrance to Khan al-Imara al-Amira] to avoid harm."**

The Western entrance (Fig.1.5, pl. 1.2, 1.3)
The western entrance is deep from the front façade by 1.56 m forming a deep recessed entrance, built of dressed *ablaq* stones in red and gray. The entrance is enclosed within a quirked ogee frame moulding which extends in a double profile around the extrados of pointed horseshoe

34 Sijil 79: 475
35 Burgoyne, 1987, 486-487
36 Sijil 32: 341
37 Sijil 58: 600
38 Pierotti 152, 1864

Pl.1.1 North elevation of Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.2 Western portal of Dar al-Sit Tunshuq al-Muzafariyya

arch over the recess.. The two mouldings are linked directly at the springing level indirectly by single loop above the key stone.

Four steps flanked by stone benches are in front of the portal. ,Directly above the red color lintel of the door- which is now closed -, a string course of joggled *ablaq* (some of it fell from the damage), built with black and crème-color on the reverse of the cavity entrance. At a height of five blocks of the door lintel, there is a rectangular window (pl.1.3) surrounded by a framework of an inlaid star-pattern. The inlay, where it survives intact, consists of pieces of reddish stone, grey- black stone, and turquoise faience. An inscription extending across the recess of the entrance framing the window, The inscription is engraved in *naskhi mamluk* script with the quranic quotation of the verses 46-55 of Surat al- Hajar. It reads:

"(It will be said to them): 'Enter therein (Paradise), in peace and security.' And We shall remove from their breasts any deep feeling of bitterness (that they may have), (So they will be like) brothers facing each other on thrones. No sense of fatigue shall touch them, nor shall they (ever) be asked to leave it. Declare (O Muhammad SAW) unto My slaves, that truly, I am the Oft-Forgiving, the Most-Merciful. And that My Torment is indeed the most painful torment. And tell them about the guests (the angels) of Ibrahim (Abraham). When they entered unto him, and said: Salam (peace)! [Ibrahim (Abraham)] said: "Indeed! We are afraid of you. They (the angels) said: Do not be afraid! We give you glad tidings of a boy (son) possessing much knowledge and wisdom. [Ibrahim (Abraham)] said: "Do you give me glad tidings (of a son) when old age has overtaken me? Of what then is your news? They (the angels) said: "We give you glad tidings in truth. So be not of the despairing."

Pl.1.3 Details of decorative elements of western portal of Dar al-Sit Tunshuq al-Muzafariyya

The circular window (diameter 1.31 m) located between the western and the central entrance (Fig.1. 6, Pl. 1.4), at a height of seven courses off the floor level, allows light and air to the main hall (stable / carpentry). It is framed by a double quirked ogee moulding enclosing four concentric rings of low-relief chevrons, two carved on the outer wall face of the voussoirs, and two on the splayed intrados.

Pl.1.4 Circular window of Dar al-Sit Tunshuq al-Muzafariyya

The central entrance (Fig.1. 7, pl. 1. 5), while it is the smallest and simplest of the three entrances, is the widest (2.22 m). It comprises a shallow recess topped by cinqfoil arch. The arch and the upper part of the recess are built of red, black, and cream colored *ablaq* now pale with the passing of time and are now yellowish. But the joggled voussoirs of an oculus and string course above the door are of black stone and plain limestone painted red to simulate *ablaq*. More traces of red paint survive on alternate courses of jambs. The jambs end on each side with moulding corbels

Pl.1.5 Middle doorway of Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.6 Eastern portal of Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.7 Details of the stone panel of the eastern portal of Dar al-Sit Tunshuq al-Muzafariyya

supports the lintel of the door which reduces the span of the doorway. The middle entrance is designed to allow easy entry, especially since it is the door leading to the main hall (stable), so the benches have disappeared, and the corners of both the recess and the doorway are chamfered to reduce friction especially while beasts passes .

As for the eastern entrance (Fig.1.8, pl. 1.6), it is the most elaborate and the most beautiful of the three doors that were opened in the northern facade of Dar al-Sitt Tunshuq. The entrance is a deep recess (2.06 m)., built in *ablaq* of red and white stone, now slightly yellowish, the recess is bordered with a frame of red stone, parallel by quirked ogee mouldings. A string course of ablaq joggling runs around the recess above the door lintel. The original of this joggling is of natural limestone inlaid with black stone that has weathered to a grey color.

A large stone panel is in the front of the recess, it is of limestone elaborately carved with floral, geometric and animal motifs (Fig.1. 10, pl.1. 7). it takes an inlay of black stone, red glass paste, green glass, and possibly turquoise faience. It is unfortunate that most of this has been ruined and lost. The four corners terminals with dovelike, and drilled eyes and carved beaks to look like its flying high. Lami'i [39] pointed out that the entrance recess of the Mosque of Sultan Faraj ibn

39 Lami'i 11, 1999

Barqouq in Cairo 811H /1409 AD has a similar model to this in terms of style and not the element of decoration. At the center of this panel is a small circular stone window.

At a height of three courses form the panel, four tiers of *muqarnas* 'stalactites' support a slightly pointed arch and semi-dome entrance. The arch is composed from joggled voussoirs (red, black and gray), while the semi-dome is has the shape of a shell composed of four almond-shaped areas each made of the color stones (Fig.1.8, pl. 1.6).

The fenestration t of the upper part of the facade between the western entrance and the eastern entrance (Fig.1.11), is a simple design which does not attract attention. It has five rectangular windows. And at the north façade, on the western side, are six windows belonging to architectural unit, not original, it forms the second floor of Dar al-Sitt Tunshuq.

Of the description mentioned above, is evident that the façade of Dar al-Sitt Tunshuq is unique with no equivalent in the architecture of the Mamluk Jerusalem or Palestine, in terms of the richness of decorative architecture, or the presence of three elaborate entrances in a single facade.

1.3.2 Internal description - the ground floor (Fig. 1.12, Pl. 1.8)

The middle entrance of Dar al-Sitt Tunshuq, leads to the main hall used today as a carpentry workshop which originally functioned as a stable. The large hall has an area of 36 m in length, and 11.50 m in width. The floor is of old flagstone of irregular sizes and multi-colors and there are places covered by the slabs of concrete, especially near and below the carpentry electrical machines. The hall consists of two *riwaqs*, extending from north to south, each containing five bays covered by cross-vaults. The vaults are supported by transverse arches span between the vaults. The arches are based in the center by a row of four square pillars on the one hand, and on the wall on the other hand. (pl. 1.9). Each arch springs from similar impost blocks carved with a pair of *muqarnas* elements.

The hall ends to the south with two bays each covered with a barrel vault, the western being smaller in area that than the east and rises above the natural bed rock by about 1.32 m. The southern wall of the hall is the boundary between the stable of Dar al-Sitt Tunshuq and the Khan of al-Imara al-Amira. The hall surrounded to the East and West by a series of rooms, accessed through several openings doors.

It should be noted that in all of the west and east walls and at a height of seven blocks are a number of iron rings installed in the walls (pl. 1. 9) which makes it likely that they used to mind the beasts and the horses. The layout of windows and doors in the eastern wall of the hall includes a window and three main doors[40].

40 For more details on the remains of parts of this room see the archive of the Reconstruction Program of the Old City, the historical study and see Burgoyne, 1987, 488-89

Pl.1.8 Main hall of the first floor of Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.9 Springing of arches and in the main hall of Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.10 Covering of the vestibule of the eastern portal

East entrance vestibule (W, fig. 1.12)

The eastern entrance to Dar al- Sitt Tunshuq, leads to a vestibule, square in plan, the arched vault, with a small octagonal dome decorated with magnificent stone configurations (pl.1. 10). The four sides of this vestibule has openings to reach its units, in addition to the great entrance in the north, and the window that opens towards the main hall, (stable) in an easterly direction mentioned above, there are two doors opened in the eastern wall, and a third door in the south wall which seems to be originally have been a window and expanded later to become door.

West entrance vestibule (Z, Fig. 1.12)

The western entrance to the northern facade of Dar al-Sitt Tunshuq leads to a perpendicular vestibule. The vestibule is surmounted by a shallow dome based on spherical triangles. The eastern wall of the vestibule has two doors, the great southern one leads to al 1.36 m staircase leading to the first floor units. This is the only way available to get to that floor (pl.1. 11). And the second smaller door opens on the northern area with an irregular shape which also included a stairway which has now disappeared, and rises 2.85 off the current ground level which exactly matches Burgoyne's attempt [41]to try to re-design this staircase, which he called the "services stairway," and for which he found evidence on the first floor.

These are the components of the ground floor of Dar al-Sitt Tunshuq and it appears from the description, that the original was mostly built by Sitt Tunshuq in the Mamluk period, taking into consideration that there have been many adjustments especially on the eastern wall of the main hall, and design of the entrance to this room in particular, hints that its purpose was for it to be a stable for horses and cattle, the main means of transport in the Middle Ages.

1.3.3 The Mezzanine floor (fig. 1. 13)

This floor, consisting of three rooms, is located directly above the east entrance vestibule and subsequent architectural units that are to the south. Access to this middle floor is through a new stone stairway, made up of 13 stairs, in the northern part of the open courtyard situated south of the *iwan* room that is used today for the master of the carpentry (c, fig.1.12).

Pl.1.11 Stairs of western entrance of Dar al-Sit Tunshuq al-Muzafariyya

This stair gives access to the southern room (A, fig. 1.13), and through a new door in the north wall, one enter to the second chamber of the Mezzanine. The north room of Mezzanine (c) is entered through a new door in wall separating it from the middle room. All floor pavements in the Mezzanine are furnished with modern tiles and the roofs are covered with shallow domes.

1.3.4 The first floor (Fig.1. 14)

Access to the first floor, was through the main stairway, which starts from the vestibule of the western gate as mentioned earlier, and this stair ends with a semi-circular recess in the west end of a rectangular courtyard which allows access to all facilities and units of the first floor and its roof (pl. 1. 12). In front of the recess, there is a door, surmounted with slab lintel, that leads to a

41 Burgoyne 1987, 492

Pl.1.12 End of the stairs of western entrance of Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.13 The pavement of the open courtyard of first floor Dar al-Sit Tunshuq al-Muzafariyya

rectangular room (A, Fig. 1.14), with a cross vault. In its northern wall a door leads to a small room (B, fig. 1.14) to the west of a service stairway.

Service stairway

The stairway appears in the room (b, fig. 1.14) located in the northwest corner of the open yard on the first floor. The room has a rectangular plan covered by a cross vault, and in the eastern wall a short corridor leads through a small door to the open courtyard of the first floor.

First floor open courtyard and surrounding units (Fig. 1.14)

Irregular stones in the upper parts of the walls of the courtyard expose changes in at least three of the walls. The eastern wall has kept a frieze with moulding blocks of stone built in the late period; most probably it ran around the four walls. The floor of the courtyard seems to be original (pl. 1.13), which suggests that the changes that have occurred to the walls are not radical and is probably the result of restoration and maintenance.

There are four passages in the courtyard, the first in the northwest corner, gives access to a chamber (b, fig.1. 14) and the second is a bend passage on the south western side with difficult access to it. In the south wall of the southern corridor there is a door which leads to room (c, fig.1, 14) and in the eastern wall a door leading to the room (d) located to the north of the reception hall. The remaining two passages are found on the eastern side next to a door that leads to the chamber (k). The first passage, the north-east, leads to a room in the east (e), the first of four rooms, forming the north wall of the yard on the first floor. And three rooms (f, g, h, fig.1.14) are similar to each other in several respects. The roof of the three rectangular rooms has a cross vault. There is a large wall niche in the western wall of the fourth Room (h).

Pl.1.14 Passage leading to durqa'a looking north in Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.15 Roof covering of the durqa'a in Dar al-Sit Tunshuq al-Muzafariyya

Pl.1.16 Details of the durqa'a covering in Dar al-Sit Tunshuq al-Muzafariyya

The second passage, the south-eastern has a door opened in its southern wall connected to the room (i, fig.1. 14) and a door is opened in the west wall of this room, it leads to a room (j) covered with a cross vault. The original function for this room is not known, but today contains ten water sprinklers. The chamber (k) relatively isolated was originally toilets and today laundry, and room (i) adjacent to the laundry that located in the south eastern corner of the yard was until recently containing four basins of stone, now scattered in the open courtyard, which makes it likely that it was one of the annexes to the bath house.

Reception hall (Figure 14.1)

In the middle of the south wall of the open courtyard on the first floor of Dar al-Sitt Tunshuq al-Muzaffariyya, is a corridor that leads to the reception hall (l, fig. 1.14, pl. 1.14), which is the most prominent and most important unit on the first floor in Dar al-Sitt Tunshuq. The reception hall is composed of a central hall (*durqa'q*) sunken between two open *iwans* to the east and the west (pl. 1.15). The ground-floor of the reception hall is a bit lower than the ground level of the *iwans*, and still retains some parts of the marble formations that were covered, which alludes to past richness. Folded cross-vaults, centered with an octagon, cover the roof of the reception hall and

the western *iwan* (pl. 1.16.). The sides of the two octagons are decorated with beautiful *muqarnas* made up of three tires and covered by raised lantern domes to admit light and air but exclude rain and wind.

To the south of the reception hall are a range of eight attached rooms, four contiguous to the reception hall, and four further to the south following the four adjacent rooms. And adjacent rooms (Fig. 1.14, m, n, o, p) appear to be original and date back to the construction of Dar al-Sitt Tunshuq. These rooms have different spaces and are divergent. The rooms (Fig.1. 14, q, r, s, t)extends to the south of the south wall of the ground floor where the main hall ends (stable), based in part on the vestibule located north of Khan al-Imara al-Amira showing it was added later after the Khan was built. Therefore, they are later rooms built in the Ottoman Period. with different spaces joined by the south wall which is not straight, but oblique like the first floor T, fig. 1.14).

This way the description of Dar al-Sitt Tunshuq ends as far as the first floor. The upper is new and will not be described here.

CHAPTER II
al-Madrsa al-Mawardiyya

2.1 Preliminary information on the building

2.1.1 Name

al-Mawardiyya building is known in many historical references[42] as al-Madrasa al-Rasasiyya, (which literally means lead in Arabic), and is considered as part of *Ribat* Bairam Jawish. But based on records of Jerusalem's Religious Court[43], it was proved otherwise. It seems that the name was given by al-Arif [44], and referred to later on, due to the presence of lead chips among the courses of stones instead of (pl. 3.2). Burgoyne [45] attributed it to the use of the scarcity of that material made up of lime and sand.

Pl. 2.3 Lead sheets between the stone courses of al- Madrasa al-Mawardiyya

42 al-Arif 1961.307; al-Asali 1981.327; Nijm and others 1983, 360; Burgoyne 1971, 23; Bahat 1990, 26; Bieberstein and Bloedhorn 1994, II, 359
43 Sijil 56.647-650, and Sijil 77 537
44 1961.307
45 Burgoyne 1971, 24

2.1.2 Date

al-Madrasa al-Mawardiyya is undated, but based on comparisons to some of the architectural and historical information documented; the building was probably founded in the early 10H/16AD.

2.1.3 Waqf

The endowment of al-Mawardiyya, has not been found to date but Jerusalem court records show that al-Mawardiyya had a record, although that is not enough.

2.1.4 Site and the boundary of the building

The *madrasa* is located on the south side of the 'Aqabat *Takiya* (Fig. 2.1), which forms its northern edge. To the west there is an undated building and the eastern parts of al-Imara al-Amira, and to the south a group of undated residential buildings, and to the east Ribat Bairam Jawish. Therefore, al-Mawardiyya lies between *Ribat* Bairam Jawish to the east, and al-Imara al-Amira additions to the west.

2.1.5 Brief description of the building

al-Mawardiyya includes a beautiful northern architecture façade built with an *ablaq* entrance that leads to a ascending stairway to the school's mosque overlooking the 'Aqabat Takiya, and to the rest of the architectural units made up of an open courtyard, and *iwan*, a small house and a large house and a group of rooms of various sizes.

2.1.6 Function of the building

al-Mawardiyya was dedicated to teaching in its facilities and worship in the mosque. It seems it had suffered a setback early, which led to the shift to residence, where Bairam Jawish stayed in the second half of the 10th century H / 16th century AD. The Mawardiyya today, and for nearly four decades, forms the bulk of the orphanage school, as all the units are used for classes for teaching students.

2.1.7 Ownership

al-Mawardiyya is Islamic Waqf properly owned and run by the Department of Islamic Awqaf.

2.2 Historical section

2.2.1 Date

al-Mawardiyya is undated, therefore attempts to verify its date of construction will depend on its history, architectural comparisons, and this will be at the end of this section after studying and analyzing its architectural and decorative fabric.

2.2.1 Waqf (Endowment)

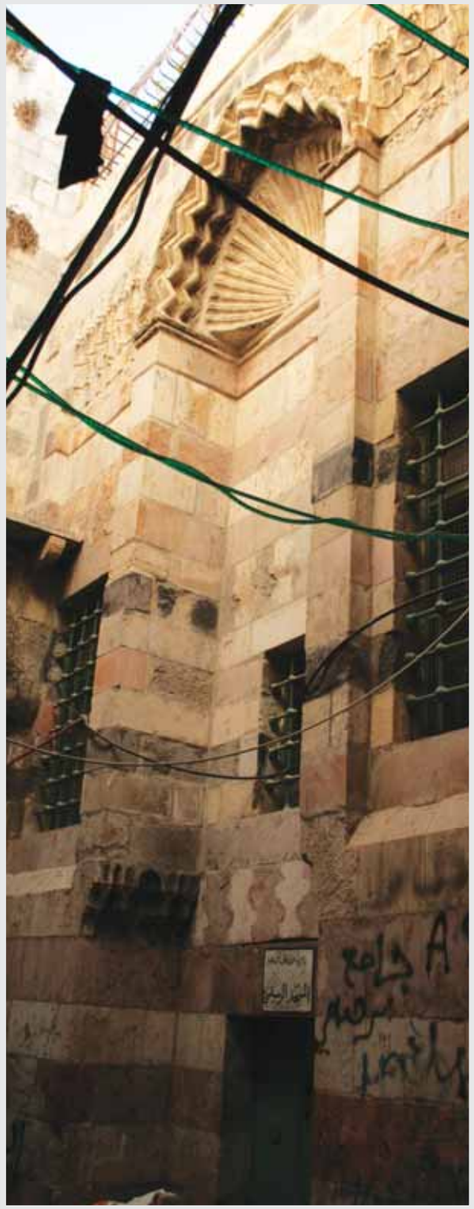
al-Mawardiyya had a Waqf but to date its details and conditions are not available. It seems that this Waqf was not been sufficient to cover the expenses of the school which needed several renovations. al-Assail [46] published a long document from the register of the Islamic Court [47], dated between the years 995-997H/1587-1589AD, which includes a table of allowances and salaries of officials and beneficiaries in the institutions of religious Jerusalem. al-Mawardiyya was mentioned in this record and contained the names of Sheikh Mohammed and his brother, Sheikh Mahmoud, inspector and concierge, for 12 coin per day.

There is another document [48] that shows that al-Mawardiyya was been struck by the devastation in 1005 H/1596-1597 AD, and that Mahmoud Zain a;-Din al-Wafa'i asked the judge to disclose and assess the expenses needed for the schools before starting work and that he allows recover the amount from the school's future income as a debt by the school. The judge sent a team to uncover the needs of the school and what needs to be spent on it.

2.2.3 Subsequent history

It seems that the school continued to be a residence for a long time until the first half of the 20th century when it became a school. The late Jerusalem historian Arif al-Arif studied at al-Mawardiyya primary. And since 1969 it included parts of Ribat Bairam Jawish and some parts of al-Imara al-Amira to form the academic section of the School of Dar al-Itam al-Islamiyya, which continues to this day. A decade ago, the front façade was restored and damaged red stones were replaced, as well as the mosque. This was done by collecting donations from the local committee in particular, and it was technically overseen by the Department of Islamic Archaeology at the Islamic Awqaf of Jerusalem.

46 245, 1989
47 68, page 42
48 Sijil 77, 537



Pl. 2.1 North façade of al- Madrasa al-Mawardiyya

2.3 Architectural Description

2.3.1 The north façade (Fig. 2.2, pl. 1.2)

The front façade of the building is known for consistency and accuracy in the colors, and decorative richness with a length of 5.75 meters, it is enclosed within a relief moulding. The façade is dominated by a recess enclosing the imposing entrance of the school. The entrance was built of red, black, and cream-colored *ablaq* stones. It culminates in a scallop shell like a sunray or dove tail (panel 2.2), surrounded by a semicircular of chevron moulding.

The door recessed by 60cm, it is flanked by two stone benches from both sides (65, M. × 60, m. × 45, m.), and it is surmounted by red slab lintel. Above the lintel there is an ablaq string course of black and white joggling, now turned to grey. (pl.2.4) this decorative element common in the early Ottoman buildings in Jerusalem, such as fountains of Sultan Sulaiman the Magnificent.
There are four windows in the northern façade, three originals illuminating the school's mosque, and the fourth new small-sized one, recently opened to the west of the entrance to secure the additional lighting of the stairs leading to the mosque and the annexes to the school. The original windows are fitted with elaborate iron grille with perfect workmanship, and surmounted by red and black slab lintel. A ribbed semicircular hood is set five courses above joggled voussoirs.

2.3.2 Ground floor (Fig. 3.2)

The ground floor of the al-Mawardiyya School is reached through the main door, which was opened in the northern facade. It consists of the vestibule, and two small rooms and stairs. The entrance leads into a square antechamber 2X2

Pl. 2.2 Details of the upper section of the north façade of al- Madrasa al-Mawardiyya

Pl. 2.4 Details of muqarnasat in the north façade of al- Madrasa al-Mawardiyya

m.,which has been paved with stone slabs, and covered by a cross vault of fine stone blocks . A door was opened in the southern wall of the antechamber leads to the first room. In the eastern wall of the antechamber another door was opened and leads to a second chamber – the two rooms seem to have been extensions of the mosque. There is a slot door to the west of the vestibule leading to a stone slab, leading to the stairs of al-Mawardiyya School's mosque. At the end of the stairs, and to the east there is an elaborate entrance (Fig. 2.4, pl.2.5),which is the original entrance to the mosque. The entrance door has red, black, and gray and is eventually surmounted by a crown *muqarnas*.

2.3.3 al-Mawardiyya Mosque (Fig.2.5, pl.2.6, 2.7)

al-Mawardiyya Mosque was mentioned in a restoration document [49] as "the compound with a *mihrab*." The rectangular mosque has six windows that illuminate the prayer hall , three in the north wall, and two in the eastern wall, and the latter in the

Pl. 2.5 Entrance of al- Madrasa al-Mawardiyya mosque

49 Sijil 77, 537

Pl. 2.6 South section of al- Madrasa al-Mawardiyya mosque

Pl. 2.7 North section of al- Madrasa al-Mawardiyya mosque

south wall above the *mihrab*. The windows of the north wall are crowned with horseshoes arches, while the rest of windows are topped by semicircular arches. All windows have iron grille, but with a different style, and the most elaborate are seen in the north as mentioned in the description of the northern facade of the school.

al-Mawardiyya Mosque hall is divided into three sections: north, middle, and south. The central part is covered by the semi-spherical shallow dome, based on four pointed arches built in red, black and white springs from the four corners of the walls. Some were re-painted and later heavily in the restoration in 1998. The southern section contains the *mihrab*, on each side of the *mihrab* a marble column. This part of al-Mawardiyya Mosque is covered by a cross vault centered by a small shallow dome. The northern section 3 of the mosque is divided into two non-equal parts.

2.3.4 The first floor (Fig.2.6)

al-Mawardiyya stairs lead to a courtyard (A, fig. 2.6) with irregular shape and multi-level (three levels), with a southern beautiful stone entrance (pl.2.8) leading to the units of the first floor of the al-Mawardiyya school which is composed of two courtyards (B, fig.2.6, Pl. 2.9, 2.11) and a set of rooms. The entrance door is decorated (gadrooned) and surrounded on either side with (billet) on top. And the internal facade of this entrance (Pl. 2.9) reflects the horseshoe surrounded by decorative panels.

From the entrance leading to the courtyard (Fig. 2.6), are the first units on the first floor of the al-Mawardiyya School, which was mentioned in the restoration instrument [50] .

This rectangular courtyard, had paved floor tiles of good quality (pl.2.11) and has a large pointed arch leads into the chamber C (Fig.2.6) and was named the Great House in the restoration document which is already relatively large hall.

The arch was closed in an unknown time with the exception to a door which flanked by two windows. And the plan of the hall C is rectangular, paved with stone floor slabs higher than the level of this ground floor of the courtyard B (fig.2.6) which predates it by 27 cm . A window was opened in the southern wall of this room which overlooks the north-east open courtyard of al-Imara al -Amira, with the water basin.

Room D, or what it called in the restoration document (Fig.2.6), the large *iwan*, to the east of the open courtyard, faces Hall C. The outline of room D is a square room, covered by a cross vault with a small cross shallow dome at its center. It is difficult to know what is meant by "al- Ma'zal al- Juwani" (pl.2.10), stated in the repair estimate, but most likely it is a space separates between two units forming al-Mawardiyya School as it appears from the plan (e, Fig .2.6).

The first northern unit consists of an open courtyard B (the square in front of the Great House), and Hall C (Great House), and the Chamber D (the great Iwan). The second southern unit consists of courtyard w (the square in front of the middle house) and Hall G (Wastani House), and the Chamber H (little house) and the room "I". Accordingly al-Mawardiyya school is likely to be formed of three sections, the housing unit, a unit of teaching, and the mosque and its annexes, on the first floor. This, when teaching was based in al-Mawardiyya, but when it became a residence, the teaching section also became a residence, and perhaps this explains the reasons and motives of the closure of arches overlooking the area for each of the Iwan and the Great House.

The level of the ground courtyard W is higher (pl.2.11) than the courtyard B by about .40 meters and its plan is of rectangle shape, surrounding by four rooms of different sizes and locations, and ascending stairs (pl.2.9) in the eastern wall leading to the upper floor of al-Mawardiyya. Two of the four rooms, can be linked with information mentioned in the document of restoration referred to earlier, such as Wastani House (Hall G) and the little house (Room H). "G" (Fig.2.6) which and is most likely Wastani House is located based on the restoration document to the West of the open arena and its eastern facade is the only visible one.

This façade was built of white stones and the pattern of opening is or a door and three windows. Hall G has an outline of rectangular shape stretching from north to south.

50 Sijil 77, 537

Pl. 2.8 Entrance gives access to the first floor of al- Madrasa al-Mawardiyya

Pl. 2.9 Open courtyard B looking north

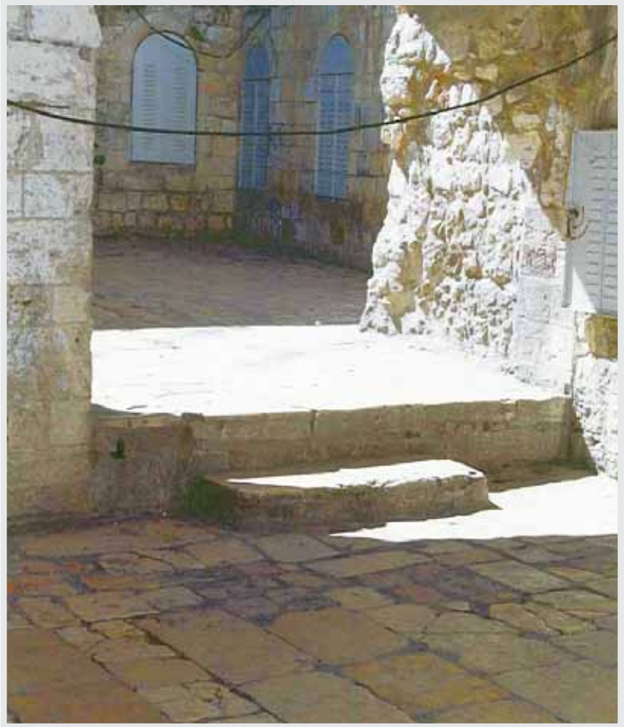
Room H, which is probably the little house based on the restoration document, lies in the southeastern corner of the square, (and is entered through a door opening in the north wall overlooking the arena. The outline of Room H is rectangular. Room I is small and lies between Room H and Hall G, and these were not mentioned in the restoration document. The outline of the small room is square, and accessed through a door (80. meters × 1.65 meters) opened in wall north overlooking the arena (F).

The small size of this room suggests it may have been used as kitchen or bath, today it's a store. There is room (J), which is similar to the room I, but not identical, located in the eastern wall of the open courtyard. It has a window and floor and vault like room I, and may have had the same function as well. It is accessed through the door opened in its western wall, which has a new iron door added to it.

Dating al-Mawardiyya

Burgoyne [51] says this building, "Rasasiyya", actually dates back to the Ottoman period, but he was later reserved and threw some doubt saying that the design goes back to the end of the Mamluk era or directly after the reign of the Mamluk. And Arif al-Arif, followed by al-Asali date al-Mawardiyya , known as " Rasasiyya" to *ribat* Bairam, to the year 947 H/1540AD.

Depending on this record [52], it shows that al-Mawardiyya was up and running in the year 942H/1535AD, and thus the oldest of the first built Ottoman buildings in the 'Aqabat Takiyya, and by that we mean the way of Bab al- Nazir (943H/1536AD).
Burgoyne referred [53] to the usage of the chevron arch as Ottoman influence used in some buildings of the 10th century H/ 16th century AD. Meinecke [54] noted that the shell decoration above the entrance, which he said resembles the dove-tailed cuneiform, were common in Cairo in Khasraw Pasha Sabil (942H/1535AD), and in Damascus in the tomb of Ahmad Pasha, who died in 942H/1535AD. Meinecke, says the '*muqarnas* dome and the chevron arch are two features of Mamluk architecture, just like horseshoes arch, gadrooned, *abalq*, thresholds, jambs, and pillars.



Pl. 2.11 Pavements of courtyard B and W looking south in al- Madrasa al-Mawardiyya

Accordingly, it is understood from the analysis of Burgoyne and Meinecke, that al-Mawardiyya has a mix of Mamluk and Ottoman architectural attributes. But what is striking is a feature in al-Mawardiyya, is the *ablaq*, which is truly Mamluk, and we do not find a resemblance in Ottoman Jerusalem buildings. There is no trace of it in the wall of Jerusalem or in the six fountains of Sultan Sulaiman the Magnificent, nor in al-Imara al-Amira, one of the most important 10th century H / 16th century AD buildings.

51 Burgoyne 25, 1971
52 7, 348
53 Burgoyne 26, 1971
54 Meinecke 267, 1988

An accurate survey of Ottoman buildings shows that *abalq* is weak in both Maktab Bairam Jawish 947H/1540-1541AD, and the Dome of the Prophet 943H/1536-1537AD, It is known that the Maktab was renewed by Bairam, and *ablaq* in the Dome of the Prophet, dates to the restoration of the dome after the 10th century. The first appearance of the *ablaq* was in Khalawi, which was founded at the beginning of the 11th century H/ 17th Century AD, in a revival of Mamluk phenomenon, rather than tradition and practice of Ottoman architecture.

Therefore, the question is, whether al-Mawardiyya has Ottoman foundations, what is the explanation of the density of *ablaq* and its disappearance in all 10th century H/ 16th century AD buildings in particular, and Ottoman buildings in Jerusalem in general. So most likely, al-Mawardiyya is not Ottoman incorporation, but probably Mamluk.

If this assumption that al-Mawardiyya school is Mamluk, this raises the question why it was not mentioned in Mujir al-Din's book who is a local historian and researcher, strictness and reliable in understanding and tracking the development of Jerusalem in the Mamluk era.

We would like to say that Mujir al-Din is a researcher that we owe a lot to, but he inadvertently dropped al-Mawardiyya, and this is not unique, as Turkan Khatun, located on the way of Bab al-Silsila was not mentioned in his book either, though it was established in the years (753H/1352-1353AD) . Therefore, not mentioning the Mawardiyya by Mujir al-Din does not negate the fact that the school was founded by the Mamluks. It is likely that al-Mawardiyya may have been built after the completion of his book, a year after 900/1494-1495 and before 922/1516-1617AD.

It is noted that there is a gap of time nearly half a century between the last building activity of the Mamluks, the Ashrafiyya school (885/1482 AD) and the first building established in Ottoman Jerusalem, Sabil Qasim Pasha 933H/1527-1528AD.

The big Sultan projects like the restoration of the citadel (938/1531-1532) and the public water fountains (10 Muharram 943H/ 29 June 1536 AD to 2 Ramadan 943H/12 February 1537 AD) had to wait several years to begin implementation. There is therefore a possibility that the al-Mawardiyya was founded in this period (900-922H/1594-1517 AD), which, like a few other buildings and not dated such as al-Zawiya al-Muhammadiyya on the 'Aqabat *Takiyya* path facing al-Mawardiyya , and the shrine room in the al-Imara al-Amira and Al Zawiya al-Younisiyya and al-Qastmouriyya School (perhaps this building is the anonymous one in Burgoyne's list No. 46, 1976).

If this holds true, it explains why there is no mention of these buildings by Mujir al-Din, while is frequently mentioned in the records of the Jerusalem Religious Court, especially in the first half of the 10th century / 16th century AD, but without details concerning its Waqf of or its founders.

CHAPTER III
Ribat Bairam Jawish

3.1 Preliminary information on the building

3.1.1 Name

The building was known by its original name *ribat* Bairam Jawish. But some authors[55], mix between al-*ribat* and al-Mawardiyya (Rasasiyya). Other names given were the mosque of Bairam Jawish on the grounds that al-Mawardiyya mosque is part of *al-ribat* [56].

3.1.2 Date

947H/1540-1541/AD

3.1.3 Waqf

al-Ribat has a generous endowment by Bairam on several stages in the years 948H/1541-1542AD, 952H/1545-1546 AD, 967H,/1559-1560 AD

3.1.4 Site and the boundary of the building (Fig. 3.1)

Ribat Bairam Jawish is situated at the southwest corner at the intersection of 'Aqabat *Takiyya* and Bab al-Nazir road with al-Wad road. It is surrounded from the north by the northern end of 'Aqabat Takiyya, to the west by the eastern end of al-Mawardiyya school, to the south by residential buildings and to the east Bab al-Wad.

3.1.5 Brief description of the building

The building of *ribat* has two facades: the Northern one which includes the main entrance and the second eastern one overlooking Bab al-Wad. *ribat* is composed today of three simple floors. The ground and first are part of the original built by Bairam, while the third was added in a subsequent undated period.

First floor access is through the entrance in the north façade, which leads to a rectangular corridor connecting to a courtyard surrounded on the north and the south and east by relatively small rooms in size. The second floor is made up of a small open courtyard (which rises in the south from the ground floor level), and the corridor, and six small retreats, and North Hall consisting of three sections.

The third floor is made up of a rectangular room divided by a pointed arch into two parts, with access to this room [57]after crossing the bridge arch over the 'Aqabat *Takiyya*.

55 al-Arif 1961.307, Asali 1981.327, for me 1999.34.
56 Burgoyne 1976, 23
57 We will not describe this room here, but for those who wish they can review the archive of the Program of Rebuilding the Old City, the file of the ancient study of the *Dar al-Itam al-Islamiyya* complex, and in English in Natsheh, 2000, ii,

3.1.6 Function of the building

The goal of Bairam Jawish from the establishment of this *ribat* was to provide a place to house the Sufis and the poor in nearby Jerusalem. It was reported in the endowment, it is stated:

> **"The aforementioned *ribat* is prepared to house the righteous poor's, each lives in one room, and the inspector of the ribat cash him an *uthmani dirham* daily and give one of the endowed bowls(meal)".**

3.1.7 Ownership

al-*ribat*, as stipulated in the endowment is proper Islamic Waqf, owned and administered by the Department of Islamic Awqaf. The endowment states":in case of no offspring after Bairam, the endowment shall be administered by the head of the Two Holy Mosques, or the beholder of Waqf of Prophet Khalil Rahman and the Waqf al-Aqsa Mosque."

3.2 The historic study

3.2.1 Date

The date 947/1540-1541 AD was engraved on a marble plaque placed above the entrance in the north façade. It included three lines drafted in carved Arabic script. Van Berchem [58] noted and disseminated the writing:

This blessed place (is made *waqf*) as a hospice
(by) the poor one(by the mercy of God), the Amir Bairam Jawish son of Mustafa, may his glory be perpetuated
its date being 20th Rabi' I of thee year 947(25 July 1540)

Van Berchem read the last word of the first line as house instead of housing, but what is right is what we demonstrated here, that Bairam Jawish never lived in the *ribat*, but in al-Mawardiyya and then built a house adjacent to the *ribat* from the east [59].

3.2.2 Founder

This *ribat* was founded by Amir Bairam Jawish Ben Mustapha, and until lately we had little knowledge of Bairam[60]. Meinecke noted [61] that very little was published about the founder. Bairam was an important public figure in Jerusalem in the early Ottoman period, and was awarded several honorary titles reflecting his position and activity at the social and economic levels.

al-Arif [62] and al-Asali[63] believe that Bairam, was appointed by the Sultan Sulaiman the Magnificent (926-974H/1520-1566AD) to supervise the building of the wall of Jerusalem. Unfortunately, the two authors did not validate this opinion with a reference. In any case, studies based on the record [64] show without a doubt, that Mohammed Chelibi Naqqash, is the person who supervised the building wall of Jerusalem, yet it seems it was Bairam 's seems to have contributed to the building of the wall of Jerusalem, where it appears from a document [65] dated 18 Rabi' Awwal 947H/23 July 1540 AD that Bairam traveled to Egypt to bring artisans and architects to work on a wall in Jerusalem. But it is interesting to note that to date, the record does not show names of the artisans and architects from Egypt. Based on Ghosheh [66] Bairam supervised it.

Bairam served several functions: the beholder of the lands in Jerusalem and the supervisor of the state funds for each of Egypt and the Hijaz and the Islamic lands. Bairam was a speaker on the (Portal) at the Church of the Resurrection in the early years 960H/1552-1553AD. It is understood from the record[67], referred to by al-Asali[68] that Bairam Jawish assumed the management of the al-Imara al-Amira (Khassaki Sultan). He was very firm and efficient so that the institution stores overflowed under his reign and wheat was exported to Egypt.

In addition, he was entrusted of being secretary of the Prophet Musa Waqf near Jericho[69], in 965H/1557-1558AD.

In addition to these functions outlined above, his contribution to life in the city of Jerusalem was concentrated in two areas of focus: the first architectural activity and second in the economic sphere.

Therefore, it clearly shows that Bairam is one of the most important figures who lived in Jerusalem in the 10th Century H/ 16th Century AD and had an active and effective role in the development of the city of Jerusalem in terms of architectural and economic development. Bairam Jawish passed away [70] on 6, Rabi' Awwal 970 / 3 November 1562AD.

58 Van Berchem 1923, 430
59 For this house and its history and architectural and decorative components see Natsheh 2000, ii, no. 13.733-741
60 For details about the life and activity Bayram Gawish's architectural, commercial and social life see Natsheh 1997, 154-158
61 Meinecke 1988,267

62 1961.307
63 1981.325.
64 Cohen, 1989, 470-473, Cohen 1990, 33, Natsheh 2000 ii, 677-678
65 Sijil 12, 360
66 2000.60
67 495- 27 and record 28 , 437
68 1989.98
69 Sijil 36 334
70 Salameh 1992.270

3.2.3 Waqf [71]

Bairam had a generous Waqf to this property second to al-Imara al-Amira in the Ottoman period. Finding the details of this was a tough job and amusing at the same time.

The first step in establishing this endowment [72] was on 15 Jumada I 952 H/25 July 1545 AD when Bairam Jawish allocated the amount of (50000) fifty thousand Ottoman [73] as Waqf for his *ribat* and office next door.

In a purchase note [74] dated 2 Ramadan 959 H/21 October1522, that the Bairam as the incumbent executor on his Waqf, bought a quarter share (6 *qirat* out of 24) of the property of the village of Bani Na'im, the farm known as the "Khattein" of the village of Bani Na'im, for 50 gold pieces out of fifty thousand *dirhams*.

The second and last step in Bairam 's Waqf was in the middle is the Dhul Hijja 967 H/ 6 September 1560AD, where he himself testified to a judge and witnesses, that he allocated one hundred *qintars* of soap, equivalent in value (100,000) one hundred thousand *uthmani* [75].

This brings the total allocated by Bairam to his *ribat* and office 150 thousand *uthmani*. This amount is huge and generous in itself when compared to other Waqf of Jerusalem in the 10th Century H/ 16th Century AD.

As stipulated by Bairam in his Waqf, he allocated and spent this amount on the purchase of land in different parts of Palestine, which ranged from agricultural land, orchards, and lots of villages, and real estate within cities.

With regard to financial arrangements Bairam set salaries and the following expenditures:

Function	daily amount Dirhams (*'uthmani*)
16 residents in *ribat*, each *'uthmani*	16
Sheikh al-*ribat*, the supervisor	5
Doorman	2
Teacher (jurist)	3
Waqf supervisor	4
Waqf secretary	1
Oil to light the *ribat* and Bureau	1
Total	32

Accordingly, the total annual expenditure is approximately 11 680*'uthmani*.

71 See the details on this in the archives of WA, historical studies file of the *Dar al-Itam al-Islamiyya* and Natsheh 2000, ii, 711-712.
72 al-Asali 1989.122, *sijil* 17.127.
73 Silver currency
74 Sijil 18.407-408.
75 Sijil 56 647-648

3.3 Architectural Description

3.3.1 Northern facade

The main entrance (Fig. 3.2, pl. 3.1, 3,2, 3.3) is the most prominent of this façade, which is surmounted by a pointed arch. There is a marble plaque written which was mentioned when we discussed the history of the *ribat*. Two courses above the keystone of the pointed arch, there is a recessed rectangular square marble panel. The pointed arch of the porch entrance is flanked on both sides by rectangular windows. The two windows are not on the same level, nor they are the

Pl. 3.1 North façade of Ribat Bairam Jawish before restoration

same size, but both are surmounted by a slab lintel and fitted with an iron grille. At the top section of the façade on the second floor of the *ribat*, there are three identical rectangular windows. This section has two shallow domes covered by the small stone tiles which top the two rooms that make up this second floor.

Pl. 3.2 North façade of Ribat Bairam Jawish after restoration

Pl. 3.3 North eastern corner of Ribat Bairam Jawish

3.3.2 The eastern facade (pl. 3.3, 3.4, 3.5)

The eastern facade is strikingly different from the northern one as it does not contain any architectural or decorative elements. It is about 16.10 meters from north to south, overlooking the al-Wad road by five large rectangular openings on the lower level.

These five openings with five bays, divide the facade into five similar sections. Each section, is fitted by a wooden door (replaced by metal) leads to a small area which was a home in al-*Ribat* for one of the sufis (*mujawer*)and now all turned into shops.

It is unfortunate that these shops are not mentioned in the endowment of *ribat*, this suggests that these openings were not part of the original, but added later on, and these places were not shops, otherwise they would have been reported in the endowment as a source of income.

This strengthens an assumption that these sections are only rooms used by sufis. The Waqf mentions that there were 16 Sufis in the *ribat* therefore sixteen rooms. If it is taken into account the five rooms on the first floor and five of these, with others units on the ground floor, sixteen Sufis would be able to reside in the complex with two rooms named in the Waqf as the northern and western complex.

Pl. 3.4 Eastern elevation of Ribat Bairam Jawish (before)

Pl. 3.5 Eastern elevation of Ribat Bairam Jawish (recent)

3.3.3 Interior description

Ground floor (Fig. 3.3)

Pl. 3.6 Covering of chamber in the ground floor in Ribat Bairam Jawish

Pl. 3.7 Newly opened door in the Ribat elevation from interior

The ground floor consists of an entrance vestibule A, and chambers B, C, D, and open courtyard E. The main entrance, which is lower by .75 meters than the level of 'Aqabat Takiyya, leads to a rectangular vestibule paved with flagstone, and covered with barrel vault.

A door at the end of this vestibule led into the open courtyard E of the *ribat*, but this vestibule, with room B next to it from the west, were used as a shop to sell vegetables, and now a place for selling pastries. This door was closed four decades ago.

Chamber C has flagstone floor of small-scale, it is covered by a cross vault(pl. 3.6). A door that opens in a south-eastern corner, leads to a small area like an iwan, and overlooks the open courtyard. The *iwan* is covered with a cross vault and is paved with floor tiles.

Room B, located between vestibule A and chamber C, is a rectangular room, overlooking the open courtyard E. chamber D has a separate entrance opened in 'Aqabat *Takiyya* (pl. 3.7) with an easy design and no openings with the exception of the door, and the eastern window open into chamber C. its walls are plastered, it has a cross-vault roof.

Open Courtyard E

This open courtyard is rectangular in plan 9 meters by 5.20 meters, has been recently paved with modern flagstones. Walls surround this courtyard on all four sides. The north wall is the largest and the highest wall, and the fabric of this facade can be divided into two parts, upper and lower. The lower represents the original part of the *ribat*, which was built by Bairam, where the ground and first floor. The eastern wall surrounding the open courtyard H has two small *iwans* each of which overlooks the courtyard in a semi-circular shape which precedes Chamber C (Fig. 3.3, pl. 3.8). The two *iwans* have the same quality tiles that covered the open courtyard, their walls are plastered, and have a barrel vault roof. There is a room (*iwan*) built in the southwest corner of the open courtyard facing Chamber C on the same axis.

Pl. 3.8 Two iwans in the north-eastern corner in ground floor of Ribat Bairam Jawish

Pl. 3.9 Stairs leading to Madrasa Mawardiyya and to the first floor of Ribat Bairam Jawish

The western wall has large stairs (Pl. 3.9), consisting of 18 stairs and extending 7.5 meters from north to south, this stairs leads first to the courtyard (Fig. 3.4), which gives access to Dar Bairam Jawish and the first floor of the *Ribat* and secondly, after turning west to the al-Mawardiyya school's courtyard and to the second floor of *ribat*.

Description of the first floor of the - *Ribat* (Fig. 3.4)

This floor consists of an open small courtyard and a long rectangular corridor G and six rooms H 1 - H 6, and hall I , which consists of three sections devoted to the housing of the Sheikh of al-*Ribat*. Courtyard w is reached through the open courtyard E through the ascending stairs. This courtyard is smaller than the open courtyard E, and it is in the south-eastern corner of the courtyard F. There is another luxurious and decorated door, which dates back to the 10th century H / 16th century AD, which are the entrance to Dar Bairam Jawish, the sponsor and builder of the *ribat* who made for himself and his descendants the right to access to the Dar from the *ribat*, as clear in the endowment[76].

The connecting open corridor (Fig. G 24,), is parallel to the eastern wall of the floor first, to cells (rooms H 1 - H 6), and extends for a distance of 9 meters with a width of 1.40 meters, furnished with stone floor tiles.

The description of this *ribat* has ended and we note that the architectural fabric of the -*ribat* is simple in configuration, with a few ornaments, have been subjected to several restorations and a variety of uses, which negatively impacted its architectural fabric.

76 Sijil 56, 652

CHAPTER IV
al-Imara al-Amira

4.1 Preliminary information on the building

4.1.1 Name

Several names were given to the big building built by wife of Sultan Sulaiman the Magnificent. al-Imara al-Amira [77], is the original name, mentioned in the Waqf [78] and in many of the documents of the records of the Jerusalem Religious Court . In some European publications [79] and some Arab ones [80] it is knows as "Khassaki Sultan ", or Takiyyat Khassaki Sultan and sometimes only briefly as the *takiyya*[81].

4.1.2 History

According to the documents of the Waqf, building al-Imara al-Amira started a while after 30 Jumada Awwal 959H/24 May 1552-1553 AD and was completed before 15 Sha'ban 964 H/13 June 1557 AD.

4.1.3 Waqf

al-Imara al-Amira has a generous Waqf drafted in Arabic, Turkish, in several copies.

4.1.4 Site and the boundary of the building

The building is located between 'Aqabat *Takiyya* to the north and 'Aqabat Sarayya to the south (Fig. 4.1). Therefore, northern and southern borders are clear. To the west, the building is surrounded by eastern parts of Dar al-Sitt Tunshuq, and to the east by units of al-Mawardiyya School.

4.1.5 Brief description of the building

(Fig. 4.5) the building is too large and has two entrances: the northern is located on the road of 'Aqabat *Takiyya* and the south on the road of 'Aqabat Saraya. The northern entrance leads to a vestibule that reaches an open courtyard divided into two parts based on floor level. In this section there are the remains of an elevated entrance, kitchen, water storage and bakery occupying the hall downstairs of a two-story building. The southern entrance leads to a vestibule (A, fig. 4. 5), its walls are rich with decorated circular stone, and it leads to an open courtyard (south-western courtyard) surrounded by aisles making up the Khan of al-Imara al-Amira. To the east of the Khan and its open courtyard, a building established in the 19th century, known as Adliyya, was probably at the site of *ribat*, and disappeared with time. Adliyya faces Hall (C) with four bays, and may be related to al-Imara mosque which is no longer there.

77 'Imara (building) is a word of Turkish origin, meaning the building in which food, especially soup, is given to the poor, and thus it can also be called soup house
78 Sijil 270: 18-27.
79 Pierotti, 1864, 150-153; Burgoyne, 1976, 17-20 Burgoyne, 1976, no.140
80 al-Arif, 1961.307; al-Asali, 1982.9-38; Najm and others, 1983.364.
81 The word Tkieh originally Turkish "Tekke" refers to mystical Sufi institution but as noted by al-Asali (1982 23), the Tkieh in the dialect of the people of Jerusalem, means a place of free food, and in particular soup

To the east of this room is a tomb with a pointed dome. al-Imara al-Amira is therefore an illustrious architectural project comprising four open courtyards, a few staircases, and several buildings, each consisting of two floors and a range of rooms and halls of different sizes and method of construction.

4.1.6 The function of the building

The building was assigned more than one function, including some for religious purposes such as the mosque and *ribat*, and some socially like distributing food to the poor and the needy, and some were commercial assigned to the Khan which was until the second half of the 13th century H / 19th century AD still active, while the kitchen is still active and distributes soup daily.

4.1.7 Ownership

All al-Imara al-Amira is proper Islamic Waqf, owned and administered by the Department of Islamic Awqaf.

4.2 Historic section

4.2.1 Date

It seems that the preliminary construction work began in the second half of the year 959 H/1552AD. Heyd [82] published a summary of the order issued by the Istanbul governor of Damascus, on 23 Rajab 959 H/ 5 July 1552 AD, instructing him to send craftsmen to Jerusalem to work in al-Imara al-Amira. Since the formulation of the Waqf of any building before its completion was considered illegal [83], and since the date of the endowment which was drafted in Arabic is 15 Sha'ban 964 H/15 June 1557AD, it means the construction of al-Imara al-Amira began in the mid-959 H/ 1552 AD and continued nearly four years.

4.2.2 Founder

The founder of this project was Khassaki Sultan, the wife of Sultan Sulaiman the Magnificent (926-974H/1520-1566AD). This project has the support and patronage of Sultan Sulaiman, especially after the death of his wife, so it is a great project of the Sultan.

Meinecke [84] also finds that the interest in the city of Jerusalem by Sultan Sulaiman the Magnificent reached its peak by building al-Imara al-Amira.

The original name of the Khassaki Sultan was Roxlaneh (Roxelane), because "Khassaki" is the title known by Ottomans historians, which means the beloved of the Sultan, meaning she had higher stature than others [85] .

82 Heyd, 1960,143
83 Rogers, 1988, 19
84 Meinecke, 1988, 267
85 Cengiz Orhanlu, 1978, 1100

She was also known as the (Khurrem, Hurrem), which carries several meanings, such as humorous and cheerful [86]. But the highest and most prestigious titles awarded were mentioned in the Waqf where she was dubbed "*'Aishat al-Zaman wa Fatimat al Dawaran*", as well as *hadrat walidat al-sultan Amir Muhammad (Her Highness the mother of Sehzade Mehmed*"

Khassaki Sultan, who was born in the early years of the 10th century H/ 16th century AD, in the area of Rogatien, which was frequently invaded by the Tatars. It is likely that Khassaki Sultan was captured in a raid and taken away, and then later arrived at the Royal Palace and presented to Sultan Sulaiman the Magnificent as one of the slaves[87]. It seems that her personal qualities enabled her to convince the Sultan to liberate her from slavery and, secondly, to marry her.

Different charitable Waqf foundations are linked to Khassaki Sultan, including, in addition to al-Imara al-Amira, a large architectural complex in Istanbul [88] which contained a mosque, a school, and office, and Imara (soup house) , and later a hospital in 958H/1551-1552 AD. She also built a mosque in Istanbul in 965H/1557-1558AD, and a Sufism place in 955H/1549 AD in the city of Balat (in Turkey), and *hammam* in Ayasofya.

Outside of Istanbul, she built a mosque in Edirne, and another in Ankara, and a *zawiya* near Aksaray in Anatolia, *an imaret* and a four-rite *madrasa* Mecca (964H/1556-1557AD).

Khassaki Sultan died [89] in Istanbul on 26 Jumada I 965H/ 15 May 1558 AD, and was buried in the Sulimaniyya Complex next to her husband Sultan Sulaiman the Magnificent.

4.2.3 Waqf

al-Imara al-Amira had a large endowment details of which are clear in the *waqfiyya* and in Jerusalem Religious Court documents. al-Husseini [90] published the Waqf without comment or edit, while al-Asali[91] stated the general guidelines of the endowment, and later [92] published the text of the endowment with valuable comments.

Roger [93] pointed to another copy of the full and final document dated 15 Sha'ban 964H/13 June 1557 AD and preserved in the Museum of Turkish and Islamic Art in Istanbul [94]. The Endowment notes the number of employees and the amount of their salaries and duties and their attributes, and then notes kinds of food, conditions and amount, and the units of the building: Khan, for travelers and merchants;, a mosque for prayers and reading the Quran; *ribat* composed of 55 rooms for Sufis and the poor, and a large kitchen with bakery, mill, several stores and *sabil*.

86 Stephan, 1944, 171; Skilliter, 1986, 66
87 Rogers, 1988, 88
88 Rogers, 1988, 18-19
89 For more information on Sultan Khassaki see the archive of the Program of the Rebuilding the Old City of the Welfare Association, *Dar al-Itam al-Islamiyya* file - historical study, see also: Salhieh, 193-196, Natsheh, 2000, ii, 748-749
90 1982. 78-93.
91 1982. 16-28
92 al-Asali 1989. 127-142.
93 Rogers, 19-20, 1988
94 Türk ve Eserleri Müzesi- TIEM no.2192

Khassaki Sultan allocated a generous endowment to al-Imara in Jerusalem. The list of endowments is long and rich and is not matched in Palestine apart from as al-Aqsa Mosque in Jerusalem and al-Haram al-Ibrahimi in Hebron.

According to a copy of the Turkish and Arabic endowment, the endowed land and real estates were distributed in five areas: Jerusalem, Gaza, Nablus, Sidon, Tripoli, and Levant [95]. Endowments were set by Sultan Sulaiman in Shawwal 967H / June-July 1560 AD , a year after the death of Khassaki Sultan,. Sultan Sulaiman added another [96] Waqf to al-Imara, through his agent, Minister Rustum Pasha, which brought together real estate located in the District of Sidon in the Levant.

In addition to increasing these Waqf by Sultan Sulaiman, it also enjoyed the care and attention of the Ottoman Empire over the days, when there appeared difficulties or problems, the Sublime Porte in Istanbul intervened in favor of these endowments. When it was found it difficult to collect Waqf rent in Jericho, a decree [97] issued 17 Muharram 972H/25 August 1564 AD ordered the replacement of this Waqf by a private one of the Gaza governor. Two others were issued: the first to allow the export of surplus of wheat from al-Imara to Egypt, and the second to facilitate the import of rice from Egypt to al-Imara al-Amira[98].

Although the Waqf of al-Imara al-Amira was lost, the kitchen still offers soups daily, as well as rice and meat once a week, but with fewer quantities than those provided in the Waqf. And this continues to this day, with the Department of Islamic Awqaf supervising its care. Local and Arab contributions are attracted to ensure its continuity.

In addition to details of land and real estate in the endowment, it also includes the list of staff and duties of each, their attributes and the amount paid to them daily or monthly. It is clear that the total workers in the building were 49 staff, with a total annual expenditure of 360 pieces (gold coins) and 79 205 silver *dirhams*, and this indicates the status and role in the social and economic life of Jerusalem.

List of food distribution and Conditions

The *waqfiyya* listed the items, amounts, and times of serving food served in the kitchen of al-Imara, as stated by Khassaki Sultan:

1) Two types of soup per day: The first, rice soup for lunch made up meal of following amounts: 20 *munn* [99] rice (16.380 kg), 3 *munn* clarified butter (2.457 kg), 1.5 *munn* chick peas (1.228 kg), 2 *munn* onions (1.638 kg), 2.5 *munn* salt (2.047 kg) , 25 *munn* sour milk (20.475 kg), and parsley or the equivalent of four *dirhams*. And 60 *munn* of firewood (49.14.1 kg) to cook the soup.

95 For more on this, check al-Asali, 1982, 18-19 Natsheh, 2000, ii, 749-751
96 al-Asali 1983, Sijil 270 , 145-151
97 Heyd 143, 1960
98 Heyd 131-133, 1960
99 Munn: unit weight equal to 819 grams

The second kind is wheat (*firika*) soup for dinner (except Friday night) and contains the following amounts: 4 supplies of wheat (4.212 liters), 3 *munn* clarified butter (2.457 kg), 2.5 *munn* salt (2.047 kg), 2 *munn* onions (1.638 kg), 75. *munn* cumin (614.1. Kg), 1.5 *munn* chick peas (1.228 kg)and 60 *munn* firewood (57.33 kg) to cook the soup.

2) 2000 loaves of *fudula* (brown wheat bread) are baked daily weighing 281.25 grams each for the equivalent of 562.5 kg of wheat, 3 *munn* of salt (2.457 kg) were also needed daily and 55 *munn* of firewood (45.045 kg).

3) Every Thursday and every night in the Holy Month of Ramadan what is known as *dana birinji* and *zerde* (sweet) is prepared. Each recipe contains the following ingredients: 62 *munn* of rice (50.778 kg), 35 *munn* mutton (28.665 kg), 13.5 *munn* clarified butter (11.056 kg), 2 *munn* of chick peas (1.538 kg), 2 *munn* onions (1.638 kg), 40 black pepper (45. kg) 4.5 *munn* salt (3.685 kg), and 16.5 *munn* honey (13.513 kg), and by 14.1 *dirham* (silver coins) saffron, and 90 *munn* wood allocated (73.71 kg) for cooking.

4) On the tenth of Muharram every year (*ashura*) four large vessels of the soup to disperse to scholars, the poor, the indigent and the rich of Jerusalem.

It stipulated that the Khassaki Sultan is distributed food items mentioned above for the following categories:

1) Each *mujawer* in one of the cell in al-Imara al-Amira is given lunch and dinner to fill a ladle of soup with a loaf of bread, and on Friday night a piece of mutton is added.
2) Each staff member of in al-Imara al-Amira mentioned in the above table No. 2.3 takes a meal like the *mujawer*.
3) 400 people from the poor, weak, and needy, (each two of them) get what is given to a *mujawer* daily.

Not others apart from those mentioned were allowed food at al-Imara or to take food out of the building. The records of the Religious Court of Jerusalem are containing relating documents concerning the assignment of a portion of the food or bread to beneficiaries. This was referred to by the term of "bowl" or " bowl of food ", and it seems that this bowl was a metaphor of the aforementioned ladle. The right to food there was sometimes associated with possession of the bowl, because losing it n the year 962H/1555 AD by one of the ladies had led to her divorce[100]. According to some of the records in the Religious Court in Jerusalem [101] , the beneficiary was entitled to give up his share of the food or bread in the court for other persons against a financial allowance. The record [102]states on 15 Dhu'l Hijja 1011 H/ 26 May 1603 AD that "the judge had "decided to allow Aisha, daughter of the Ali Antaki, a loaf of bread, morning and evening at al-Imara al-Amira in Jerusalem instead of Barwana bin Abed al- Mu'iz by virtue of absence on the date by his agreement on the 15th of Dhu'l-Hijjah 1101H/26 May 1603 AD. "

100 Sijil 30: 193
101 Sijil 120: 153 155: 242 520
102 84: 18.

4.2.4 Subsequent development

Expanding the kitchen at al-Imara al-Amira and adding chimneys & fireplaces

Shortly after the completion of the construction of al-Imara al-Amira kitchen, the size of narrow kitchen, and lack of chimneys and fireplaces suitable for the discharge of smoke, causing permanent harm to workers in it. So it was taken up with Istanbul, which approved the expansion of the kitchen with legitimate court documentation [103] on 1 Rabi' I, 967H/ 6 December 1559 AD. This expansion, which still extant, was implemented along with the chimneys for cooking rice and wheat, by Husain ibn Nammar the master builder

According to an inscription, in the south wall of the open northern courtyard on the first floor of Dar al-Sitt Tunshuq, the al-Imara al-Amira was restored in 1167H/1753AD by the Haj Khalil Agha, who oversaw the Waqf, and by his agent, Mustafa Agha. The location of the inscription is not original, but it is reused, with a brief text, composed of four lines, written in Ottoman style.

Burgoyne [104] referred to this figure for the first time and published a picture and read the date, and Lami'i [105] read the inscription in full, where it states:

Has renewed the restoration of al-Imara al-Amira and fixed the roofs
The great elite who previously held the position of *oda pashi*
***al-haj* Khalil the recent inspector of the noble waqf, by the supervision of his agent,**
Mustafa Agha at the end of 1176(1753)

In 1286H/1869-1870 AD, al-Imara al-Amira underwent an extensive restoration campaign, which seems to be associated with using several sections of al-Imara al-Amira by the seat of the Ottoman governor of Jerusalem, , therefore al-Imara al-Amira was known by al-Saraya.

A source of key information on the restoration campaign, is a long rectangular panel which named the location as the Government House. The writing is at the top of the north wall of the southern entrance vestibule, which leads to Khan al-Imara al-Amira. The writing consists of two parts, the first in the east is inscribed in Turkish Ottoman, and the Western Section is written in Arabic.

The Arabic writing is composed of seven lines, written in poetry format, inscribed by Dawud al-Karimi. The content of the writing praised the one who undertook the reconstruction and repair more than mentioning the details of restoration. Therefore, the nature and details of this reconstruction are not known except for details of the Adliyya Building. According to the writing the one who undertook the reconstruction is the Governor of Syria Mohammad Rashid, and the one who executed it was the governor of Jerusalem Muhammad Nazif Pasha. The restoration work was completed in 1286H/1869-1870AD. It is known that Jerusalem has become an independent province from Syria and directly linked to Istanbul in 1872AD. This restoration made it possible for al-Imara al-Amira to become a center for the governor and was known as al-Saraya and the area as 'Aqabat al-Saraya. The Sultan then was Sultan Abed al- Aziz (1277-1293H/1861-1876AD).

The full text of the writing was published for the first time by this writer [106] with the translation into English, and from the Arabic to English by Tutunji [107], with a correction of a date and the fourth verse and addition in the fifth verse. While appreciating his observations, unfortunately his translation had several distortions and obvious errors[108], as he did not translate the Ottoman Turkish text into English or Arabic to have the opportunity to compare the two texts, but only translated into modern Turkish. He also had the translation of the English text without reference to its original source. The following text differs [109] slightly from what has been published before:

The house of the government resumed its laughter (*dhhikat*) after being sad …, as the governor of the Noble Jerusalem initiated its restoration. This Governor was known as Muhammad Pasha, the honest (man) among our tribes. The restoration was in response to the order from Muhammad Rashid, the governor of Syria (Damascus), where he enjoyed a good reputation. It took place during the time of 'Abd al-'Aziz, the Sultan and the Crown of kings-may Allah grant him a life full of victories and make us more powerful under his reign…. When the restoration was completed I dated it (chronogram) "the house, established with illumination as the full moon". Da'ud al-Karimi made it (inscribed it) proudly in 1281(the year 1865)

When the Supreme Muslim Council received the al-Imara al-Amira rom the British Mandate authorities in 1922 AD and decided to turn it into an industrial house for the Muslim orphans, they rehabilitated and reconstructed some of its sections. The panel written on the above-mentioned dual-language inscription, in rectangular stone sized 88X 48 cm, and consists of two lines, which reads:

"The Supreme Legislative Muslim Council renewed this madrasa in the year 1342 H/ [1923AD]

103 Sijil 39: 30.31.
104 Burgoyne, 1987, 493, pl. 48, and No. 19
105 1999, 3.
106 Natsheh, 1997, 198, Natsheh, 2000, ii, 754, 1078
107 Tutuncu, 2006, 129-130
108 Words in fourth and fifth verses, and the full sixth verse
109 Correction of mistakes in verses

Pl.4.1 North façade of al-Imara al-Amira

Pl.4.2 Decorative roundel above the eastern window of the north facade

Pl.4.3 Decorative roundel above the western window of the north facade

4.3 A description and architectural analysis of al-Imara al-Amira

4.3.1 The north façade (Fig. 4.2, Pl. 4.1)

The northern façade of al-Imara al-Amira is located on the 'Aqabat *Takiyya* road, to the east of the façade of Dar al-Sitt Tunshuq al-Muzaffariyya the facade stretches from west to east with the length of 32.35 m, but the height is not equal due to disparity in the level on 'Aqabat *Takiyya* road as you head toward the west.

The facade consists of an entrance, with a solid wall with six windows to its east - three in its upper part and three others in the lower segment. In the lower part are three windows (Fig.4.2, pl. 4.1) with the first slit window located directly east of the entrance, illuminating a room rectangular (j, fig, 4.5). Both the second western window and third Eastern window (Fig.4.2), are on the same level.

There is a stone circular ornament (disk) on each of the windows, with the one on the western side(pl. 4.3) smaller than that of the eastern one with geometric, almond-shaped decoration consisting of 10 intertwined modules joined at a small circle. The ornament on the east is decorated with eight rose petals, surrounded by an asterisk, its eight points headed by a plant leaf (pl. 4.2). The upper part of the northern facade (Fig. 4.2) contains 13 courses built over the middle section of the northern facade of the al-Imara al-Amira. The stones of this part, except for a rectangular opening of the three windows, are of simple configuration.

Pl.4.4 The North entrance

Pl.4.5 al-Imara al-Amira

4.3.2 The northern entrance of al-Imara al-Amira (Fig. 3.4, Pl. 4.4)

The entrance consists of a shallow recess dominated by trefoil arch framed by an ogee moulding. The moulding, which starts from the springing of the arch, twists above the keystone of the arch forming *mimi* decoration. The decoration runs towards left and right to meet the original ogee moulding at the springing and to continue downwards to run round the two stone benches of the entrance. The doorways surmounted by lintel consisting seven voussoirs at either end are decorated with identical stone roundels which projects slightly. The roundels have a relief floral and geometric pattern that consists in the main of an eight-petals rosette in the center, surrounded by a concave –sided octagon fro, which trefoils emerge, interwoven with this are stems of eight split-palmettes (pl. 4.5, 4.6). A third roundel decorate the keystone of the door lintel, its decorative motif consists of flat rosette in the center surrounded by two sets of five petals with other smaller petals between (pl. 4.7). Directly below this medallion, a small iron ring is fixed, this was probably used to suspend an oil lamp to light the entrance. Directly above the door lintel, a stone rectangular plaque [110], 2.20 m wide X 1 meter high, is framed by an engraved geometric interlace enclosing hexagons. Two courses above the rectangular plaque a window (70, m.. × 90, m.),is opened, and is fitted with a modern iron grille.

110 Until recently the plaque was obscured by a modern sign stating, "The Department of Islamic Awqaf, the *Dar al-Itam al-Islamiyya*". It appears that the sign was developed after 1982, as al-Asali (1982.10), had a photo of the original with no sign covering it and remained until early in 1999, then removed

Pl.4.6 Decorative roundel west of the north door lintel

Pl.4.7 Decorative roundel at the middle of the north door lintel

The upper part of the entrance is formed of seven stone courses, these are set above the moulding of the entrance of al-Imara al-Amira This section is original , it was built in the 10th century H/ 16th century AD together with the entrance, and its stones are homogeneous with stones of the north and south entrances.

4.3.3 The southern façade (Figure 4.4, Pl. 4.8, 4.9, 4.10)

The southern facade of al-Imara al-Amira extends about 45.10 m from west to east. This façade is divided into three sections: east, central and western, and the heights of these sections are not similar. The eastern section belongs to the local Palestinian architecture that prevailed in the late Ottoman period, (i.e., not related to the architectural fabric of the al-Imara al-Amira.)

But the middle section of the southern facade (pl. 4.8), belongs to al-Imara al-Amira but not to the 10th century H/ 16th century AD, but to a later stage of development. It consists of two parts, lower and upper. The lower forms the facade of what is known as the 'Adliyya Building (Department of Justice), or the Printing Press. In the center of the façade a door is opened, it is surmounted by a slab lintel, and above it we find the inscription (Pl. 4.9) saying [111]: "*'adliye dairesi*.."

The style and pattern of the building of this façade is not traditional, it is resonant of architectural developments, and European influences that started to affect Jerusalem and Palestine in the second half of the 19th century AD.

111 Tutunji reported (Tutunci, 2006, 191, no.95) "'*adly dar si*", but the proper one is the above and published by Natsheh, 2000, ii,, 755., see the pl. (9.4) in this study

Pl.4.8 The middle section of the south façade al-Imara al-Amira

Pl.4.9 Inscription panel of al-adliya building in south façade of al-Imara al-Amira

Therefore, and despite that the construction of *'adliye* is undated, but based on established evidence it was erected in the reconstruction campaign of Mohammed Rashid in 1286 H/ 1869-1870AD.

Khan entrance (Figure 4.4, Pl.4.10)

Pl.4.10 South doorway of al-Imara al-Amira

Section III in the southern facade of the al-Imara al-Amira is the west, extendes 15.30 meters. The southern entrance has an opening crowned with a large pointed arch overlooking 'Aqabat Saraya. The arch is made up of masonary blocks framed by a frieze of small lancet niches, each with palmette motif. The keystone of the arch is embellished with carved boss in strong relief. There is a masonary roundel on either side of pointed arch set four courses above the springing of the arch (pl. 4.10). In the western part of the southern facade are seven windows (Fig. 4.4), five in the top level, and two in the lower level, on both sides of the entrance. One of the seven windows, has double opening, it is located directly above the stone roundel found at a height of three courses over the entrance. On either side of the double window, there are two windows. These four windows are identical and the southern facade ends here at the height of three courses of stone from the hexagonal

opening, and the circular stone ornaments, arranged over the double window, with a frame that protrudes slightly to the outside.

4.3.4 Internal description (Fig. 4.5)

The open doorway in the western section of the southern facade of the al-Imara al-Amira leads to the vestibule (A, pl. 4.5) which is square in plan, and it is paved with flagstone (pl. 4.11) and is covered by a cross vault which is supported on four pointed arches. These springs from the four

Pl.4.11 The east wall of the south entrance vestibule

Pl.4.12 Decorative roundel in the south entrance vestibule

corners of the vestibule.. The eastern arch leads to a rectangular chamber and above the door leading to the east chamber, is a semi-circular arch, and above it on a height of five courses a rectangular stone panel (pl. 4.11, 4.13) is centered. The panel is framed with a series of three relief engraved chevrons.

In the fifth decade of the 20th century a new inscription was done for the panel, a quranic quotation from verse 105 (Surat al Tawbah), which read:. “And say: "Do deeds! Allah will see your deeds”

Also observed is a stone roundel on each side of the panel at the level of the course supporting it. A third roundel is seen directly over the panel, and the decorations on the side roundels are alike, made up of a six- petalled rose of three layers of over-lapping petals, and in the center is a small circular petal shape of two levels (pl.4.12). The decorative of the top upper roundel is also concentrated in the six- petalled flower, but here with a different geometrical configuration.

In the west vestibule's wall a door leads to a western chamber facing the east chamber, with a rectangular trapezoid plan. An arch rises above the door of the west chamber with a stone panel and three stone roundels; all similar to what is found in the east chamber previously described. Two secondary differences are noted here: The first concerns the text as instead of the quranic quote inscription, we find the writing "religion is how you treat others," a common saying among people thinking it's Prophet Muhammad Hadith, although it is not, but similar to the Hadith which reads: "Religion is advice". The second is the details of center decoration side stone roundel, instead of a six petal rose; we find here two small circles.

Pl.4.13 Inscription panel on the east wall of the south entrance vestibule

Pl.4.14 Inscription panels on the north wall of the south entrance vestibule

To the north of the vestibule there is an opening leading to a corridor, shut with a door with wood locks. And above the opening, an arch and three stone roundels, similar to the roundels of the western side vestibule (two roundels on either side with decorations) and the third above by a course below the level of the bottom north arch which supports the roof of the northern vestibule. There is a large rectangular panel with no writing or decoration, and it is a wrong assumption [112] that there was a writing which was deliberately distorted.

On this panel, the writing states that the Council renovated the school in the year 1342 H/1923-1924AD. And the bottom of the Islamic Council's Panel there is another (pl. 4.14) which we already studied and commented on [113], chronicling the restoration work carried out by the mayor of Jerusalem Muhammad Nazif in 1286 H/ 1869-1870AD.

112 Lami'i , 1999.13
113 See above topic: "Repairs years 1286/1869-1870

4.3.5 Khan al-Imara al-Amira

The vestibule leads into the south-western courtyard of the al-Imara al-Amira (Fig. 4.5). This courtyard, with three riwaqs that surround it from the north, west, and south, made up of eight bays are Khan al-Imara al-Amira

It was stated in the Waqf document[114]: "... including the lofty spacious caravanserai built (by the donor) for the satisfaction of Allah, and she dedicated it to the general wayfarers, and travelers....". We also find as mentioned by Pierotti [115]further support that the area in question is the caravanserai of al-Imara al-Amira. When he visited Dar al-Sitt Tunshuq (al-Imara al-Amira) in the 6th decade of the 19th century, and described the southern sections he said "On the south is a fine pointed doorway leading into a spacious hall. Beyond this is a very large court surrounded by a cloister with pointed arches. The hall, the cloister, and the court, are now only used to shelter the camels and horses of first comers". Therefore, there is no truth to what was said recently that the Khan disappeared, and nothing was left from its features [116].

The caravanserai of al-Imara al-Amira is original and dates back to the 10th century H/ 16th century AD , and there is no truth to what was said recently that some architectural facilities of this unit were established [117] when construction was developed in 1286H/1869-1870AD.

It is not known when the Khan stopped functioning, but it is likely that it took place in the last quarter of the 19th century AD, as Pierotti [118] mentioned he saw camels and beasts entering al-Imara al-Amira from the southern entrance. Currently, the annexes to the Khan are used entirely by the industrial school.

The dimensions of the Khan open yard (b 1 - b 8, form 4.5) (South Western courtyard) is 13 meters × 9.10 m. It is rectangular in plan, and the exposed walls are adorned with eight prominent stone roundels, placed at the fifth course before the end of the walls. The three *riwaqs* surrounding the courtyard of the Khan is divided into eight bays (spaces), all covered with cross vaults. The vaults are supported by pointed arches based on the wall on one hand and on the square pillars on the second hand.

4.3.6 The original stairs leading to the upper floor of the Khan

A door, .80 wide and 2 m high was opened on the eastern wall of the bay 8B, leads to a small rectangular vestibule with an area of .90 m. × 3 m. The roof of this vestibule has a barrel vault, and an opening in the roof which is currently closed, indicating that there was an ascending stairway connected to the upper floor of the Khan. Pierotti mentioned this stairway and described it saying: a spiral staircase in the north-east corner of the hall [that] leads to the upper floor"

114 Sijil 270: 18-27
115 Pierotti, 1864,152
116 al-Asali, 1982, 23.
117 Lami'i, 1999.14, 15
118 Pierotti, 1864, 152

Pl.4.15 Open courtyard of Khan al-Imara al-Amira

The upper floor of the Khan is currently reached by a new stairway - rather than the original, adjacent to the western side of the west wall, which is next to the ground floor of the Khan courtyard (pl. 4.15). It consists of 27 stairs and two landing, each step measures 1.30 m length and .30, m. depth and .20 high. It runs towards east then turns north as it leads to several units, including the roof of the *'adliye* (Justus Building) and the first floor of Dar al-Sitt Tunshuq al-Muzaffariyya and the roof of the ground floor of the Khan, in addition to the annexes to the upper floor of the Khan, which are mainly over the southern entrance and the vestibule of the first floor [119].

4.3.7 al- Imara al-Amira North Block (Fig. 4.5)

The northern entrance leads to a vestibule (Fig.4.5) its plan nearly rectangular covered by a semi barrel vault. The vestibule with a pointed arch overlooks a courtyard called the north-west courtyard. This rectangular courtyard, was recently furnished with stone floor tiles rectangular in shape (pl. 4.16). Room J (fig.4.5), located in the northeast corner of the north-west courtyard of al- Imara is irregular in shape. This courtyard is bordered from the east by a large stairway of 12 steps leading to the north-east courtyard of al-Imara al-Amira (Fig. 4.5). The level of this courtyard is lower than that of the north-western courtyard by about 2.5 m. This is due to the high contours

119 Only so much of the description of architectural annexes to the southern entrance, despite the fact that the plan (Fig.4.5) includes other units as important as the south-east courtyard, the mausoleum, 'adliye building and Hall C, in line with the size and objectives of this book, so those who wish to learn more about these facilities and other facilities of *Dar al-Itam al-Islamiyya* revert to the archive of the Reconstruction Program of the Old City of Jerusalem in WA, and access the file of the historical and architectural study of the *Dar al-Itam al-Islamiyya* complex. For a detailed description of the English see Natsheh, 2000, ii, 754-771.

Pl.4.16 Open courtyard behind the northern entrance of al-Imara al-Amira

to the west and was bridged by a stairway. The rectangular courtyard is paved by old flagstone, but not of excellent quality.

The north-eastern courtyard is bordered (pl. 4.23) from the south by the kitchen of the al-Imara al-Amira and a storeroom; to the east *sabil*; the north what is today called the bakery and three stores; and to the west the stairs leading to the north-western courtyard. The kitchen and its additions are the most important of the four units that make up al-Imara al-Amira and that still retains its active original function, despite the ravages that affected the building. The kitchen won the lion's share in terms of work since it was created and it gave the al-Imara al-Amira its common name – the *takiyya* – and it's the only one among the four units which still occupies its original function.

Pl.4.23 Open courtyard in front of al-Imara al-Amira kitchen

Pl.4.17 The north façade of the Kitchen of al-Imara al-Amira

Pl.4.18 Water basin of façade kitchen of al-Imara al-Amira

The kitchen has a northern facade (pl.4.17), overlooking the north-eastern courtyard of al-Imara al-Amira, extending 14.5. from east to west, with an entrance with segmented arch in the middle. Each side of the door has an outstanding slightly projected roundel stone, placed on the level of the springing of the arch of the door.. There is a beautiful small niche and stone water basin (pl.4.18), to the east of the east window slightly lower by one course to the window. The niche is surmounted by a stone moulding in the form of trefoil arch, carved in within the slab lintel that surmounts the niche of the basin. At a height of four courses and at the axis of the keystone of the arch of the entrance of the kitchen door, there is a third stone roundel, like that of the east window in the northern facade of al-Imara al-Amira.

The drum of the dome over the central bay in the kitchen, rises directly from the roof of the

Pl.4.20 One of al-Imara al-Amira chimneys

Pl.4.21 The dome of al-Imara al-Amira Kitchen (from exterior)

kitchen (pl.4.21) The drum has eight sides, each side cut away to form an arch window opening. The hemispherical dome is of medium sized To the south of the dome there are three large stone blocks (pl.4.20) similar to truncated pyramidal form, these are the stone chimneys built by the local famous architect Hussein bin Nammar.

The kitchen is square in plan, and is divided into three *riwaqs* extending from east to west, and every *riwaq* is divided into three bays (spaces), covered with three types of roofing, a cross vault, a vault with a rectangular slot in the middle, and a dome. These roofs were based on arches, supported by four pillars in the center where the central bay is crowned by the dome and the side walls (pl.4.19). The method of roofing of the south bays and their height and being different from the rest of the bays are a reflection of an explicit goal for which built these bays were built.

A document [120] dated 6 Rabi' I967 H/ 6 December 1559 AD show that the kitchen of al- Imara al-Amira was narrow and had no chimneys, which harmed workers in it. To prevent damage, a request to expand the kitchen was approved with chimneys for each of the rice and wheat stoves. The document goes into detail, noting the architect who carried out this work is Mr. Hussein bin Nammar the master builder of Jerusalem, and the location of these chimneys are the south wall.
The water fountain (L, fig.4. 5, pl.4.22) is on the eastern side of the south-eastern courtyard of the building. There are three elevations visible, west, south, and north. Seven stairs lead to the ground level of the fountain. On the first course of the fountain's western façade there are four marble panels ending with a pointed top, built inside a shallow niche. In each panel an aperture pour water. The fountain has a rectangular plan (2.80 m. × 3.80 m), its floor is filled with earth, its walls has old plastering and its roof is barrel vault .

120 Sijil 39: 30.31

Pl.4.19 The dome of al-Imara al-Amira Kitchen (from interior)

Pl.4.22 Sabil of al-Imara al-Amira

Building the furnace (Figure 5.4, M)

Facing the kitchen of al-Imara al-Amira is a two-story building, the first floor was called the bakery because one of the ground floor hall was used as a bakery for making bread until 2000 AD, while the second floor was named the prison because what appeared to be is that some people were held there when the complex was home to the governor of Jerusalem in the Ottoman period. The lower level consists of the bakery, (N) and form large room (R).

Conclusion

A glimpse of the identity and style (architectural and decorative common and different elements of the complex)

From the above description and analysis of *Dar al-Itam al-Islamiyya*, the complex has four architectural units:
1) Dar al-Sitt Tunshuq, which dates back to the Mamluk period, built around 794H/1391-1392 AD
2) al-Madrsa al-Mawardiyya that was built in the late Mamluk and early Ottoman period
3) *Ribat* Bairam Jawish built in 947H/1540AD
4) al-Imara al-Amira built between the years 959-964H/1552-1557 AD

Therefore, features of this compound belong to the architectural style of the Mamluk and Ottoman periods.

The common elements and features of the Mamluk and Ottoman periods, in the compound Of *Dar al-Itam al-Islamiyya* are:

1) Use of a stone in the construction

What exists in the compound is chiseled stone, average in size, of good quality, especially in the northern facade of Dar al-Sitt Tunshuq, and in front of north and south facades of the al-Imara al-Amira.

2) Attention and focus on the doorways and facades

We find this feature clearly in the presence of three monumental doorways in Dar al-Sitt Tunshuq al-Muzaffariyya, and two entrances in al-Imara al-Amira. These entrances haves elaborate benches on the sides and surmounted with lintels and arches and decorated with rectangular panels, either decorative or with inscriptions, and all these are complementary characteristics to adorn facades with different styles.

3) Fenestration of Doors and windows

A consensus is noted in the general principles in the complex, whether in Mamluk or Ottoman building, in the fenestration of openings, represented by the wide rectangular doorways suitable for the functional purpose of the unit. As to the styles of windows, there are rectangular, square, slit, circular, and double windows. If windows are slits, they end with decorative moulding formed from trefoil petal or what looks like a trefoil arch. Iron grilles were placed on rectangular windows to give some protection and impressions of a beautiful decorative.

Roofing and covers

In this complex and its various buildings multiple methods and architectural elements were used, that elements prevailed in the Mamluk and Ottoman architecture: the majority of roofs were domes or vaults.

With regard to domes, it is apparent that the Mamluk traditions of pointed sections and spherical shapes continued to be in use even in Ottoman building, though shallow large or small Ottoman domes does not appear.

The covers of the vaults were varied, the fan-vault is seen in the reception hall in Dar al-Sitt Tunshuq, and the cross vaults over the vestibule of the northern and southern entrance of al-Imara al-Amira.
Cross and semi barrel vaults are present in various parts of the complex, especially in rectangular units, such as the bakery and multiple stores in the al-Imara al-Amira.

A distinctive vault was found in the kitchen chimneys of al-Imara al-Amira nothing that similar was not found in the complex, it is a cross vault that ends with a rectangular opening, known as the (groin vault).

4) Arches, pillars and columns

Architectural elements that characterize *Dar al-Itam al-Islamiyya* complex are the frequent use of arches to support the domes and roofs with cross vaults and entrances.

Arches are of varied types, though the pointed one is the most dominant. Pillars are found in the rooms and units with wide open spaces.

5) Mimi decoration and moulding

Elements of architectural decoration are abound in the complex which echo Islamic architecture in general, such as relief and carved *mimi* moulding which surrounds doorways and arches like those in the entrances of Dar al-Sitt Tunshuq and the northern entrance of al-Imara al-Amira.

A variety of ornaments and frames were found on door jambs and windows and sometimes at the ends of the building. It is common in the complex's decoration to find (chevron arch) or billet decoration as seen in the arches of the mausoleum room.

These characteristics and common elements found in Islamic Architecture in general and in the Mamluk and Ottoman architecture, and in the complex which is the subject of this research. With these common characteristics in this complex, it should, however, be noted that there are differences in these common elements, and that some elements appear to be more focused and well done in the Mamluk more than in the Ottoman style.

Moreover, we can refer to the properties that made the Mamluk style distinctive from the Ottoman style, and vice versa, as it appears in the complex we are discussing and the rest of the Mamluk and Ottoman monuments that do not have the space to be discussed here. But to point out some of them:

The properties that are unique to the Mamluk refer to:

1) Focus on the facades, enrich and beautify them with complex *muqarnasat*, we find that clear when compare between the eastern entrance of Dar al-Sitt Tunshuq with al-Imara al-Amira.
2) What applies to *muqarnasat* also applies to one of the important characteristic of Mamluk architecture, we mean that the use of *ablaq* style to decorate the facades and arches, and by that we mean the diversity in the color of the stones, and the course of stone like in Dar al-Sitt Tunshuq we find that the stones will vary between black, read, yellow, and white. We do not find any echo of this phenomenon in the architecture of al-Imara al-Amira though it is very large in size.
3) We find Mamluk buildings, like Dar al-Sitt Tunshuq in the *Dar al-Itam al-Islamiyya* that it focuses on the use of joggled voussoirs in lintels and arches and facades that we do not find in al-Imara al-Amira.

The distinctiveness of the Mamluk style with some of the features that were mentioned earlier does not mean that the Ottoman style does not have some features and aspects which are not found in the Mamluk features that are not apparent in the buildings that belong to the *Dar al-Itam al-Islamiyya* complex. On the contrary, we can point out to some architectural and decorative elements that characterized the buildings of the Ottoman period such as :

1) The presence of an ornamental or decorative architectural disks or in the roundel stone at the facades, these are the most prominent features of the decorative architecture of Jerusalem in the 16th century.
2) The presence of decorated stone boss such as that found on the southern entrance to al-Imara al-Amira.
3) The presence of plant decorations of small palmette trees or other plants and the decorations of the arches at entrances such as what is found in a southern entrance to al-Imara al-Amira.
4) The existence of a stone rectangular panels, framed with decorative elements without inscriptions, and we find such panels at the vestibule of the southern entrance and the arch of the northern entrance of the al-Imara al-Amira .
5) Expansion in the use of decorative *muqarnasat* on the sides of the entrances, and that is noted in the southern entrance of al-Imara al-Amira.

Shapes

Dar al-Sitt Tunshuq al-Muzaffariyya

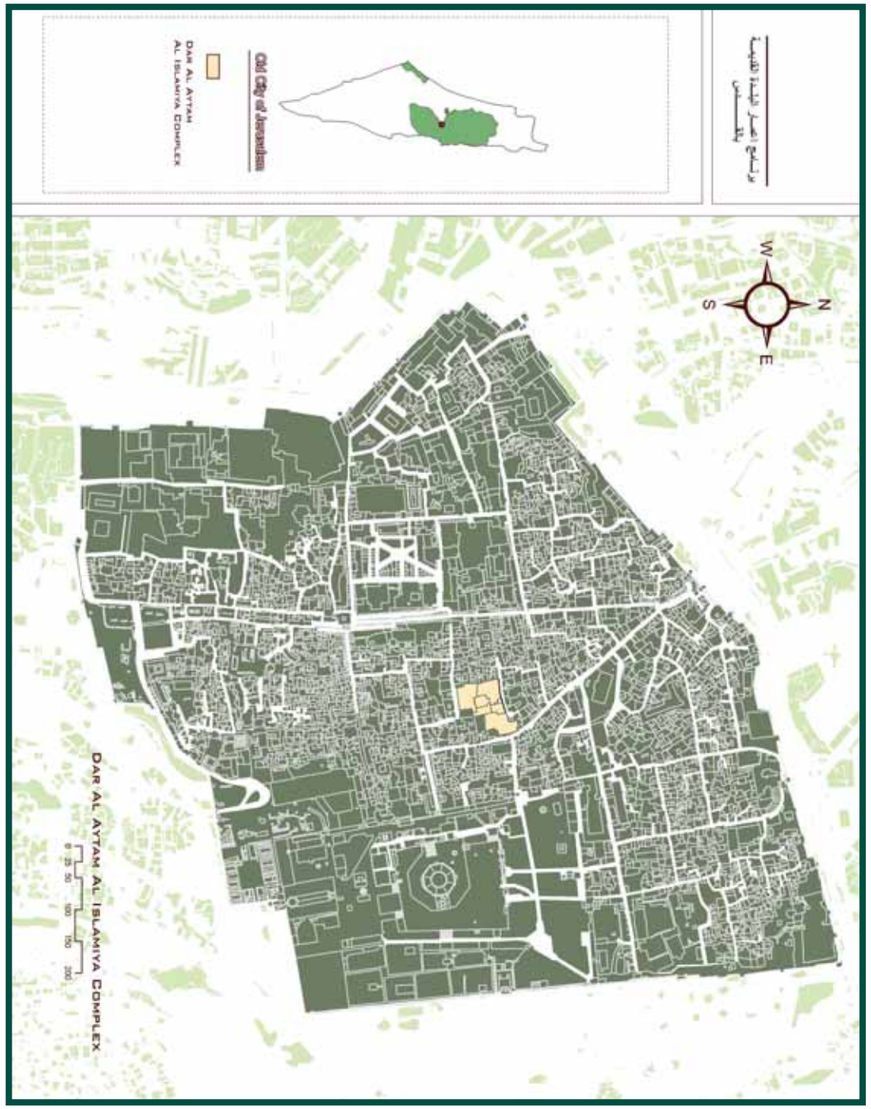


Fig.1.1 Location of Dar al-Iytam al-Islamiyya Complex

Dar al-Sitt Tunshuq al-Muzaffariyya

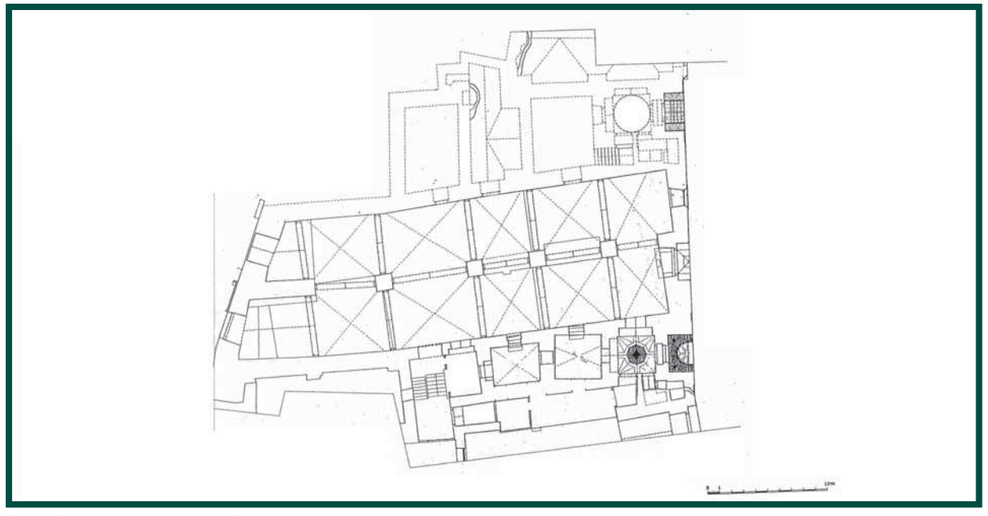


Fig.1.2 Plan of Ground floor of Dar al-Iytam al-Islamiyya Complex

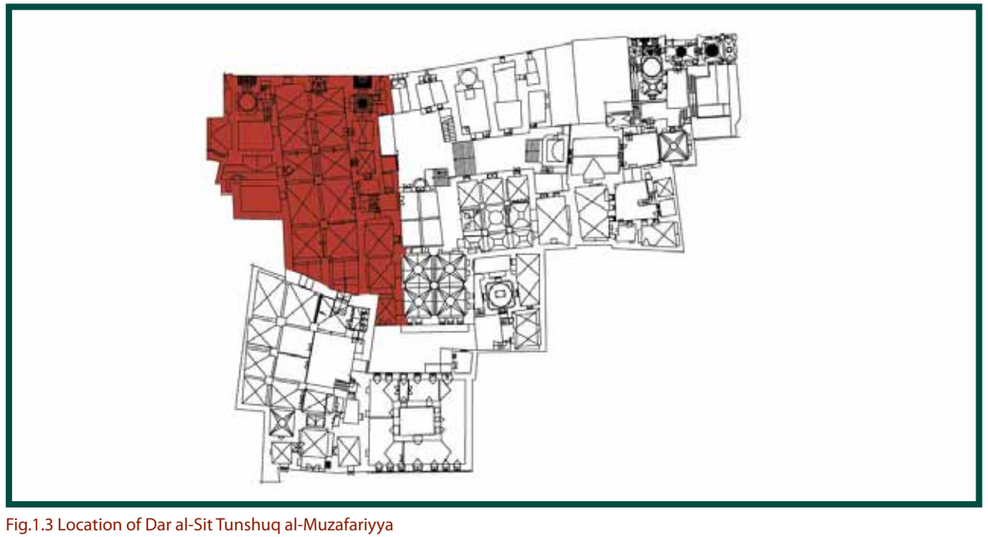


Fig.1.3 Location of Dar al-Sit Tunshuq al-Muzafariyya

Fig.1.4 North elevation of Dar al-Sit Tunshuq al-Muzafariyya

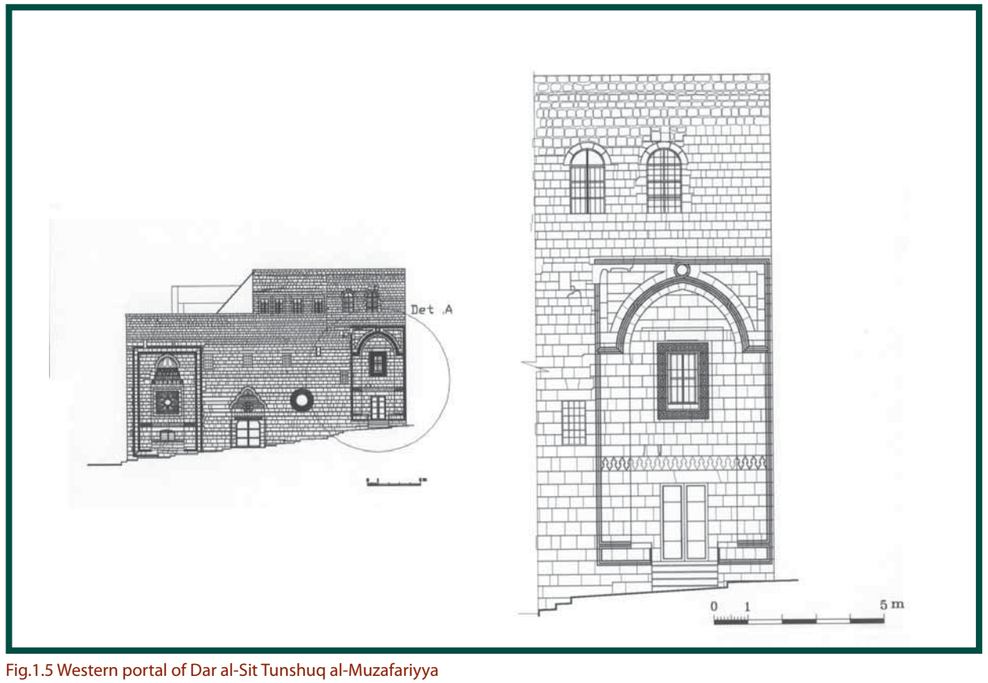


Fig.1.5 Western portal of Dar al-Sit Tunshuq al-Muzafariyya

Dar al-Sitt Tunshuq al-Muzaffariyya

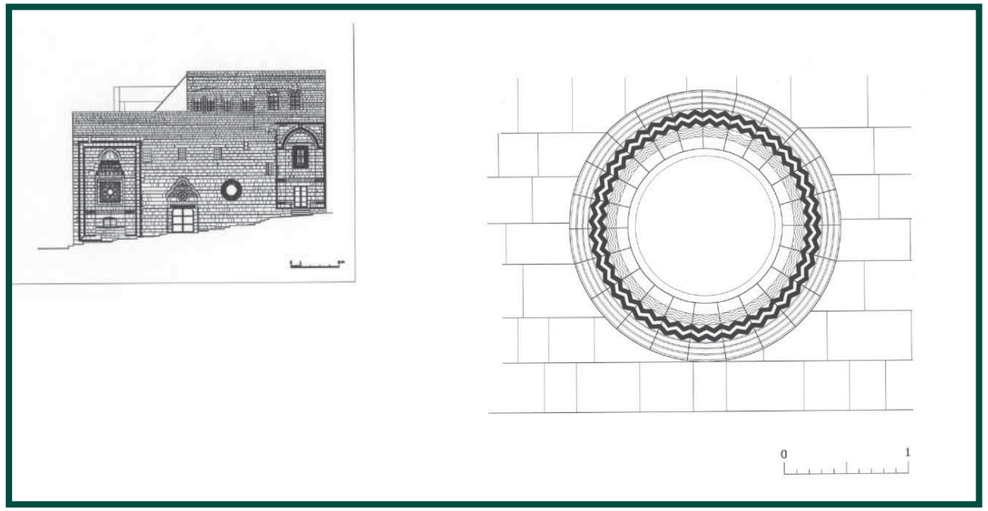


Fig.1.6 The circular window in the elevation of Dar al-Sit Tunshuq al-Muzafariyya

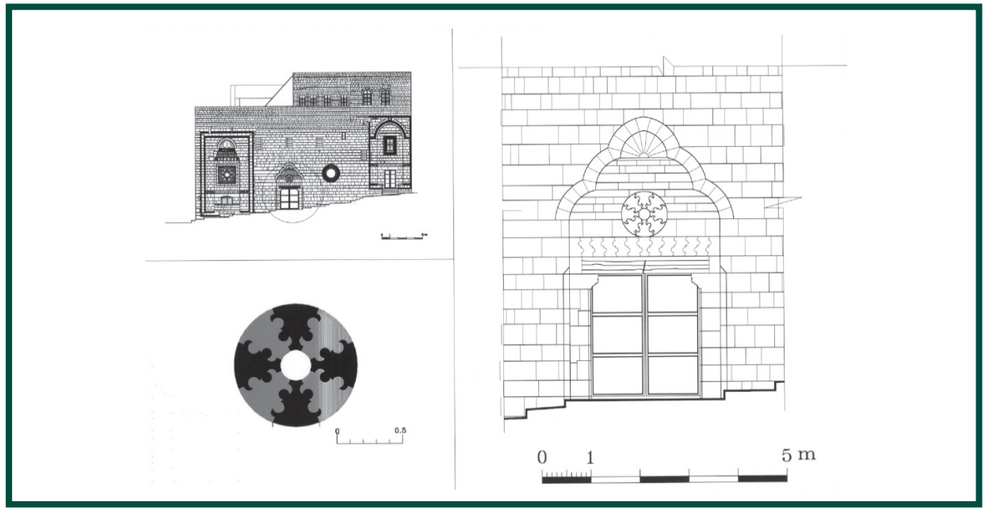


Fig.1.7 Middle doorway of Dar al-Sit Tunshuq al-Muzafariyya

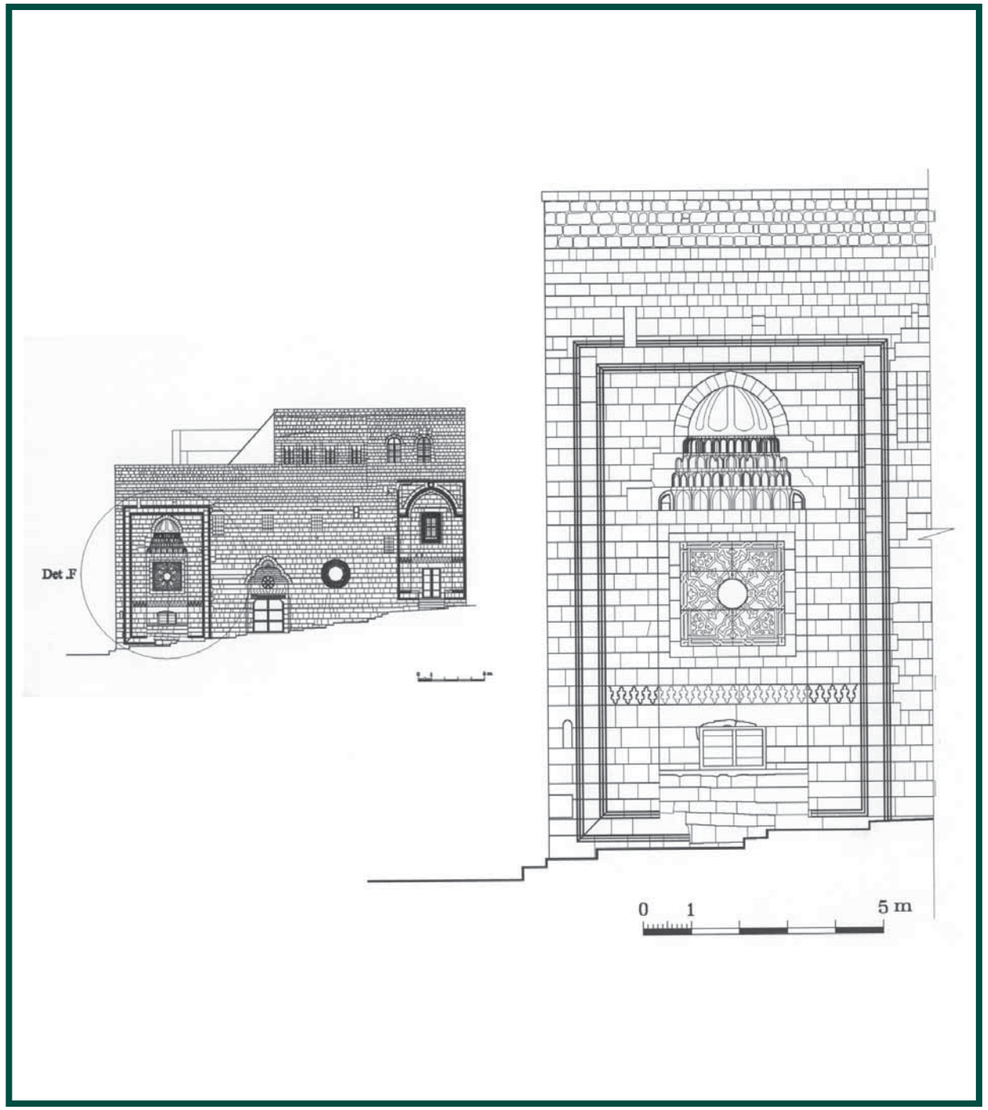


Fig.1.8 Eastern portal of Dar al-Sit Tunshuq al-Muzafariyya

Dar al-Sitt Tunshuq al-Muzaffariyya

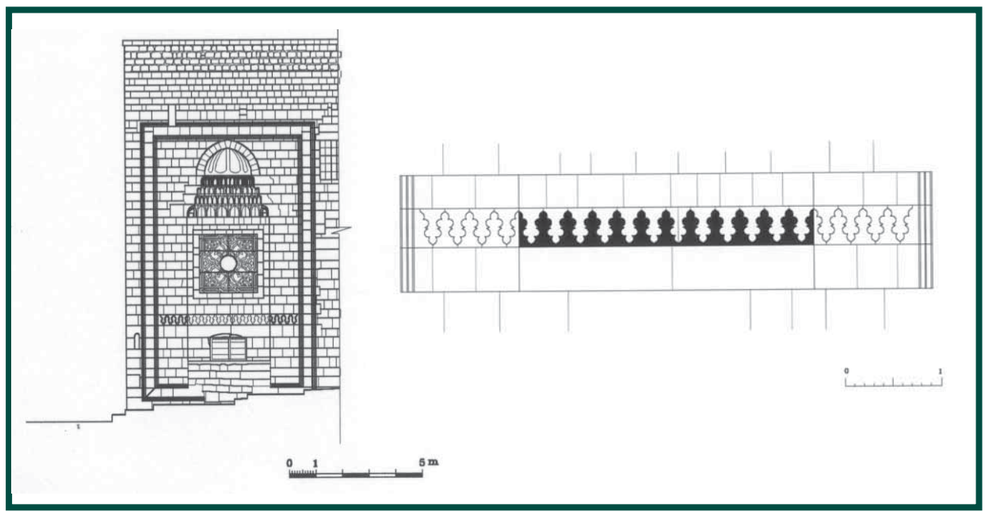


Fig.1.9 Details of the string course of the eastern portal of Dar al-Sit Tunshuq al-Muzafariyya

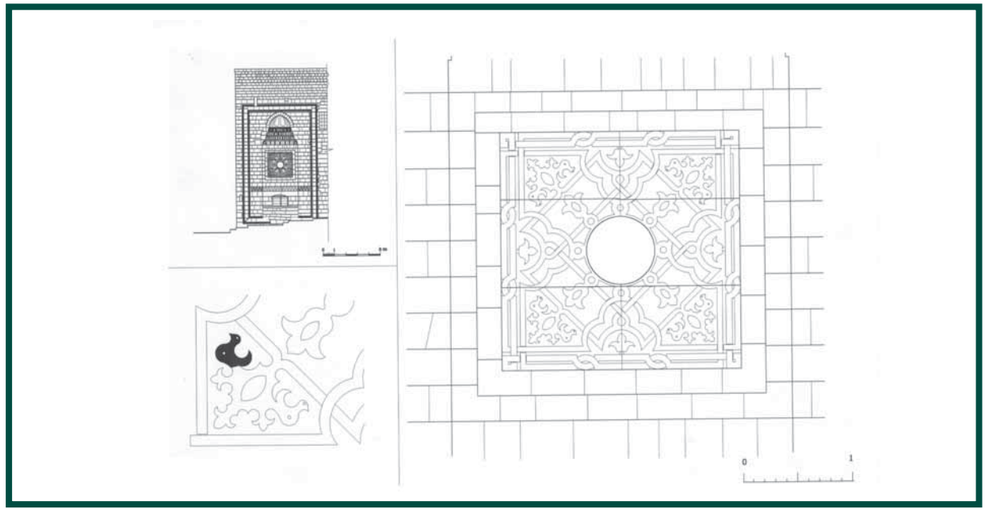


Fig.1.10 Details of the stone panel of the eastern portal of Dar al-Sit Tunshuq al-Muzafariyya

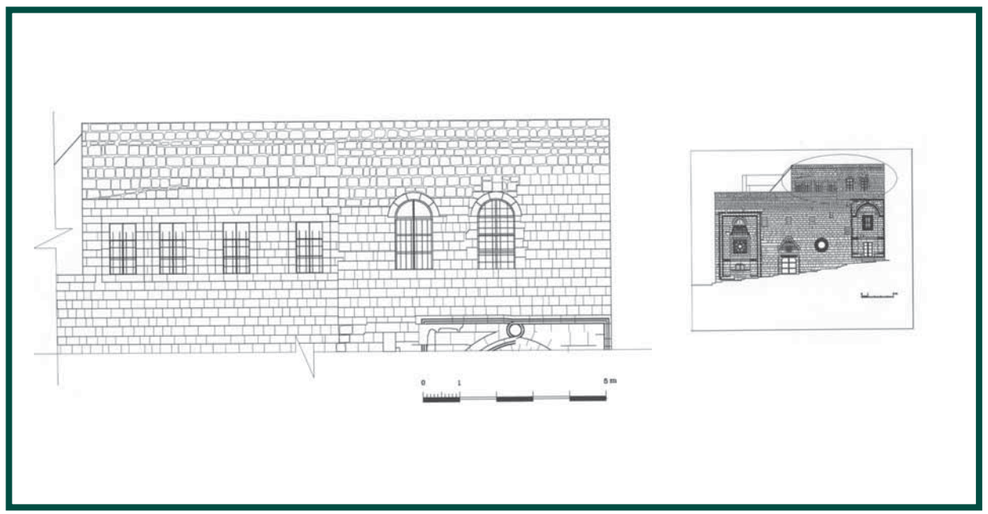


Fig.1.11 Windows fenestration of the upper section of the north elevation of Dar al-Sit Tunshuq al-Muzafariyya

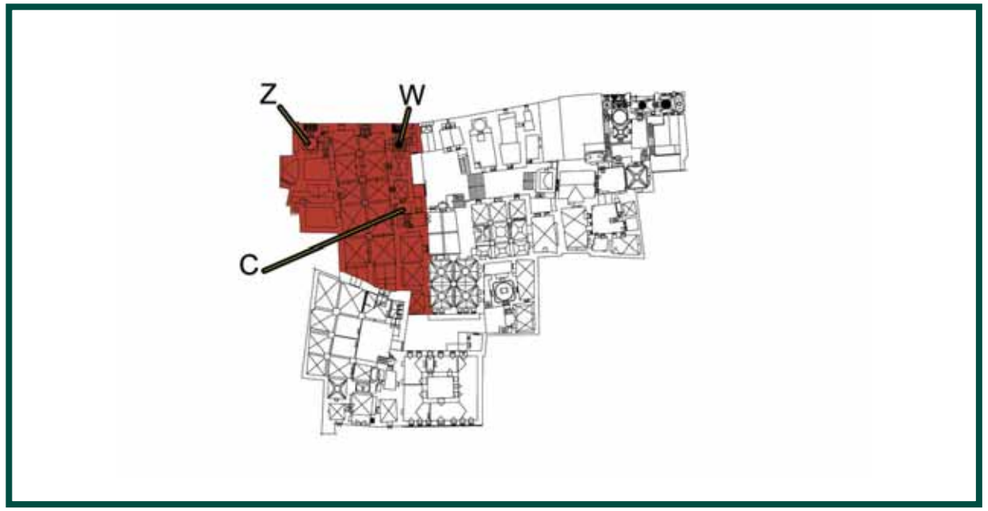


Fig.1.12 Plan of ground floor of Dar al-Sit Tunshuq al-Muzafariyya

Dar al-Sitt Tunshuq al-Muzaffariyya

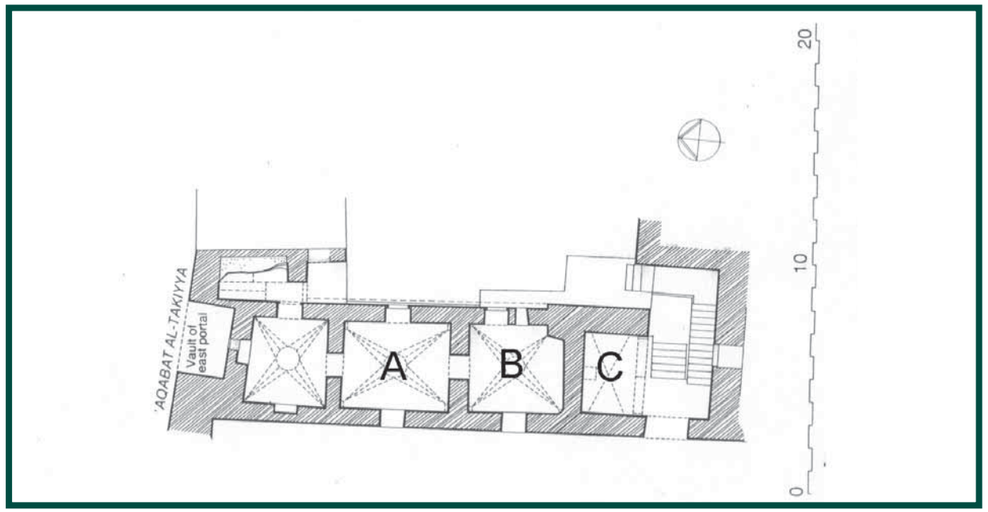


Fig.1.13 Plan of Mezzanine floor of Dar al-Sit Tunshuq al-Muzafariyya

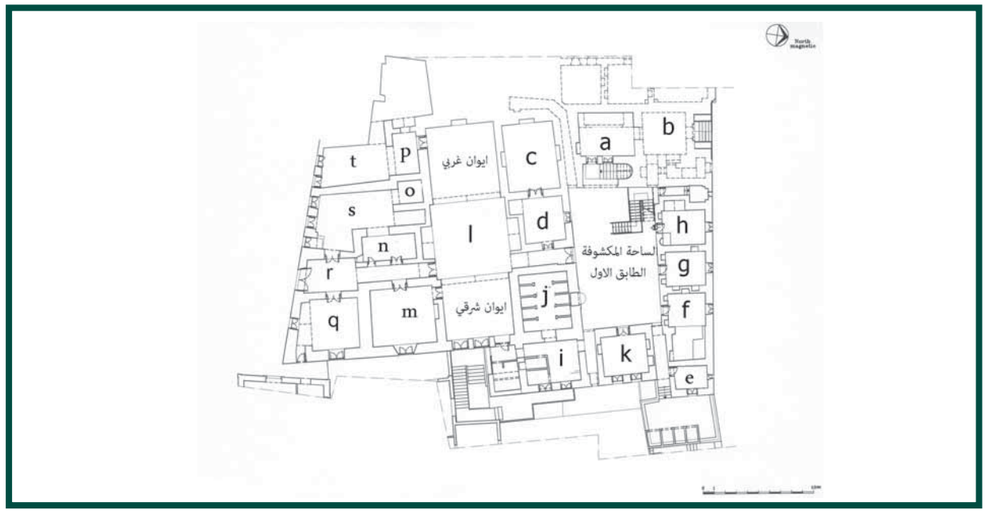


Fig.1.14 Plan of the first floor of Dar al-Sit Tunshuq al-Muzafariyya

al-Madrsa al-Mawardiyya

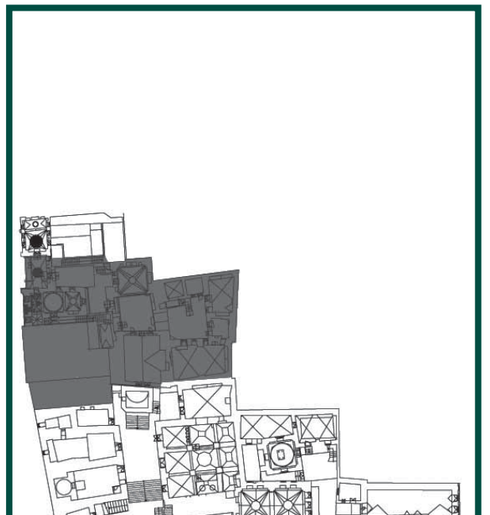


Fig.2.1 Location of al-Madrasa al-Mawardiyya

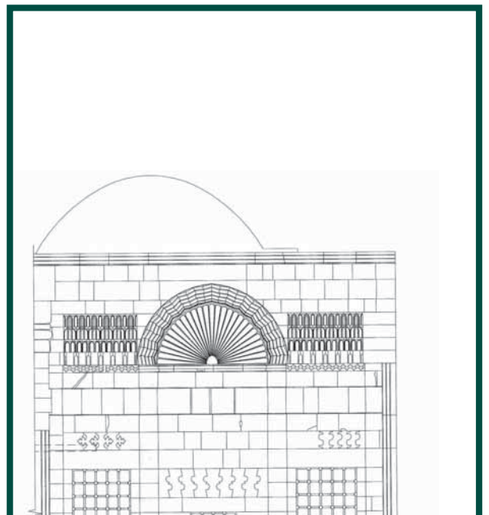


Fig.2.2 North façade of al-Madrasa al-Mawardiyya

al-Madrsa al-Mawardiyya

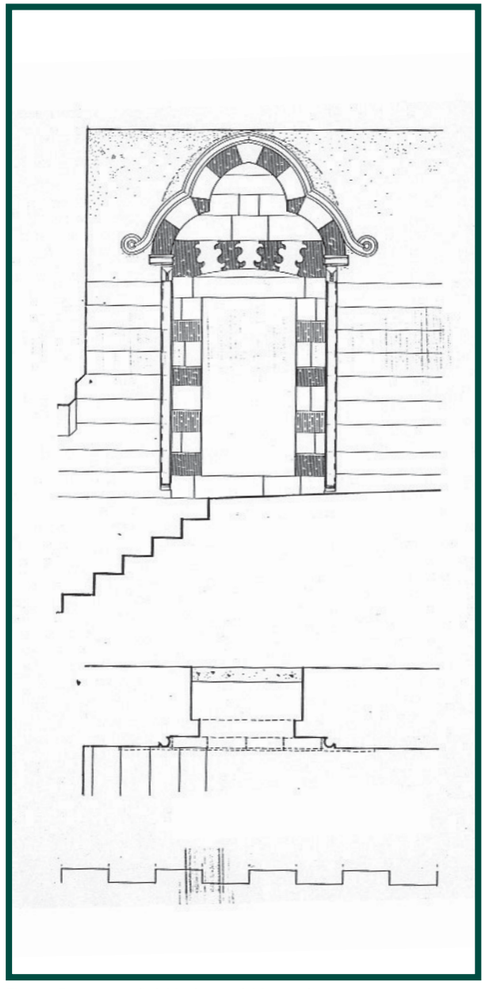


Fig.2.4 Entrance of al-Madrasa al-Mawardiyya mosque

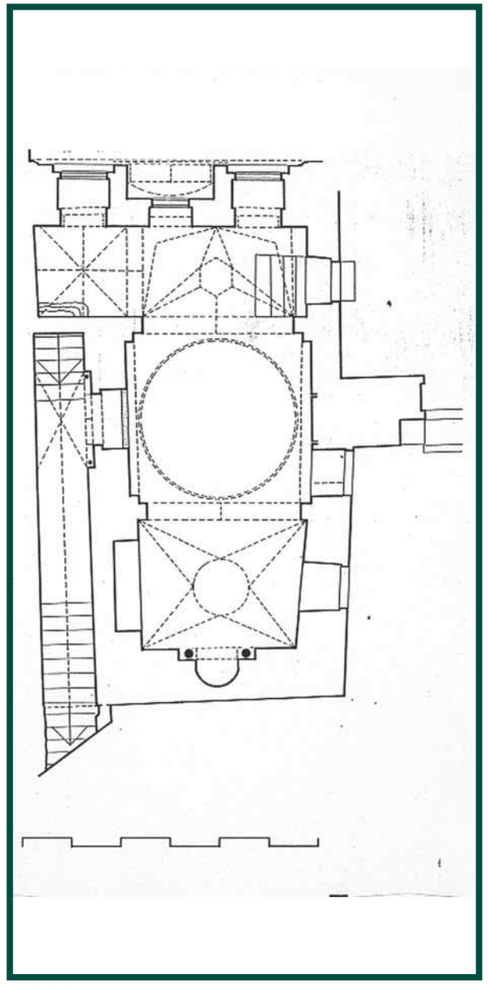


Fig.2.5 Plan of al-Madrasa al-Mawardiyya mosque

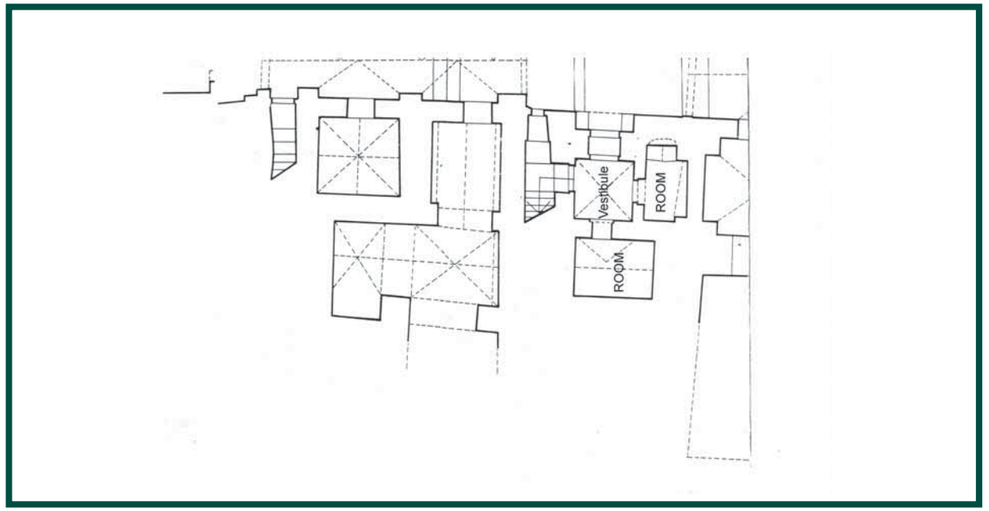


Fig.2.3 Ground floor of al-Madrasa al-Mawardiyya

Fig.2.6 Plan of first floor of al-Madrasa al-Mawardiyya

Ribat Bairam Jawish

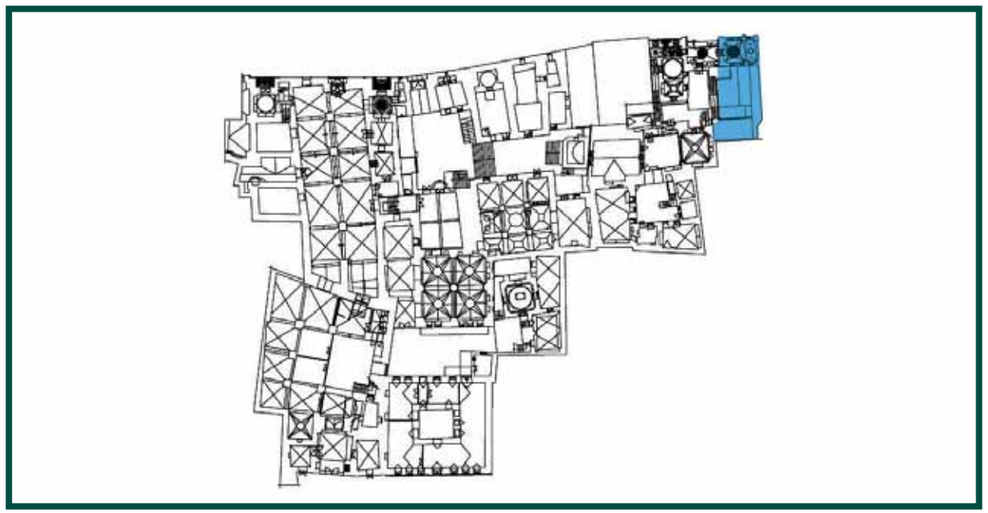


Fig.3.1 Location of Ribat Bairam Jawish

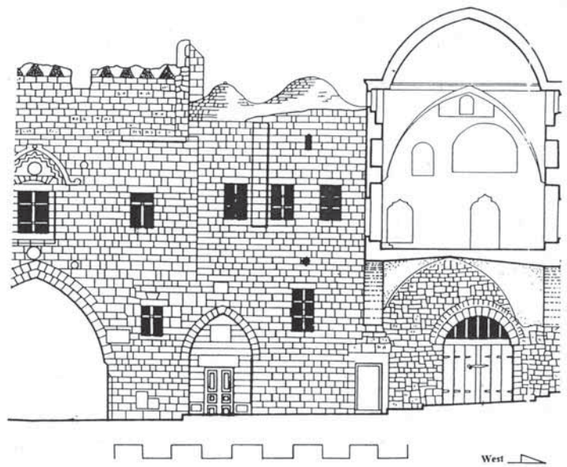


Fig.3.2 North elevation of Ribat Bairam Jawish

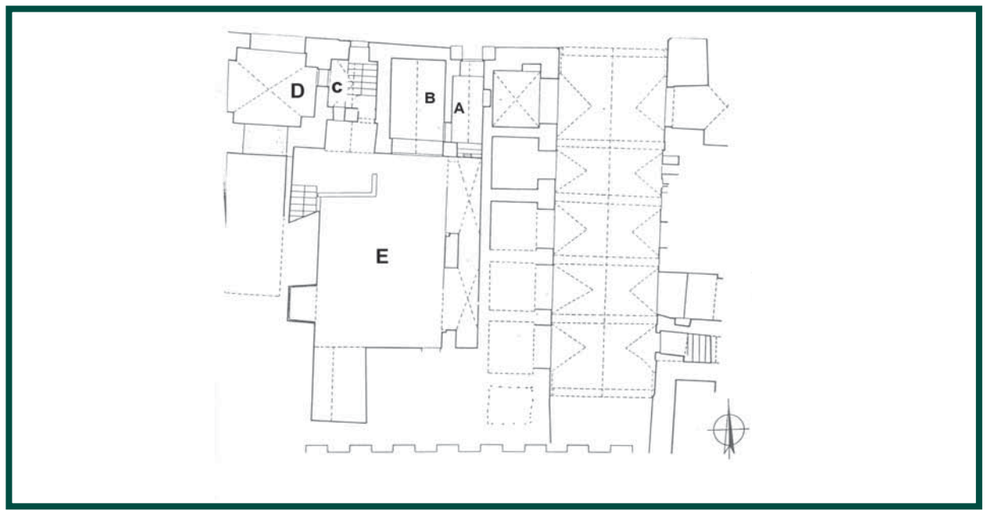


Fig.3.3 Plan of ground floor of Ribat Bairam Jawish

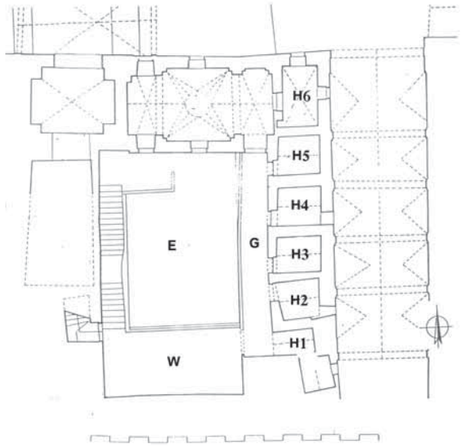


Fig.3.4 Plan of first floor of Ribat Bairam Jawish

al-Imara al-Amira

Fig.4.1 Location of al-Imara al-Amira

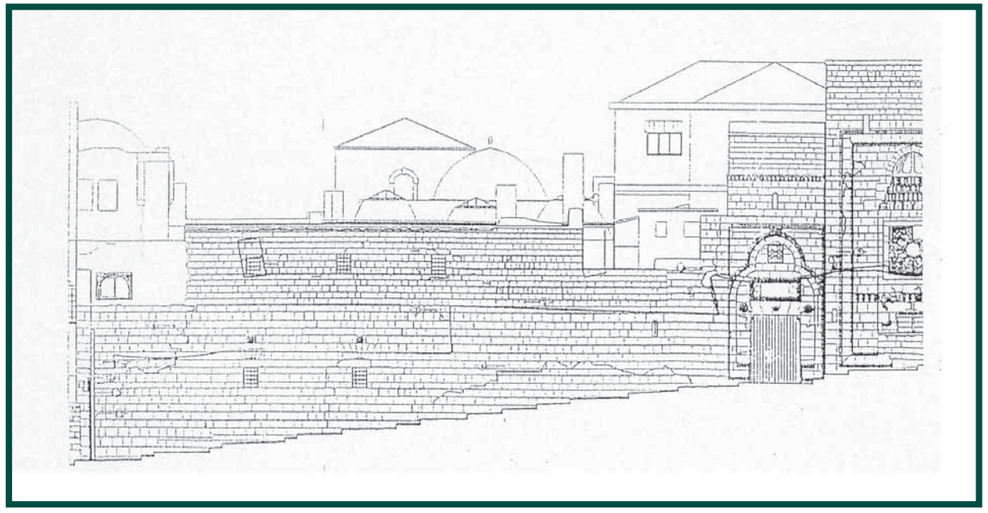


Fig.4.2 North façade of al-Imara al-Amira

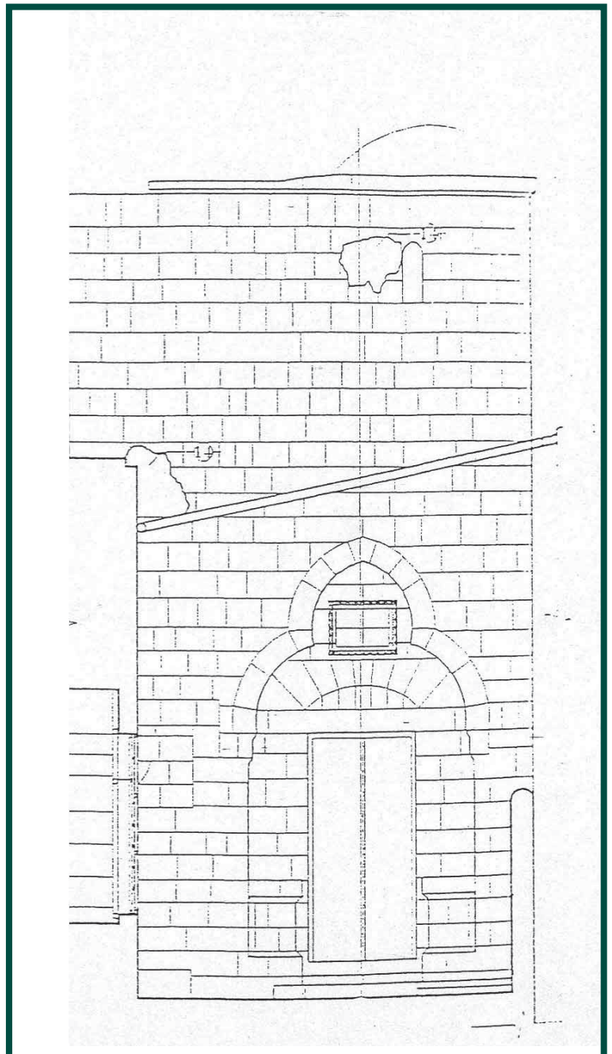


Fig.4.3 Details of the entrance of al-Imara al-Amira

al-Imara al-Amira

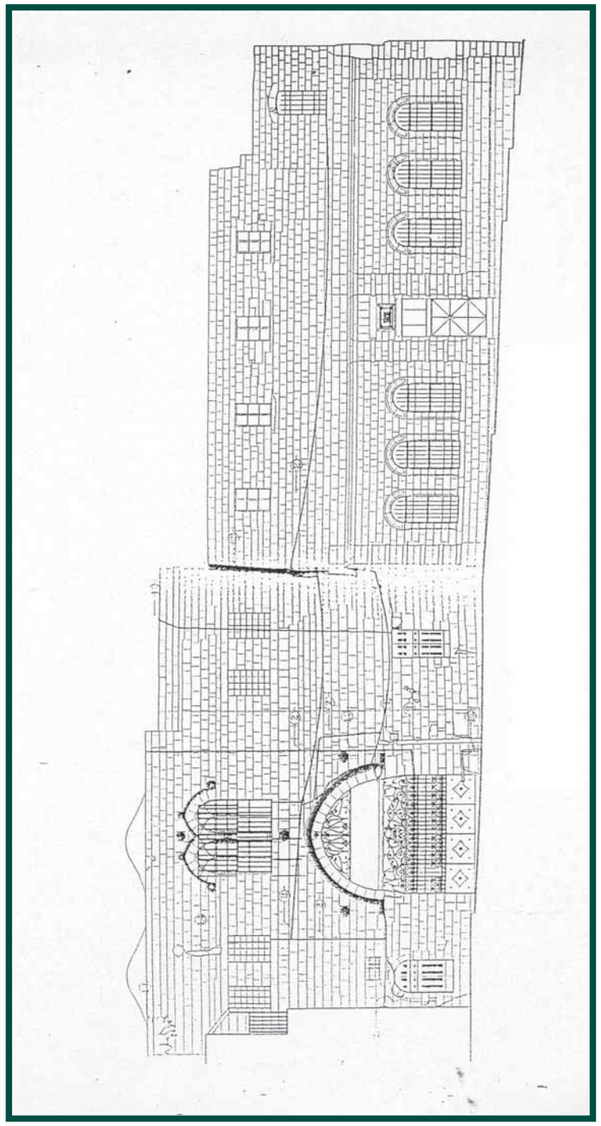


Fig.4.4 South façade of al-Imara al-Amira

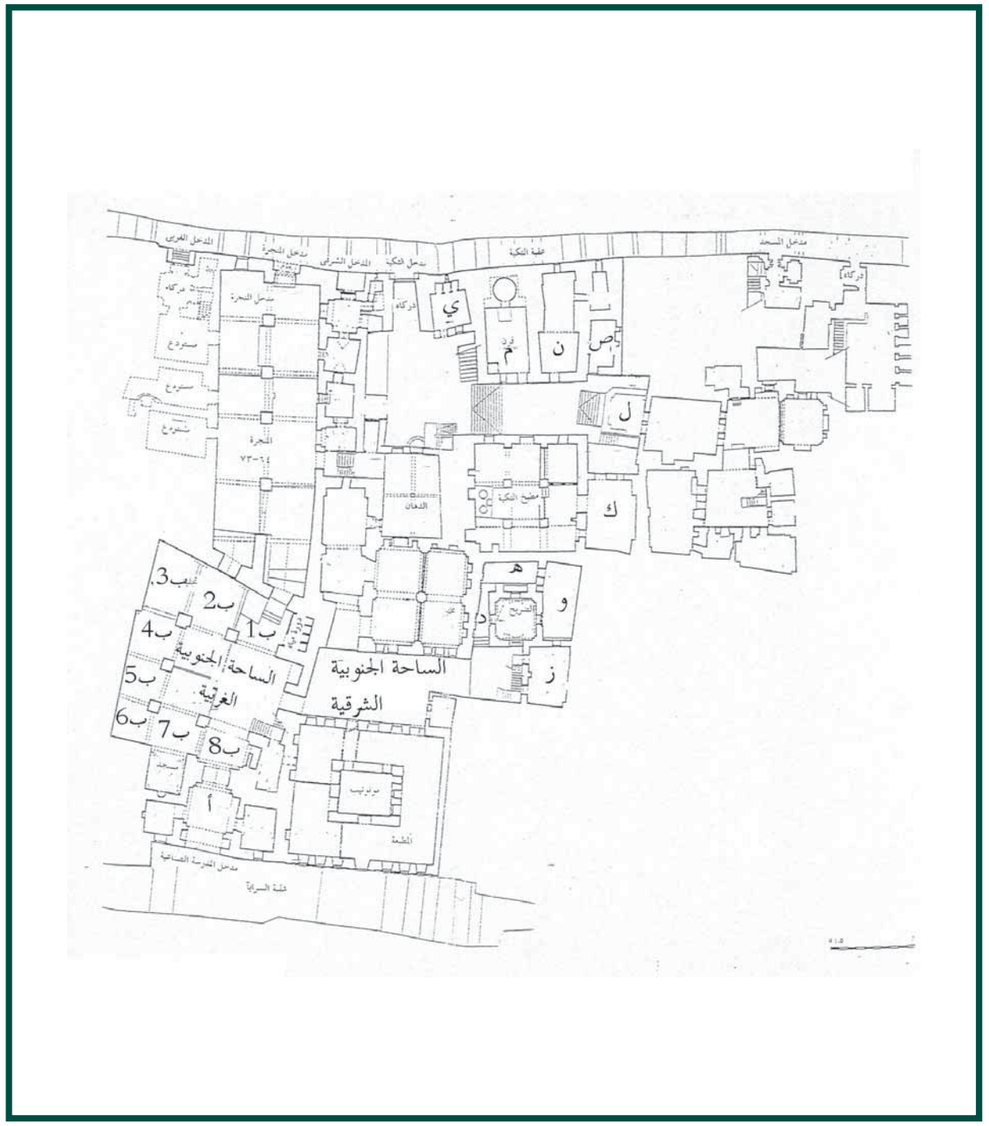
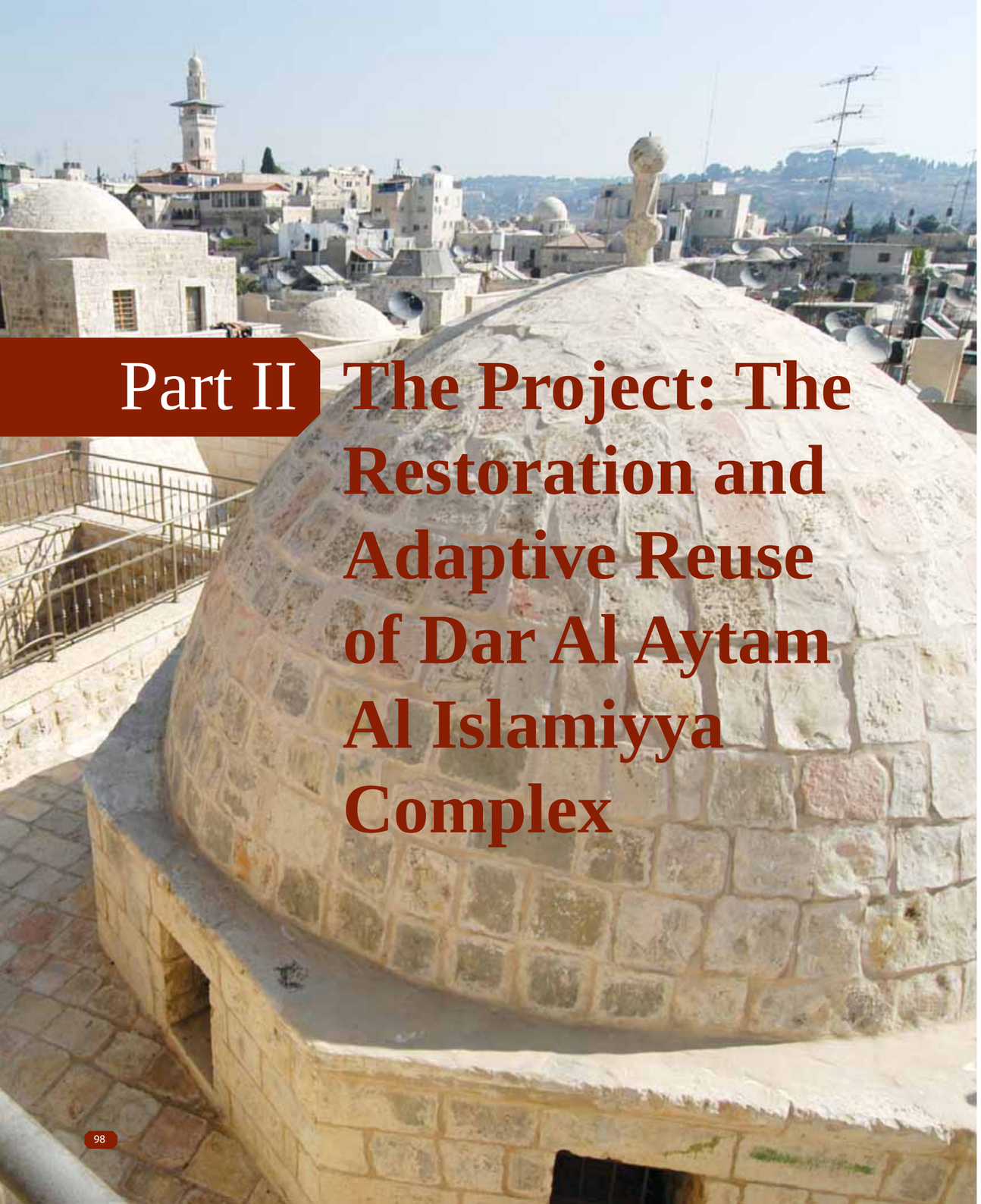


Fig.4.5 Plan of the first floor of al-Imara al-Amira



Part II

The Project: The Restoration and Adaptive Reuse of Dar Al Aytam Al Islamiyya Complex

Part II: "The Project : The Restoration and Adaptive Reuse of Dar Al Aytam Al Islamiyya Complex"

Introduction

Dar Al Aytam Al Islamiyya Complex is considered to be one of the most significant cluster of historical and architectural buildings in the Old City of Jerusalem. Its development took over 150 years in different stages; the first was during the Mamluk period and subsequent developments followed during the Ottoman period. The complex represents a unique example of Mamluk architecture (Sitt Tunshuq Palace) which was followed and complimented by the new buildings and extensions added during the Ottoman Period (Al Mawardiyya, Rabat Bayram Jawish, Al Amara Al Amera/ Khaski Sutan). This gradual development and transition from one architectural style to another in the various buildings creates an unusual model for architectural excellence witnessed in Jerusalem over two centuries.

As mentioned in the first part of this book, the complex played an important part in the cultural, social and economic life of Jerusalem especially since it became an Islamic Waqf at the turn of the last century for use as an Industrial School for Orphans.

The Industrial School played a major educational role for teaching orphans in Palestine as young Palestinians benefited from training on carpentry, furniture making, upholstery, printing and book binding. The products of the school were considered some of the best in Palestine.

After the occupation of Jerusalem and other Palestinian areas in 1967, part of the complex was converted for use as an Academic School. This school was established and run by what was known as *"Husni Al Ashhab Schools"*. Currently, the Academic School is under the management of the Palestinian Education Department in Jerusalem.

The Welfare Association recognised the historical, cultural and social importance of this outstanding architectural complex and the need to develop it and preserve its architectural heritage.

Welfare Association also realized the need to support both the Academic and the Industrial schools, upgrade their services and provide better physical and environmental conditions for students, users and the schools administration.

After consultation and agreement with the Department of Islamic Waqf in Jerusalem, (the complex owner), the Welfare Association conducted a preliminary study for the complex needs and prepared a budget estimate for the revitalisation, rehabilitation and restoration of its historic architectural components and development of the two schools. Both schools management were consulted by the Welfare Team to identify their needs and expectations and to agree the overall objectives of the project.

The Welfare's original project proposals included:

- Physical, historical and developmental studies.
- Comprehensive Rehabilitation of the complex infrastructure.

- Restoration of various architectural components in both schools including built up areas, open areas and yards, roofs and domes.
- Provision of furniture and equipment for both schools to contribute to the improvement the school's environment and develop their capacity.

The Welfare Association succeeded in obtaining the required funds for an integrated and comprehensive project for the development and revitalisation of the whole complex through organizing a total budget exceeding $3.5 million dollars. Most of the funds were obtained through a special fund raising event for Jerusalem organised in Sharja – UAE in 1998 by Welfare Association. Other resources were obtained to fund the final phases of the project.

1. Project Background

Welfare Association considers that the project for Development and Restoration of Dar Al Aytam Al Islamiyya Complex as a major project in its continued efforts to protect and preserve the Old City of Jerusalem. The Welfare interventions were implemented through its Old City of Jerusalem Revitalisation Programme which was established in 1995.

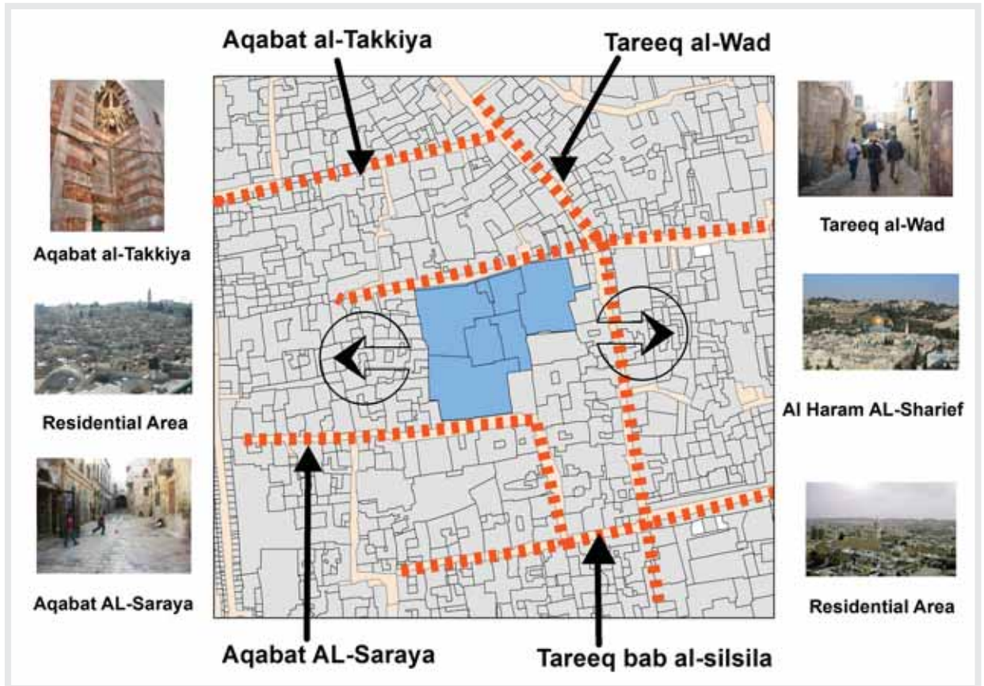


Plate 1: Dar Al Aytam Al Islamiyya Complex Location

Plate 2: Historical periods of Dar Al Aytam Al Islamiyya Complex

This exceptional complex is located less than 156 meters to the west of Al Haram Al Sharif (see plate no 1) and covers an area of 4500sq meters (4.5 donums). It's built up area, including buildings and internal open courts, is approximately 10,000 sq meters. Spread over 3 levels, it includes the original Mamluk palace, constructed in the 14th century and the Ottoman buildings added during the following two centuries, creating a unique model of one of the most outstanding Mamluk and Ottoman architecture in Jerusalem. This urban composition displays the smooth transformation of building form and architectural details between the two styles enhanced by the harmony and compatibility in the design of its various architectural components and functions (see plate no 2) Another factor adding to the architectural value of the complex is the integration of all its parts and elements in spite of the different periods during which these parts were constructed. The complex is also characterized by the exceptional architectural forms and interaction between buildings and spaces and connections between the various components, levels and functions offering an outstanding example of integrated urban form while enhancing the architectural design and artistic imagination which was contributed by several technical and creative experts.

1.1 Previous Use

Functions and uses of Dar Al Aytam Complex changed partially and sometimes completely over the centuries, from the beginning of its construction and the following years of its deveopment and expansion.

Built initially as a palace, it became a residence for Sufies and accomodation for pilgrims visiting Jerusalem, later used as the Ottoman Governers Headquarter and finally the whole complex became an Islamic Waqf in early 20th Century for use as an Islamic chartiable and educational institution. However, the passage of time, changes in use and functions and the natural disaters that befell Jerusalem did not affect the integrity of the complex or reduce its exceptional architectural charcter in spite of the physical deterioration of its components and infrastructure.

1.2 Current Use

As mentioned above, in 1922 the whole complex became an Islamic Waqf to be used as a vocational school for an Islamic charitable institution initially under the supervision of the Islamic Council and later under the management of the Department of Islamic Waqf in Jerusalem.

The complex played an important role in the lives of the community in the Old City of Jerusalem over the last nine decades. The orphanage vocational school "Dar Al Aytam Al Islamiyyah" included industrial workshops, dormitory, administration offices and a "Soup Kitchen" which continues to offer free meals until today.

During the first half of the 20th century the workshops of Dar Al Aytam School produced the highest quality carpets, furniture, prints, books and publications in Palestine. Hundreds of

Plate 3: Functional uses of the Complex

technicians and craftsmen graduated from the school, since it was established, and contributed to the improvement of the technical standards in Palestine.

Between 1922 and 1967, Dar Al Aytam use was confined to the vocational/industrial education and training. In 1968 part of the school was converted for the use of an academic school for boys as part of "*Husni Al Ashhab Schools*" which were established after the occupation of Jerusalem to protect the schools Arabic curriculum. This part of the complex is still used as an Academic School (primary & secondary) and is under the management of the Palestinian Education Department while the Vocational School is managed by the Ministry of Islamic Waqf (See plate no 3).

1.3 The Complex Physical Condition before Restoration

It was evident after the preliminary inspection of the complex by Welfare Technical Team, that decades of neglect, lack of maintenance, and unsuitable change of some functions resulted in serious physical deterioration of its architectural components and infrastructure. Consequently some of its main historic elements such as original stone tiles in the rooms and open courtyards were lost, cement wall plaster replaced the original lime plaster and cement screed replaced the original lime screed in roofs and open courtyards.

The beautiful Mamluk façade of Sitt Tunshuq Palace and other external walls suffered from pollution and some of their special features disintegrated or were no longer visible.

A classroom at the academic school (before restoration)

Over the years, services networks such as water, electricity and drainage were introduced gradually without planning, technical knowhow or attention to the special historical and architectural value of the buildings. Facades were covered with exposed wires and pipes and consequently water leakage from badly installed networks caused major humidity problems in walls and roofs.

The first floor of the industrial school- administration offices (before restoration)

New rooms and units made from concrete were added to building roofs causing increased load and consequently structural damage manifested in cracks in walls and floors, while use of cement over stone façades and external spaces affected the overall image of the historic buildings and the complex.

2. Project Philosophy

The development and restoration project of Dar Al Aytam Al Islamiyya was based on a comprehensive approach in the planning and design of all its components. Careful studies and assessment of the complex technical and developmental needs were conducted while international laws and standards for architectural heritage preservation were followed at all types and levels of intervention.

It was evident that the complex with its various historic buildings and exceptional architectural components represent a unique model of Mamluk and Ottoman architecture in Jerusalem which required the full and careful documentation of all its parts according to international standards. Meanwhile, the use of the complex by two major educational institutions also required the careful identification of their needs and priorities to contribute to the development of both schools to meet modern standards for education.

It was therefore important during the project planning to find the balance between protecting the valuable cultural heritage of the complex while adapting its buildings to the required

A classroom at the academic school (after restoration)

modern use and providing and modernizing the needed services. Such approach was required to enhance the school's environment and contribute to the development of their capacity for teaching and training.

The Technical Team of the Old City of Jerusalem Revitalisation Programme (OCJRP) was carful that the restoration and rehabilitation works, which were expected to take years to implement, will not affect the ability of both schools to operate during the project's implementation. Therefore, there was continuous consultation and coordination with the schools' administration to agree the project's programme, and location of work in various phases to ensure both schools took the necessary precautions and made the required arrangements before work in their areas started.

The overall project implementation plan and definition of various phases was also based on partnership and consultation between the main institutions. The Projects main partners were:

- Technical Office of the Old City of Jerusalem Revitalisation Programme (OCJRP) – Welfare Association, as the funding and implementing institution.
- The Department of Islamic Waqf, as the owner of the complex and beneficiary as well as the technical partner of the OCJRP.
- The Industrial School of Dar Al Aytam Al Islamiyya, the beneficiary of the restoration and rehabilitation of the part of the complex under its use.
- The Academic School of Dar Al Aytam Al Islamiyya, the beneficiary of the restoration and rehabilitation of the part under its use.

The Technical Office of OCJRP prepared all the studies, surveys and architectural documentation of the whole complex in cooperation with a number of local and regional experts. OCJRP also prepared the design drawings and tender documents needed for the implementation of various restoration and rehabilitation phases and adaptive reuse of the complex for its modern functions. This was conducted in coordination with the technical team of the Department of Islamic Waqf. The Technical Office of OCJRP also conducted training in restoration through cooperation and networks with an international organization. The project also included provision of modern furniture and equipment for both schools.

The carpentry at the industrial school (after restoration)

3. Project Objectives

Development Objectives:

- Preservation of the Arab, Islamic and World Architectural Heritage in the Old City of Jerusalem.
- Improvement of the environmental and physical conditions of schools used by educational institutions in Jerusalem.
- Development of educational institutions in Jerusalem for the benefit of its community.

Immediate Objectives:

- Restoration and rehabilitation of buildings and open spaces in the Dar Al Aytam Al Islamiyya Complex according to international standards for preservation of architectural heritage.
- Rehabilitation of the infrastructure for the whole complex of Dar Al Aytam Al Islamiyya to upgrade and develop the services provided to its users.
- Improvement of the physical and environmental conditions of schools, workshops and offices in both schools.
- Contribution to provision of specialized educational institutions in the Old City of Jerusalem that offer academic and vocational education to Jerusalem Community.
- Development of the capabilities of both schools by providing modern furniture and equipment for better use of students and management.

4. Project Components

The project concept was based on a comprehensive approach to the development and regeneration of the complex.

Therefore, the main project components were:

- Studies, surveys and research,
- Rehabilitation and upgrading of the infrastructure for the whole complex.
- Restoration and rehabilitation of buildings and open spaces in all ports of the complex.
- Provision of furniture and equipment.

The implementation of the project components included the following phases:

1. Studies, Surveys and Documentation including:
   1.1 Physical and structural studies and architectural documentation of the whole complex.
   1.2 Historical and architectural development study for the complex.
   1.3 Preparation of a development plan for both; Industrial and Academic Schools.

2. Comprehensive rehabilitation of the infrastructure and service networks in the whole complex.

3. Restoration and rehabilitation of buildings and open spaces. This phase was divided into six phases and included (See plate no 4):
   3.1 Phase (1): part of the *Industrial School* including, the print shop, book binding and upholstery workshops, the school administration offices, and utilities as well as surrounding open areas, roofs and domes.
   3.2 Phase (2): part of the *Academic School* including classrooms, gymnasium, "Tikkiyya" soup kitchen and surrounding courtyards, open areas and domes.
   3.3 Phase (3): Administration offices of the *Academic School*, offices of the Education Department, library, more classrooms and surroundings open areas and utilities.

3.4 Phase (4): Restoration of the Dormitory in the *Industrial School*, public hall, bedrooms and utilities, dressmaking room, music room, and storerooms.
3.5 Phase (5): Completion of restoration of the *Industrial School* including cafeteria, carpentry and all adjacent spaces, paint section and all storerooms.
3.6 Phase (6): Special and careful restoration of the Mamluk stone façade of Sitt Tunshuq Palace facing Aqabet Al Tikkeyeh. The delicate restoration included all the decorative elements, special architectural details and doors.

5. Implementation Methodology

5.1 Consultation Phase

After securing the required funds for the total restoration and rehabilitation of the components of Dar Al Aytam complex, a meeting was held at the Industrial School offices with participation of Welfare Association representatives and technical managers, representatives from the

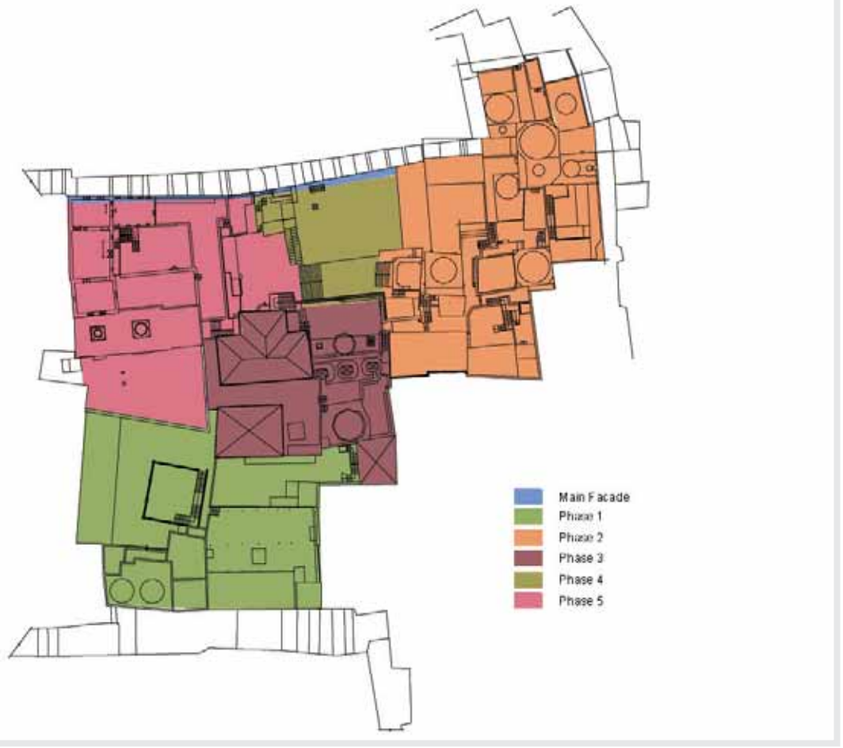


Plate 4: implementation phases

Department of Islamic Waqf in Jerusalem and representative from the administration of both Academic and Industrial Schools. The aim of the meeting was to agree the overall approach to the implementation and priorities for intervention.

Subsequently, the Technical Team of the OCJRP / Welfare Association prepared an Action Plan based on what was agreed during the first consultation meeting with the partners, before the project implementation begins. The plan was later discussed and all parties agreed that it was important to start the comprehensive rehabilitation of the infrastructure in the whole complex before the restoration of buildings, architectural and structural elements.

It was also agreed that the phases for restoration and rehabilitation of buildings would start according to the progress in the implementation of the infrastructure rehabilitation phase.

Meanwhile the required physical studies and surveys for the project would be carried out at the early stage of implementation to enable the implementation of restoration and rehabilitation work according to their results.

5.2 Preparation of Studies, Surveys, Design and Implementation Documents

- Preparation of the physical and structural studies and the architectural documentation was one of the main priorities of the project. Such studies should be completed before the team could start the preparation of design drawings and documents.
- The study for the architectural and historical development of the complex and the study for the schools development were prepared during the implementation of various project phases.
- A specialised Engineering Consulting office was commissioned to prepare the drawings and documents for rehabilitation of the infrastructure of the whole complex after conducting a thorough study of the physical condition of all the service networks and infrastructure.
- The Technical Office of OCJRP / Welfare Association prepared all architectural design, restoration, detailed drawings and tender documents for all the six phases of the project. The OCJRP team was partially assisted during the first restoration phase by a local office specialised in conservation for the preparation of the preliminary drawings which were later developed by OCJRP for the implementation phase. The OCJRP team continued the full preparation of all drawings and documents for the following five phases.

5.3 Project Management

OCJRP selected a team of their architects and engineers for the preparation of the design and tender documents and follow up of various phases of implementation, and appointed a senior architect as the Project Manager. A special technical team was also appointed for site management including a Resident Engineer and Assistant Engineer who worked under the supervision of the Project Manager and in coordination with OCJRP Technical Team.

The Site Management Team was responsible for the administration and coordination of all phases of implementation and the various contractors on site.

The site team also had the responsibility of working closely with the management of both school to ensure that the progress of implementation is according to plan and is not affecting their own work and activities.

6. Project Implementation

6.1 Studies, Surveys and Documentation

A. Architectural documentation studies and physical and structural surveys:
In 1999, The Centre for Conservation of Islamic Architecture in Cairo, Egypt was commissioned to prepare physical investigation and surveys and architectural documentation for the whole complex of Dar Al Aytam Al Islammiyya. The Centre is considered to be one of the few institutions with this expertise in the region.

The architectural documentation was carried out using "Photogrammetric" equipment and "Total Station" for all parts and components in the complex. The Consulting Team from the Centre conducted two site visits to Jerusalem, each lasted 3 weeks. The Consulting Team carried out all the documentation studies and surveys during the first visit using the latest modern equipment and technology in the field, to produce architectural survey drawings and details (AutoCAD) for all the buildings.

The Team returned to Jerusalem to check the produced drawings and compare them on site after few weeks from the first field visit. Professor Saleh Lamie, Director of the Centre for Conservation of Islamic Architectural Heritage (CIAH) visited Jerusalem and the site many times accompanying his team and a number of experts and specialists who also conducted studies and tests to determine the physical and structural conditions of various buildings and components within the complex.

The studies carried out by the Centre for Conservation of Islamic Architectural Heritage (CIAH) for the project included:

1. Architectural Documentation of all internal and external areas within the complex. The complex was constructed on an area of 4500 m^2 and the built-up area is over 10.000m^2 as mentioned earlier.

The documentation also included external and internal facades of various spaces and the main street façade of Sitt Tunshuq Palace with all decorative and delicate architectural details. It also included thorough architectural survey of all rooms, halls, open areas, yards, roofs and domes as well as the classrooms, workshops and offices detailing doors, windows, floors, ceilings and special features such as cross vaults and arches. A detailed study was made for these elements and detailed measured plans were drawn for all levels at both schools. Detailed sections were prepared for all spaces in addition to external elevations for all the buildings.

Upon the completion of this study and related documents, the Technical Team of OCJRP was able to start the preparation of design and restoration drawings for all the buildings in Dar Al Aytam for the rehabilitation and adaptive reuse of the historic spaces for the modern functions in both schools.

2. Study for methodology of photographic documentation and preparation of an Operating Manual with an example applied on Al Tikiyya kitchen in al-Amara al-Amira. The study also included the framework for photo documentation.

3. Manual for restoration based on use of traditional material including preparation of hydraulic lime and natural lime with all the ingredients as well as steps needed for the preparation of lime plaster and lime pointing. The manual also included methods for building consolidation and stone cleaning.

4. Study analysis of traditional buildings and all materials used in the construction of the complex.

5. Visual study of the stone using magnification lenses.

6. Laboratory testing for stones and plaster based on samples taken from the main material used in the buildings and its analysis in a specialised laboratory, which included six samples from stone, five samples from the lime mix and five samples from plaster.

7. Soil analysis and foundation tests based on samples taken from the site and analysed in a specialised laboratory.

8. Study for condition of structural elements: The study was prepared by experts specialised in structural condition, and covered all areas within both schools and included:
   - Evaluation of structural stability of buildings within the complex and identification of areas suffering from structural failure and cracks.
   - Examination of foundation stability and that of other buildings components.
   - Assessment of structural safety and integrity in all buildings and components within the complex by subjecting these parts to different loads.
   - Preparation of recommendations and needed action to consolidate and strengthen the structural components where needed.

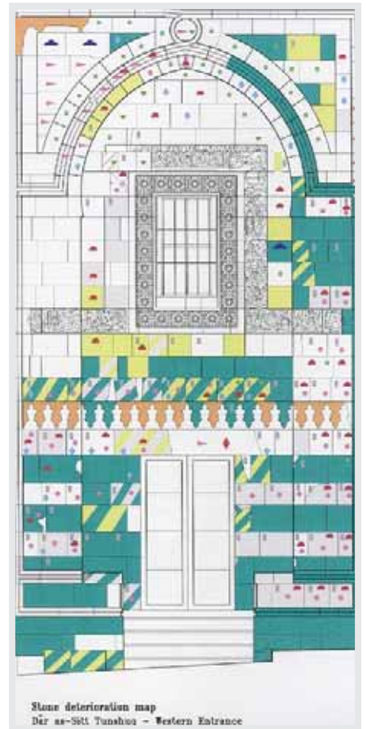


Plate 5: Laboratory testing forMamluk stone façade of al-SittTunshuq- Dar Al Aytam Complex

9. Study for the Environmental Condition of the complex: A number of tests were carried out internally and externally for the carpentry which is one of the main departments within the complex. The carpentry located in the ground floor of the Mamluk Palace was subjected to tests for temperature and humidity in the external and internal spaces. The tests were carried out to determine the degree and type of salt in the building.

10. Preparation of detailed architectural survey drawings for all buildings and spaces within the complex to use as a base for developing the design drawings for building restoration and for preparing the rehabilitation drawings for the infrastructure.

B. Historical and Architectural Development Study for Dar Al Aytam Al Islammiyya Complex:
As part of the documentation process for the complex, it was important to prepare a comprehensive study for the historical and architectural development over the centuries for all its parts. An expert specialised in architectural history of Jerusalem, Dr. Yousef Al Natsheh was commissioned to prepare the study. The preparation of the study was concluded with the preparation of the first phases of the project implementation (2000-2001).

The methodology followed by the expert was based on dividing the complex into its four main architectural parts which formed the most important stages in its development. The expert then studied each part separately with emphasis on the continuity and integration between the components. The methodology also followed the historical sequence to identify the creation and development of the various parts of the complex. Dr. Natsheh recently prepared a summarised version of this study which forms Part I of this book.

The study included description of the complex main components, following additions and interventions and subsequent functions of its main elements including the current ones. It also highlighted the political and economic value of the complex over the historic periods since its development including its significance to important political leaders over the years. The study which was prepared between the year 2000 and 2001 describes the physical problems in the complex, their causes and attempts to maintain and protect its components.

The study focused on the detailed development of each of its four main components over the historical periods including the first part which was constructed during the Mamluk period (Sitt Tunshiq Palace) and all other parts that were developed during the following Ottoman period (Al Madrassah Al Mawardiyya, Ribat of Bayram Jawish and Al Amara Al Amera). The historical development study included the identification and title of each building, date of construction, the founder and description of its Waqf as well as description of all the study examined the architectural development of each of the main buildings with description of internal and external descriptions of all spaces and analysis of their architectural composition, details and special features.

The study concludes by description of the unique architectural characteristics, differences, similarities and compatibilities between Mamluk and Ottoman design used in the complex.

C. Development Plan for Dar Al Aytam Complex (Industrial & Academic Schools) in the Old City of Jerusalem:
As part of the project for the development and revitalisation of Dar Al Aytam complex, OCJRP commissioned in 2001, a group of experts in the field of education and vocational training to prepare a Needs Assessment study for both the Industrial school and the Academic School in Dar Al Aytam Al Islamiyya and present recommendations for their development.

The experts prepared the study in cooperation and coordination with the OCJRP and in consultation with the management of both schools as well as the office of the Education Department in Jerusalem. A number of meetings were held, during the study, between the consultant/experts and OCJRP and during the review of the preliminary findings and recommendations before the study was finalised.

According to the Terms of Reference of the experts, the aim of the study was to prepare a comprehensive plan for the two schools to develop their capabilities and skills.

The study provided an evaluation of the human and physical resources and their suitability to the role expected from each school to fulfil the required objectives. It also highlighted the challenges and obstacles facing the schools. During the research, the team examined the educational and training models, curricula and management systems used in both schools.

1. Industrial School:
The study included an integrated development plan for the industrial school of Dar Al Aytam Al Islamiyya which is run by the Ministry of Islamic Waqf. The plan was based on the results of the Needs Assessment and different school activities.
The experts reviewed the students and teachers/trainers characteristics in the five available specialties; (carpentry, paint, printing and book binding, upholstery and decoration, dress making and wicker-works) based on the data provided by the school.

The study examined the schools weaknesses, and strengths, available human resources (trainers, technical staff and administrators) and their suitability for their jobs. The experts inspected the available physical resources (spaces, workshops and rooms) used for various functions as well as the stores, utilities, management space and the students dormitory. They also studied the school's training model, curriculum, and management systems.

Additionally, a detailed study was prepared for all the specialities offered by the school which included description of the functions, equipment and machinery used and its suitability as well as the safety and security methods available in the school.

The Final Report included market study and expected employment prospects for the graduates in all available specialities and ways of responding to the market needs in the future. Finally, the experts prepared a plan to develop the school based on the following objectives:

- Improving the efficiency of available training.
- Improving the effectiveness and quality of available training.
- Providing better relation between available training and local market needs.
- Improving the schools sustainability and continuity.

The achieve these objectives, short term plans were prepared to enable the preparation of a comprehensive long term development plan for the Industrial School of Dar Al Aytam Al Islamiyya.

2) The Academic School:
Another development plan was prepared for the Academic School in Dar Al Aytam Al Islamiyya which was established in the complex in 1968 is now run by the Palestinian department of Education in Jerusalem, while it is also under the supervision of the General Islamic Waqf.

The study examined the current conditions in the school including social and economic background of the students, physical condition of the classrooms, administration offices, utilities, the library and laboratories and utilisation of all rooms and used spaces and open courtyards. All administrative services, equipment, management and educational tools were also examined as well as capabilities of teachers and management staff working in the primary and secondary schools. Teaching curriculum and methodology, services and activities available for students were assessed to understand the schools culture.

The study also included the offices of the Director of the Education Department for Jerusalem Governorate and the physical condition in the space allocated to the department within Dar Al Aytam Al Islamiyya Complex. It concluded by presenting short term recommendations to help resolve the problems and challenges facing the school's main functions.

The recommendation presented a proposal to develop for the Academic School and improve the quality of education and increase its effectiveness. The recommendation focused on six main objectives:

1. Developing Human Resources.
2. Upgrading and improving physical environment and utilities (buildings, equipment and furniture).
3. Enhancing existing curriculum and increasing student's motivation.
4. Improving the schools management systems.
5. Developing the schools culture.
6. Strengthening the schools relationships with parents and local community based on partnership and participation.

6.2 Rehabilitation of the Infrastructure

During the preparation of the Action Plan for implementation of the project for Development and Restoration of Dar Al Aytam Al Islamiyya Complex, it was agreed with the main partners that implementation will start with the rehabilitation of the infrastructure for all parts of the complex and before starting the restoration of buildings and architectural components.

Consequently, in 1999 the Technical Office of OCJRP/Welfare Association commissioned an Engineering Consultant's firm specialised in infrastructure and services to prepare an assessment of the condition of infrastructure, service networks, and utilities in the whole complex. Based on the study results, the consultants were required to prepare a suitable design and working drawings for upgrading and modernising the networks while preparing all specifications and tender documents to enable the implementation of this phase.

The implementation methodology considered the need of both schools to continue functioning during the execution of the required work.

The Consultants therefore prepared a plan for providing new connections and extensions for electrical, water, sewage and water drainage networks as well as for central heating and telephone networks for the whole complex.

Rehabilitation of the Infrastructure Phase

It was decided to start the implementation in open areas and courtyards surrounding the buildings, while internal connections to the networks would be carried out during the restoration and rehabilitations works for each building.

The Tender documents included similar instructions to contractors to follow the same methodology while taking appropriate measures to ensure safety of students and staff during the work implementation.

The implementation included provision of new electrical cables, main line extensions and the main electrical board were located in the open areas between the buildings. An electricity room was located under the Dormitory in the Industrial School while the main electric board was located in the ground floor near the Paint Room behind the carpentry workshop.

After coordination with Jerusalem Electric Company the main Electricity Room for the whole complex (two schools) was located at the main entrance of the Academic School. An electric transformer was provided with its special cables and distribution from the main electric board to other boards in the complex was also agreed with Jerusalem Electric Company.

The design, which was coordinated with OCJRP, provided water tanks and boilers for both schools which were located on the Dormitory roof, while smaller boilers were also provided in all kitchens and toilets.

The service networks extension inside the buildings included the basic works needed for all services which would be carried out during the relevant restoration and rehabilitation phases for each building. Special care was followed in the design of the internal infrastructure connections to ensure that it will not affect the historical integrity and value of the complex or change any of its architectural features.

The project also included provision of toilet units for both schools. The provision was based on the number of students and staff. In the Dormitory at the Industrial School, showers were provided as well as a laundry room. Suitable services were also supplied in the Tikkya Kitchen at the entrance to the Academic School and at the kitchen and cafeteria at the Industrial School.

The project design included selection of special external lights made of (anti vandal) glass for the open courtyards and external stairs. Lighting fixtures were selected for the workshops to suit the functions, lightning fixtures were also provided in classrooms, offices and other internal areas.

6.3 Restoration and Rehabilitation of Buildings and Open Areas

As mentioned earlier, before starting the restoration works, a number of studies were carried out for the physical and structural conditions of various built components in the complex and the building materials used in the construction. Specialised experts were commissioned to carry out the architectural surveys and documentation of all parts of the complex in addition to two other studies.

During the preparation of the physical surveys, a number of tests were carried based on various samples of the building materials to examine their characteristics and conditions.

The largest and oldest part of the complex, Sitt Tunshuq Palace was selected as a case study to measure the internal and external temperature, level of humidity and characteristics of the leaked water which was causing condensation and humidity. Tests were made to measure salt and degree of acidity and alkalinity of water (PH).

Tests were also carried out on stone samples taken from different locations at 16-30 cm depth and 6 cm diameter, study of water absorption for various stone samples was also part of the tests. The test results enabled the proper treatment and cleaning of the stones and other building materials. It also recommended the use of similar stone for restoration and construction with same characteristics.

The Complex rehabilitation and restoration programme was based on two components;

a) The infrastructure comprehensive rehabilitation and;
b) The restoration of the built components divided in six phases.

The division was agreed with the partners to minimise the work disruption and to allow both schools to continue with their work.

The six main restoration phases included:
Phase (1):

This phase covered the south-west part of the complex including parts from the Industrial School such as the Upholstery, printing and binding workshops, the schools administration offices and utilities and all the surrounding open areas and courtyards.

The design of this phase included removing all the modern cement additions and re-distributing internal spaces to recover their former shape without any change to the original building components.
Additionally, all rooms built from cement/concrete in front of the main gates were also removed and replaced by newly designed gates made from "strong insulated glass" with metal protection; thus allowing natural light to the workshops while protecting the internal spaces from weather and external factors.

The recently added metal and cement roofs to cover internal courtyards of the main building, were removed to recover their original shape and provide natural light to the rooms overlooking the courtyards. This would reduce condensation and humidity inside the building and provide a more suitable environment for the students, while preserving the architectural heritage of this valuable complex.

Phase (1): The ground floor of the Industrial School- Dar Al Aytam Complex
For more details see project drawings p. 161

The restoration and rehabilitation works within this phase also included insulation and retiling of the roofs using old stone tiles and lime mortar. All cement plaster in internal spaces was replaced by lime plaster to suit the original stone and its forms.

Phase (2):

This phase included restoration works for the north-east part of the complex including classrooms in the Academic School.

The main design focus of this phase was re-organisation of classrooms, storerooms, and other spaces, and re-allocation of toilet areas to avoid health and environmental damage to the surrounding areas.

The design and restoration drawings were prepared after frequent and long meetings with the school's administration to identify the schools needs and priorities, collect information needed for the design such as number of students, available / used classrooms, school's curriculum and teaching programmes. As a result of these meetings OCJRP learnt about shortages, difficulties, future needs and plans, which assisted in making joint decisions for the project implementation.

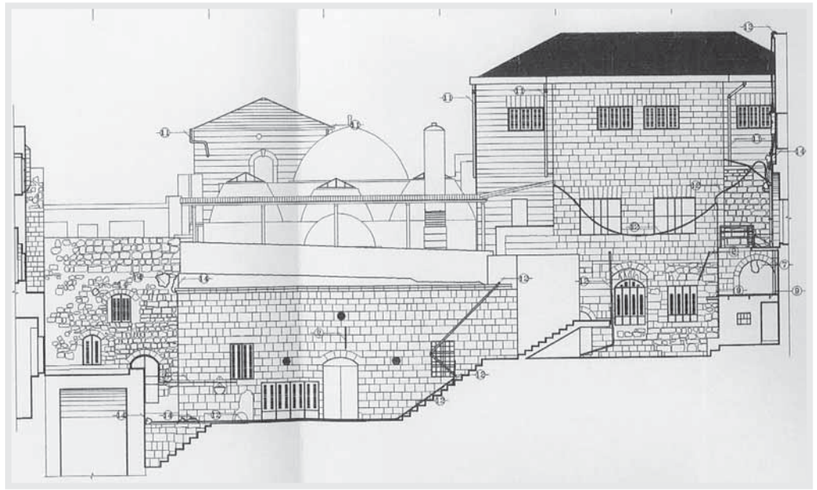
Phase (2): The first floor of the Academic School- Dar Al Aytam Complex
For more details see project drawings p. 162

During the meetings, the project phases were agreed to avoid disruption and allow the continuation of teaching and other schools activities and ensure the safety of students and staff during the works. It was therefore decided that the implementation will be divided into two phases according to agreed dates, using the summer holidays to implement most of the required work.

During this phase, the works included removing all cement and concrete additions and extensions used as classrooms or other functions. The survey conducted before the design phase showed that a number of external spaces and niches within internal walls were closed to be used for storage. These spaces were included in the design and re-opened to recover their previous shape. However, some of these spaces were closed by using transparent glass with metal protection to facilitate their use by the school, while maintaining their original Mamluk design.

All rooms in the second floor, used as classrooms were rehabilitated and restored, while toilets were reallocated, modernised and provided with natural ventilation. In addition to restoring all the classrooms and utilities, a room was rehabilitated and adapted for use as a gymnasium using appropriate finishing materials to provide safety for students and users. All building roofs were insulated and retiled using old stone tiles over lime screed. Cement parapets in open areas and courtyards were removed and replaced by metal handrails to recover the original forms and provide

visual continuity between various parts of the building and to emphasise the balance between the need for architectural heritage protection in the complex and the functions. Implementation followed international standards for architectural heritage preservation in all phases and levels of intervention.



Phase (3): The internal northern façade- Dar Al Aytam Complex
For more details see project drawings p. 164

Phase (3):

This phase covered the remaining areas of the Academic School occupying the northern part of Al Amara Al Amera in addition to the Tikkiya of Khaski Sultan (Soup Kitchen) which is still offering food for the needy and the Old City community especially during the month of Ramadan. Most of the spaces in this part are used as classrooms while others are utilised by the Academic School administration.

The work in this phase included rehabilitation and restoration of open spaces and areas especially the roofs and domes. All metal and asbestos covers were removed as well as the cement parapets as it had a negative impact on the architectural image of the complex and added weight on the original structure. These unsuitable additions also contributed to rainwater leakage into internal spaces leading to condensation and increased humidity. Therefore, all open spaces and courtyards were insulated and retiled using stone tiles to stop water leakage to rooms below these spaces.

The cement parapets around courtyards and open spaces were replaced by simple metal handrails in harmony with the overall design, to allow visual continuity between various spaces. All domes were retiled by old stone. The new design and details enhanced the original architecture and improved its presentation.

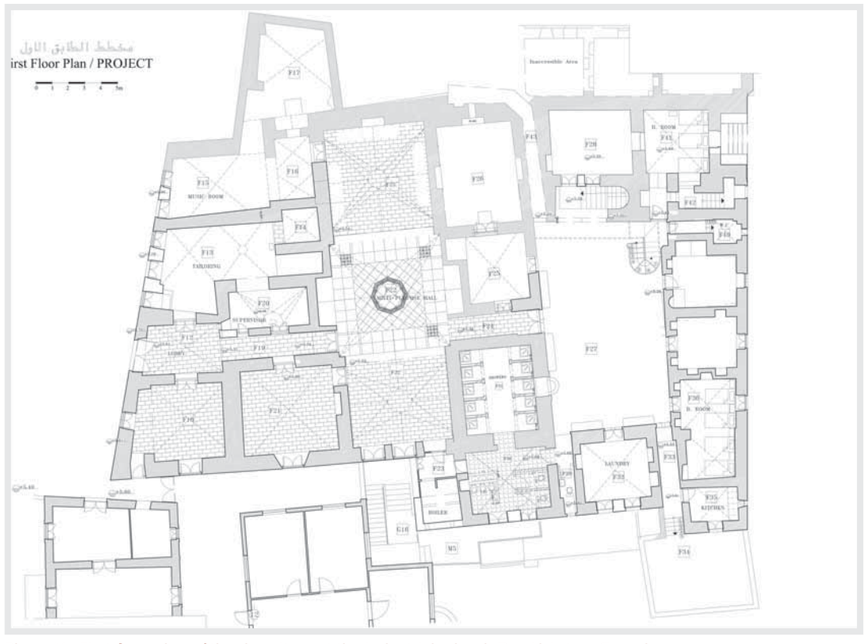
Phase (4):

Phase four focused on the restoration and adaptive reuse of the upper floor of the Mamluk Palace of Sitt Tunshuq which includes the main part of the Industrial School.

The main hall in this floor was used as the student's dormitory which was crowded and did not offer the students a suitable environment. In the new design, the hall was adapted for use as a multi-purpose hall for cultural and recreational activities for the school.

The other spaces and rooms surrounding the hall were redesigned, restored and adapted to provide better environment for the students and to offer the school more space for other utilities.

The main hall led to an open courtyard surrounded by a number of rooms on two floors. This area was abandoned for many years and most of the rooms were closed or used as store rooms and suffered from humidity and physical deterioration. The new design allowed for restoration and rehabilitation of the rooms and for the courtyard to be used as dormitory with its own toilet areas and relevant utilities with better lighting and ventilation.



Phase (4): First floor plan of the dormitory at the industrial school- Dar Al Aytam Complex
For more details see project drawings p. 165

The restoration work included replacing the ceiling cement plaster by lime plaster in all areas, insulating and retiling the roofs, cleaning the stone facades and repointing them with lime. The old Mamluk floor tiles in the main hall were carefully restored. The new design provided safety and security for all users.

Phase (5):

The lower part of Sitt Tunshuq Palace in the Industrial School was the main focus of Phase Five of the project. It comprised the restoration and rehabilitation of the carpentry, adjacent and upper rooms (many of which were closed for decades). The nearby kitchen and cafeteria used by students of the industrial school were also rehabilitated and restored.

During this phase the carpentry was rehabilitated according to its current use, location of machines and equipment was reviewed and changed in consultation with the teachers and administrators of the school. Debris was removed from three spaces in the north western side of the carpentry leading to discovery of three previously covered large rooms. The newly discovered rooms were restored and provided with side lighting and mechanical ventilation to be used as stores for special materials for the carpentry.

Phase (5) : Ground floor plan for the Carpentry at the Industrial School – Dar Al Aytam Complex
For more details see project drawings p. 170

The kitchen and cafeteria in the industrial school were restored, rehabilitated and provided with furniture and equipment, thus providing better functional and environmental conditions. All cement additions and covers to courtyards and open areas were removed.

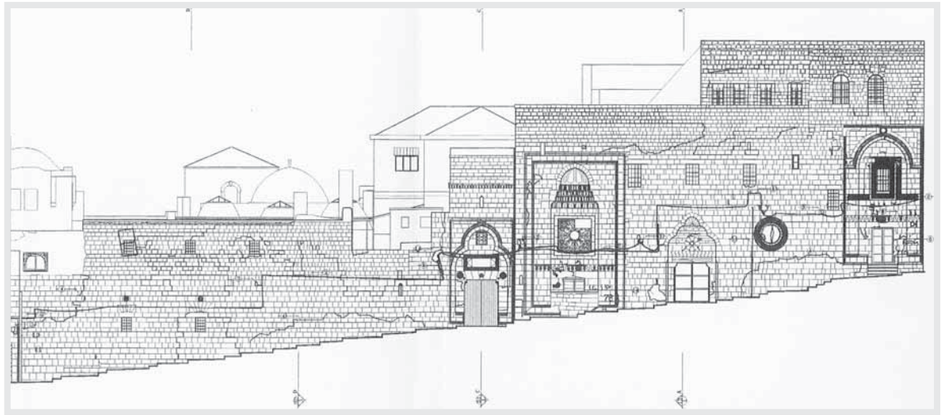
Phase (6):

The work in this phase was confined to the careful restoration of the Mamluk stone façade of Sitt Tunshuq Palace with its exceptionally designed four portals extending 35 meters from west to east.

After a comprehensive physical study of this façade through visual and laboratory inspection, it was evident that there was substantial deterioration in the stones, and that the whole façade needed thorough restoration and cleaning according to international standards for architectural heritage preservation.

The inspection showed that the stone facade suffered from multiple problems including cracks, chemical weathering, soiling, flaking, spalling and disfigurement. The problems resulted from accumulation of sediments on the surface, pollution and other environmental factors. Years of neglect and lack of maintenance as well as inappropriate interventions aggravated the condition of the stone.

The previous interventions included using cement to cover the stones or to close cracks and for pointing had clearly affected the stones resistance to absorption of water and salt. Additionally, the use of metal ties and bolts which became rusty contributed to cracking and flaking of the stone.



Phase (6): the main external northern facades- Dar Al Aytam Complex
For more details see project drawings p. 174

The façade was carefully restored during the project implementation without making any changes to the original features and details. Cleaning was carried out by the use of distilled water and soft brushes, water pads and diluted solutions.

The team of Italian restorers from the *Instituto Veneto peri Beni Culturali* were commissioned by OCJRP to carry out the restoration of the façade in coordination with OCJRP technical team. Both teams agreed to follow a conservative approach towards replacement of missing or damaged parts of the facades decorative elements. Thus, the state of the façade was preserved without affecting its authenticity.

Therefore, the special features of the portals "Muqarnasas" and decorations were consolidated using strengthening / bonding material to preserve the physical condition of these delicate elements after cleaning and restoration.

The restoration process was accompanied by a six month intensive training programme on the techniques of stone restoration and how these would be applied during the façade restoration to ensure the transfer of skill to practitioners in restoration in Jerusalem. A number of architects, engineers and contractors participated in the training.

As a result of the varied and intensive programme for implementation of the different phases of the project, which lasted six and a half years, the following was achieved:

a) Documentation of all buildings and spaces in Dar Al Aytam complex, according to international standards including preparation of all relevant drawings for the surveys and studies.
b) Restoration and rehabilitation of the whole complex based on the results of all the surveys and studies. The restoration followed international standards for architectural heritage preservation using appropriate techniques and materials.
c) Removing all cement, asbestos and concrete additions in the various parts of the complex and restoring the historic building components to their original forms.
d) Carful and delicate restoration of the external stone façade of Sitt Tunshuq Palace on Aqabat Al Tikkiyyeh with the participation of engineers and contractors in a six month training course on stone restoration.
e) Uncovering abandoned and closed historic parts in the complex and adapting them for new uses after carful restoration.
f) Rehabilitation of the infrastructure in the whole complex based on comprehensive surveys and design drawings to upgrade and modernise all services networks. Most of the networks were extended underground to avoid visual deformation and loss of the special architectural features of the complex.

6.4 Furniture and Equipment

As part of the plan to develop and modernise the two schools in the complex of Dar Al Aytam Al Islamiyya, a budget was allocated for provision of furniture and modern equipment for both schools.

This component included procurement of furniture for classrooms and offices, as well as for the kitchens and cafeteria in both schools. New computers, printers, and photocopiers were procured for the schools administration. A computer laboratory for students was established in each school.

6.5 Training

The complex development and preservation process offered the opportunity to benefit from the technical and practical experience obtained during the restoration of the architectural components and build the capacity of the OCJRP Team and the partners. Furthermore, a special training programme in restoration of stone in historic buildings was conducted for the benefit professionals and practitioners in the field of conservation. The course focused on stone used in the complex especially in the exceptionally designed and constructed Mamluk façade built in the 14th century.

In 2002, the *Instituto Veneto peri Beni Culturali* was commissioned to conduct an applied training course on "Stone Conservation in Historic Buildings" and carry out the restoration of the Mamluk façade of Sitt Tunshuq Palace in Aqabat Al Tikkiyya with its portals and special decorative features. The course included theoretical and practical training for architects, engineers and technicians to learn the required techniques for protecting and restoring stone elements in historic buildings according to international standards.

The theoretical training included lessons in history of architecture, restoration theories, chemical, physical and geological characteristics of the stone, causes and types of stone deterioration, documentation and preservation techniques and restoration methodology and application through using the appropriate documentation analysis, consolidation and appropriate material.

Tikkya Kitchen in the Industrial School- Dar Al Aytam Complex (after restoration)

Printing and book binding workshops in the industrial school- Dar Al Aytam Complex (after restoration)

The training included lectures, field visits, theoretical and practical presentation for design, installation and fixing methods of stone and marble.

After the experts and trainers from *InstitutoVeneto peri Beni Culturali* completed the theoretical and practical training course on stone restoration, the process was applied on the stone façade of Sitt Tunshuq Palace. This included documentation and analysis of its physical condition, removal of all cement and inappropriate material used in previous intervention, consolidation of loose stone tiles and decorative elements while using lime mortar for stone joints from a mixture similar in quality and colour to the original mortar.

The restoration and consolidation of the façade followed a conservative approach to protect the stone, consolidate and restore the various parts as it was found without replacing the missing parts or making any changes that could affect the facades authenticity. The restoration of the façade took 11 months to be completed.

Training course on stone restoration

7. Lessons Learnt

The Technical Office of OCJRP / Welfare Association spent over six years in implementing the project for development and restoration of Dar Al Aytam Al Islamiyya Complex. The team followed a comprehensive plan taking into consideration the need to protect and preserve the unique Mamluk and Ottoman architectural heritage of various components of the complex while also meeting the need to develop and modernise the complex and the schools.

This project and, often difficult, implementation process offered the OCJRP Team an unusual rich experience to build their technical and managerial capacity.

Implementation of the various and interrelated project components, intervention from partners, and from local and international experts contributed to the successful achievement of the required objectives. ***The lessons learnt from this valuable experience can be summarised as follows:***

- Importance of careful project planning and integration of technical and management needs to achieve successful implementation while ensuring the ability of users to continue with their activities.
- Need for close coordination and consultation with the beneficiaries to identify their needs and plan a practical programme to enable efficient implementation, avoid conflict and delays and provide flexibility.
- Need to identify technical priorities at an earlier stage of the project planning. In view of the exceptional historic and architectural value of the complex, it was important to start with documentation, careful surveys and studies, tests and physical inspections before restoration plans and project design started.
- Use of modern and sophisticated techniques and equipment in architectural surveys and documentations ensures accurate information and quick results.
- Need to carryout detailed historical analysis and architectural development study for a complex of such value to identify the various architectural styles, their characteristics and details to help in preparing the appropriate plans for intervention.
- Need to rely on partnerships and continued coordination between all parties.
- Use of available local, regional and international expertise, ensures better implementation and contributes to the transfer professional skills to local practitioners.
- Involvement of local and international institutions and individuals working in conservation, when possible, in the implementation process offers partners and associates the opportunity to improve their skills.
- Importance of starting consultation and coordination with all stakeholders at the start of the planning process for implementation of restoration and rehabilitation projects for the use of educational social and cultural institutions.
- Need to involve social experts and community activists in the implementation process for restoration projects for social, education and health institutions working in rough economic and social environments to communicate with beneficiaries and users and encourage their participation.
- Need to allocate special maintenance fund in the budget for large and complex projects used by institutions with limited human and financial resources. Such fund will ensure the sustainability of the implemented work.

Conclusion

Welfare Association decision to implement a comprehensive project for the restoration and rehabilitation of Dar Al Aytam Al Islamiyya complex was based on the exceptional historical, cultural and social value of this important and unusual compound.

The excellence of the original architectural design and construction of the unique historic building and monuments that shaped the complex were still evident in spite of years of neglect physical deterioration while the educational and social importance of the two schools for the Jerusalem community were compelling reasons to initiate a project to protect the Architectural Heritage of the complex while developing the schools and improving their services.

The Technical Office of OCJRP/Welfare Association carefully planned the various stages of the project implementation using its professional and technical experience and resources with the support of the local partners and stakeholders and with participation of local and international experts.

A project of the size and complexity of Dar Al Aytam Complex with its diverse functions, interconnected built areas and jointly used spaces created a major challenge for the team.

The need to carefully plan a programme with clear time frame was also a challenge to implement. Therefore, the team realized the need for close with partner consultation from the start. However, after two years since the project was launched, the political and security conditions in Palestine, especially in Jerusalem, deteriorated and movement and access of the technical team, consultants, contractors and workers were severely affected. The situation had a negative impact on the implementation programme although OCJRP team with the main partners continued to follow the originally agreed Action Plan with certain flexibility where and when needed.

The continued cooperation and support of local partners and stakeholders including contractors and consultants helped OCJRP team get over the obstacles and unpredictable circumstances during the project implementation. All parties recognized the value of the project and the need to complete it regardless of the difficulties.

It is evident that the knowledge and experience accumulated during the implementation of this large and significant project by OCJRP team with local partners and stakeholders, who participated in its execution, contributed to building the technical and managerial capacity of all parties involved.

After all the project's originally planned activities were completed, most of the required objectives were accomplished. The project succeeded in preserving the architectural heritage of the various components of Dar Al Aytam and restoring the original forms and magnificence of the buildings, special features and spaces. Meanwhile, the project contributed to upgrading and modernizing the services in the complex and developing the schools facilities and functions. Thus the project achieved the balance between the needed preservation and development of this valuable historic complex.
After over 12 years since the project implementation started and seven years since the completion of the last restoration phase, the positive results of this intervention are still evident. While, there is need for maintenance and some repairs in certain parts of the complex after many years and intensive use, the original shapes and features of this exceptional historic development have been restored and their functions revitalized.

Project Photos

Rehabilitation of the Infrastructure

Phase (1): Rehabilitation and Restoration of Buildings, Open Spaces and Open Areas (Workshops & offices at the Industrial School)

Before and during restoration





After restoration







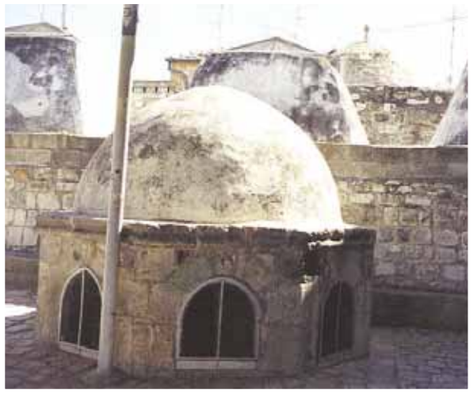
Phase (2): Rehabilitation and Restoration of Buildings, Classrooms and Open Areas (Academic School)

Before restoration

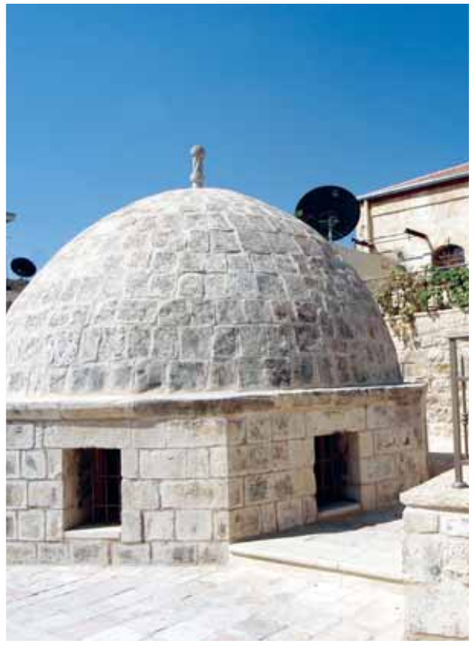
After restoration

Phase (3): Rehabilitation and Restoration of Buildings, Open Areas (Academic School)

Before restoration



After restoration



Phase (4): Rehabilitation and Restoration of the Dormitory, Adjacent Rooms and Open Spaces (Industrial School)

Before and during restoration

After restoration

Phase (5): Rehabilitation and restoration of Carpentry, Kitchen and Adjacent Rooms (Industrial School)

Before restoration

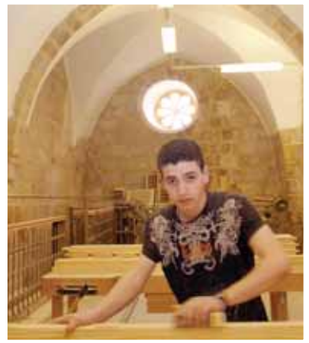






After restoration




Phase (6): Restoration of Mamluk Stone Façade of Dar al-Sitt Tunshuq in the Complex

Before restoration

After restoration

Phase (6): Restoration of Mamluk Stone Façade of Dar al-Sitt Tunshuq in the Complex

Before restoration

After restoration

Phase (6): Restoration of Mamluk Stone Façade of Dar al-Sitt Tunshuq in the Complex

Before restoration



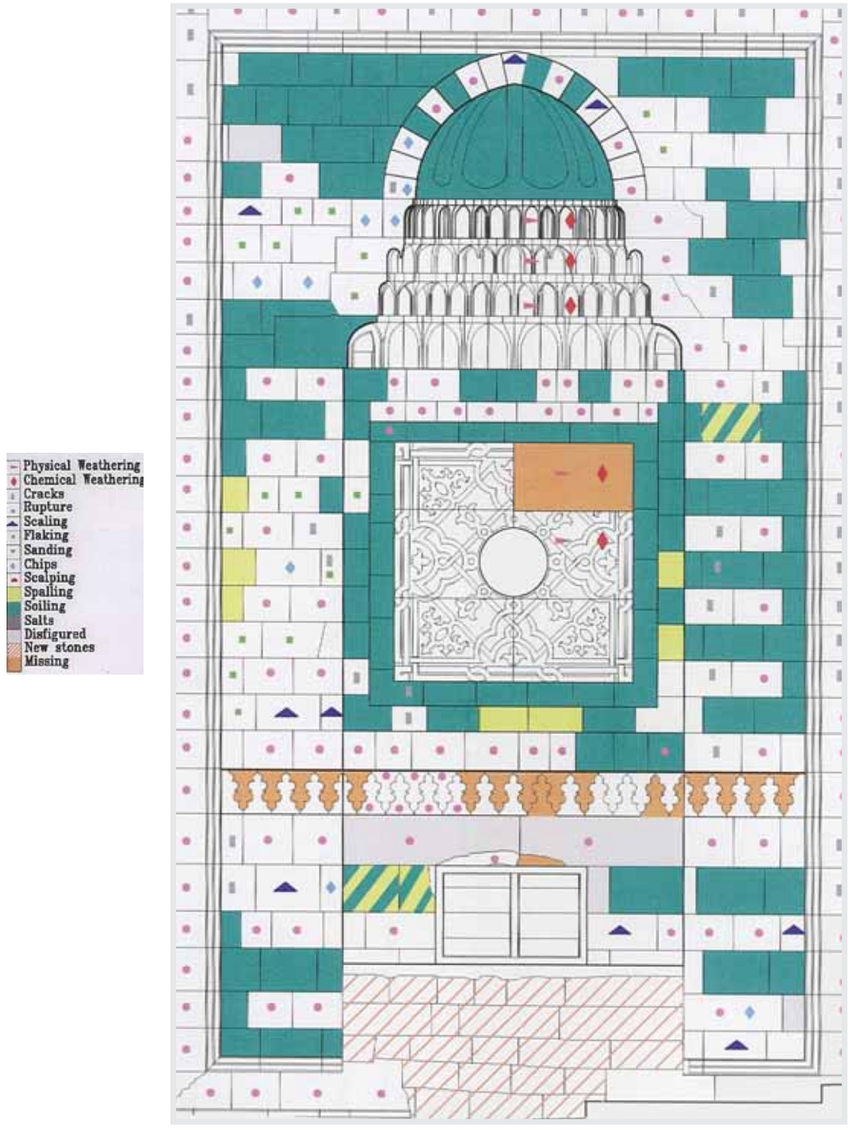



After restoration

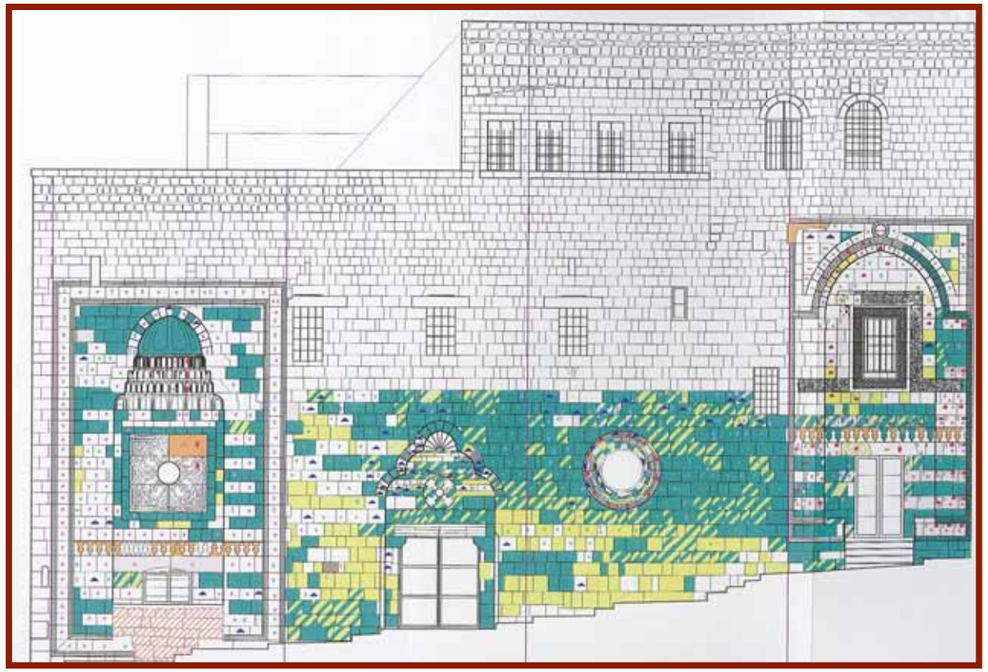


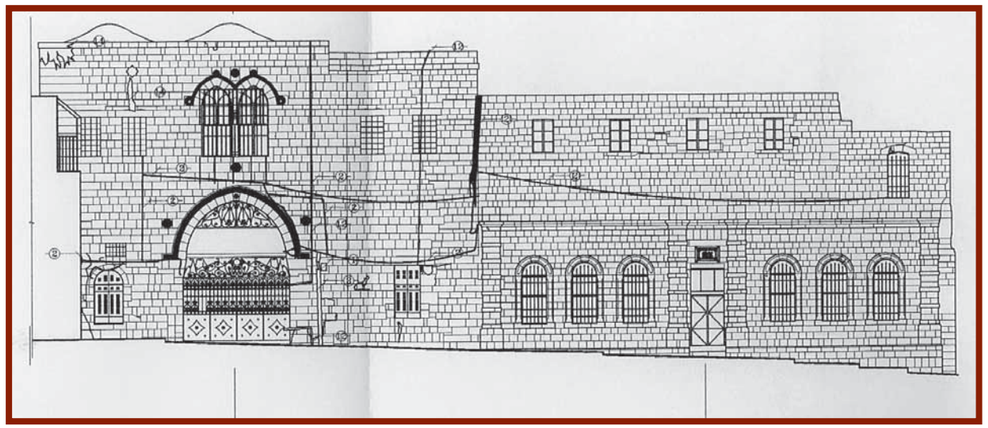

Project Drawings

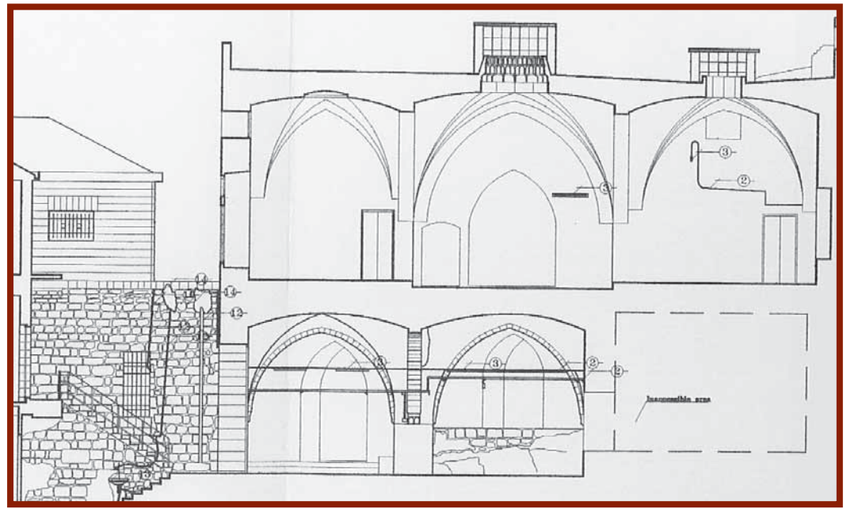
Drawings of Architectural documentation studies ,physical and structural surveys



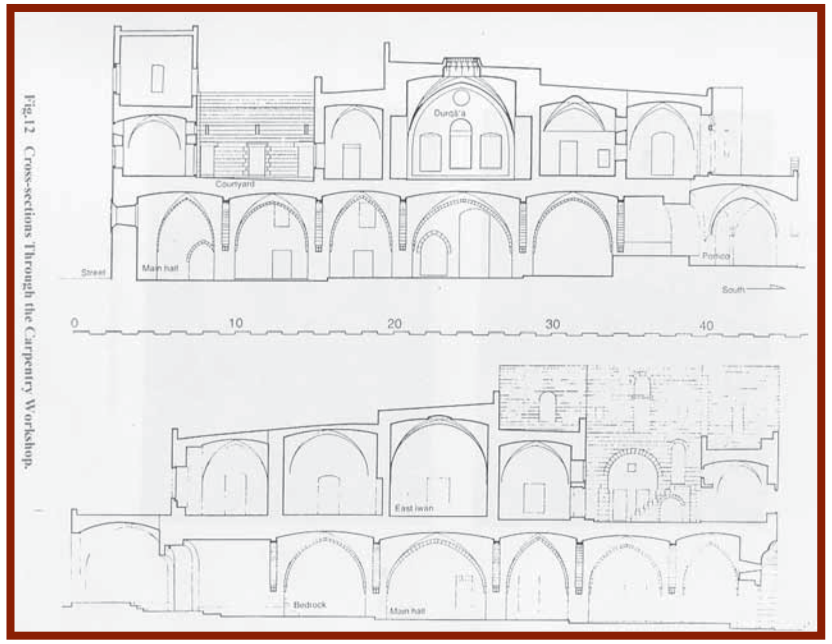
Drawings of Architectural documentation studies ,physical and structural surveys







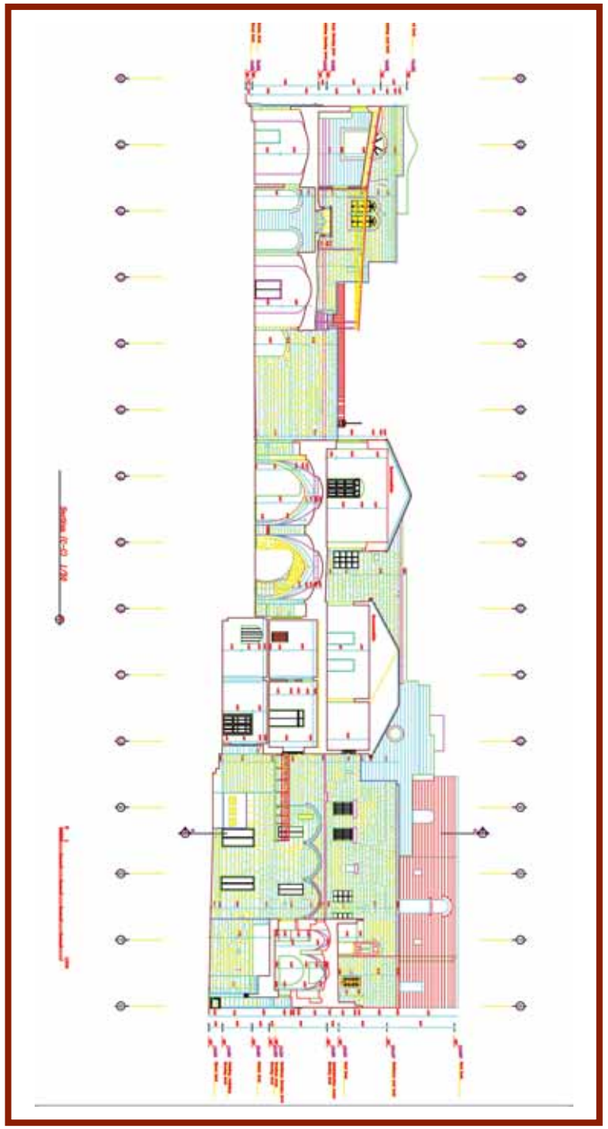
Drawings of Architectural documentation studies ,physical and structural surveys



Drawings of Architectural documentation studies ,physical and structural surveys

Fig.11 Plan of the Upper Floor and the Mezzanine for the Carpentry Workshop.

he Lower Floor for the Carpentry Workshop.



Project Drawings: Phase (1)

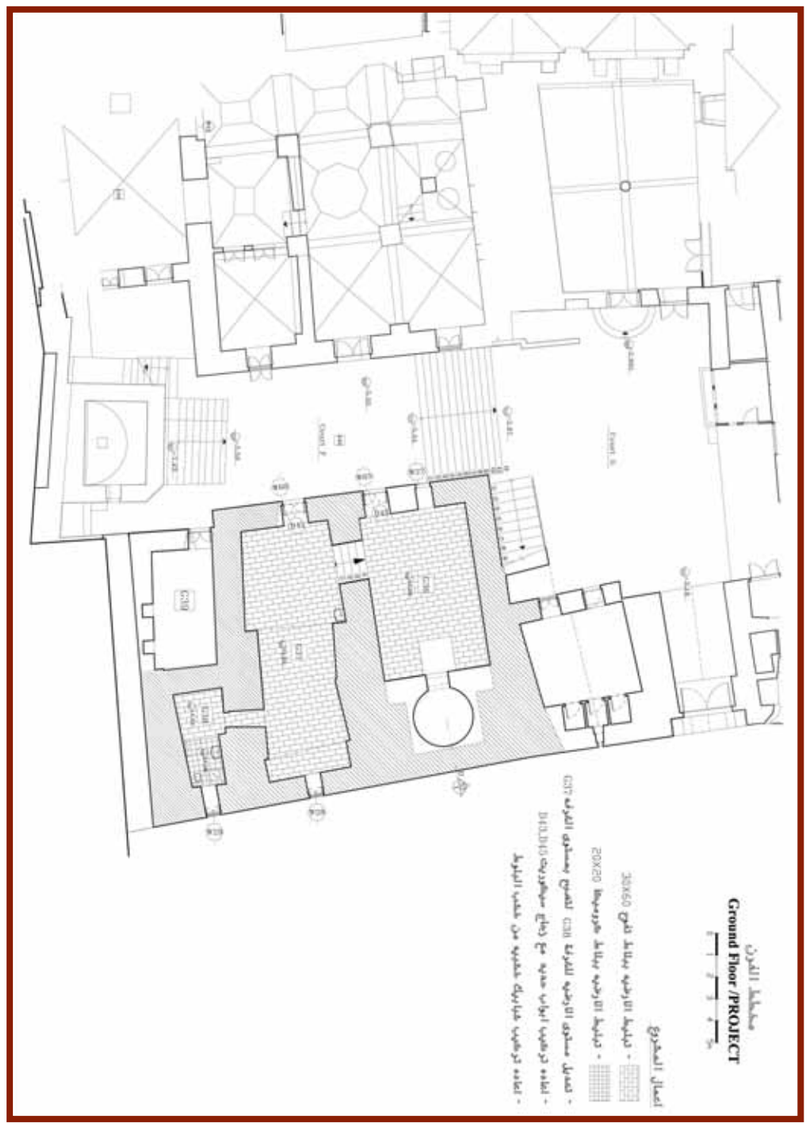
Phase (1): The roof of the industrial school in Dar Al Aytam Complex

Phase (1): The ground floor of the industrial school in Dar Al Aytam Complex

Project Drawings: Phase (2)

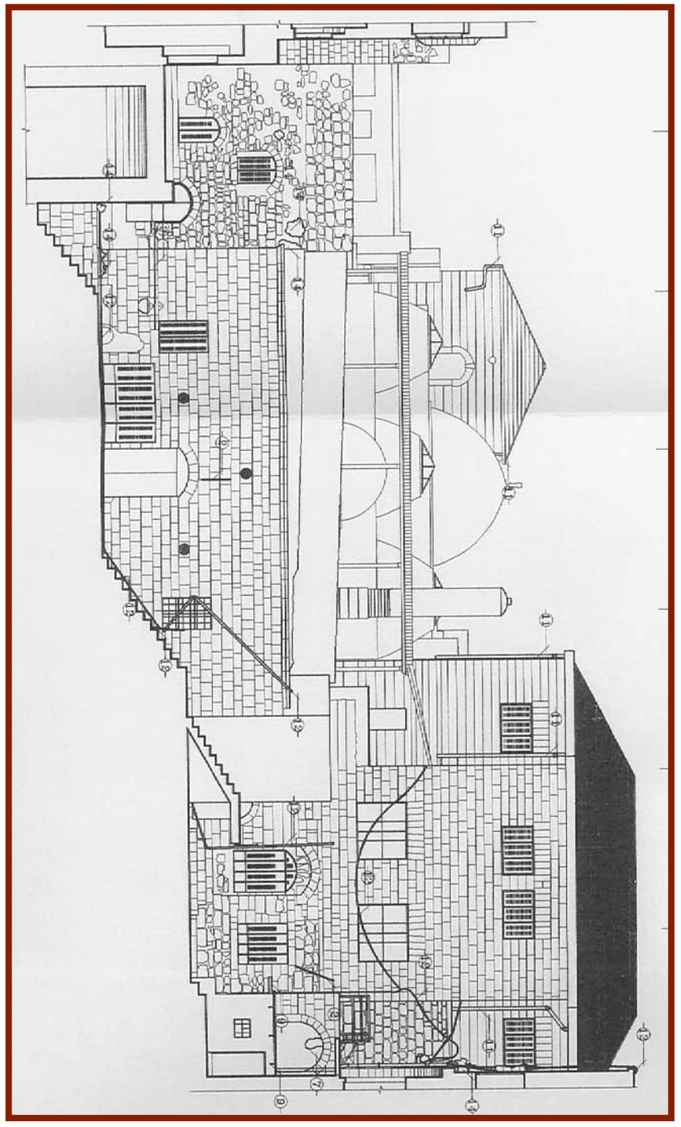
Phase (2): The first floor of the Academic School- Dar Al Aytam Complex

Phase (2): The Ground floor of the Bakery building



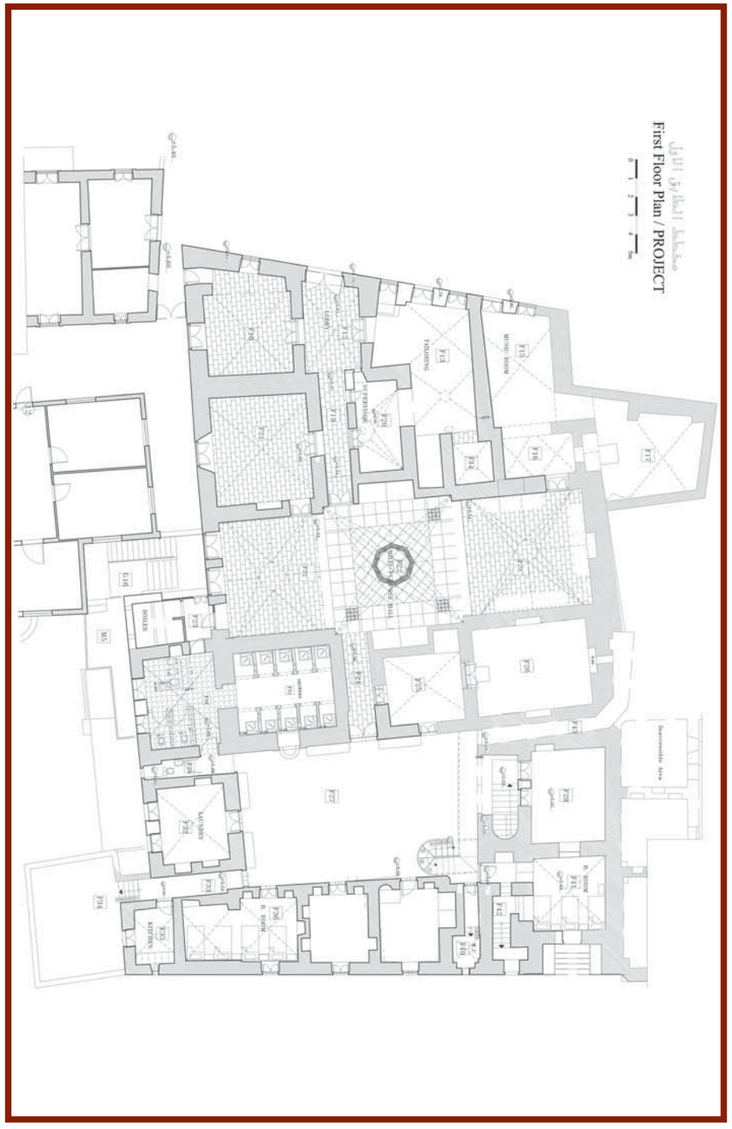
Project Drawings: Phase (3)

Phase (3): the internal northern façade- Dar Al Aytam Complex



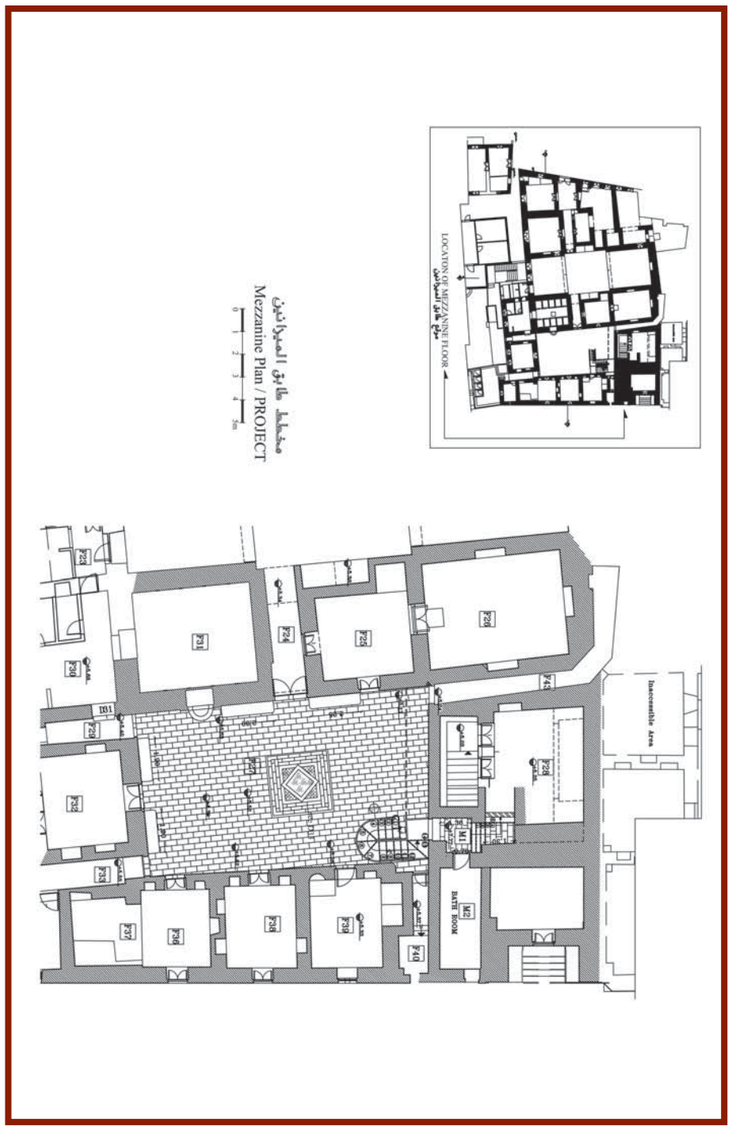
Project Drawings: Phase (4)

Phase (4): First floor plan of the dormitory at the industrial school- Dar Al Aytam Complex



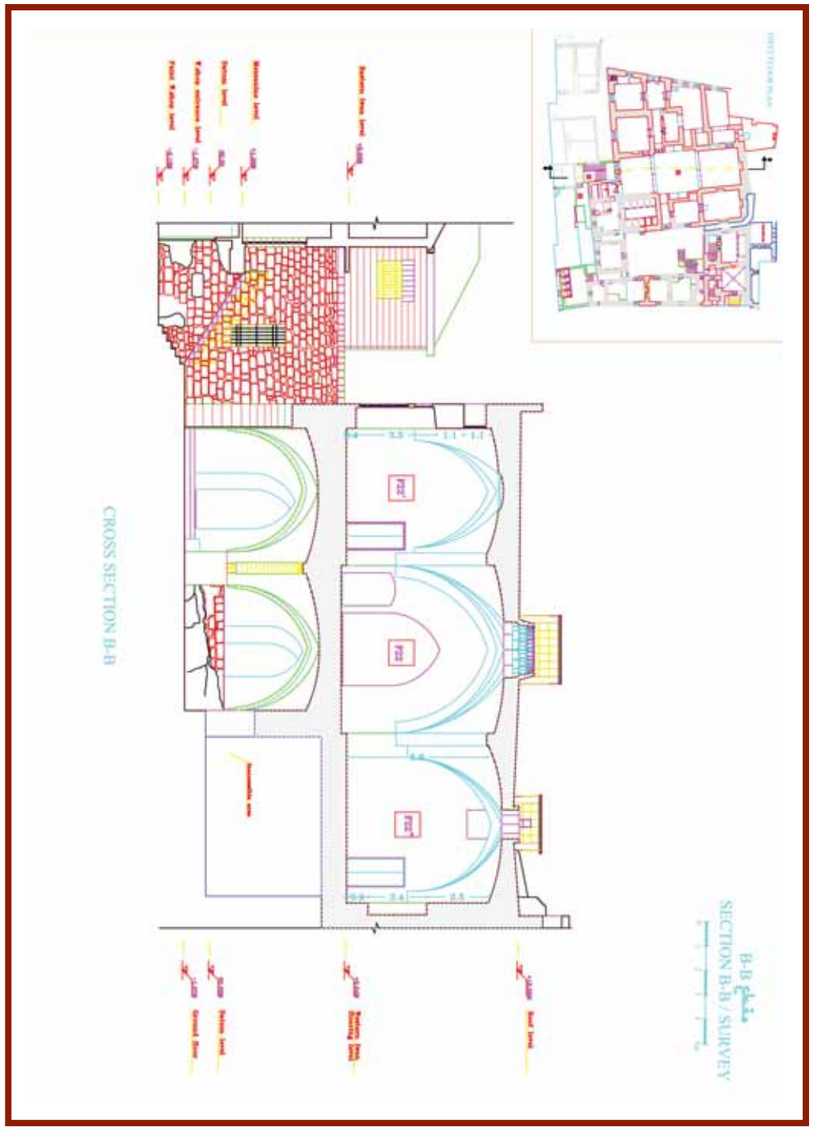
Project Drawings: Phase (4)

Phase (4): The first floor plan



Phase (4 ,5): Sections of the Carpentry and the Dormitory

Phase (4 ,5): Sections of the Carpentry and the Dormitory



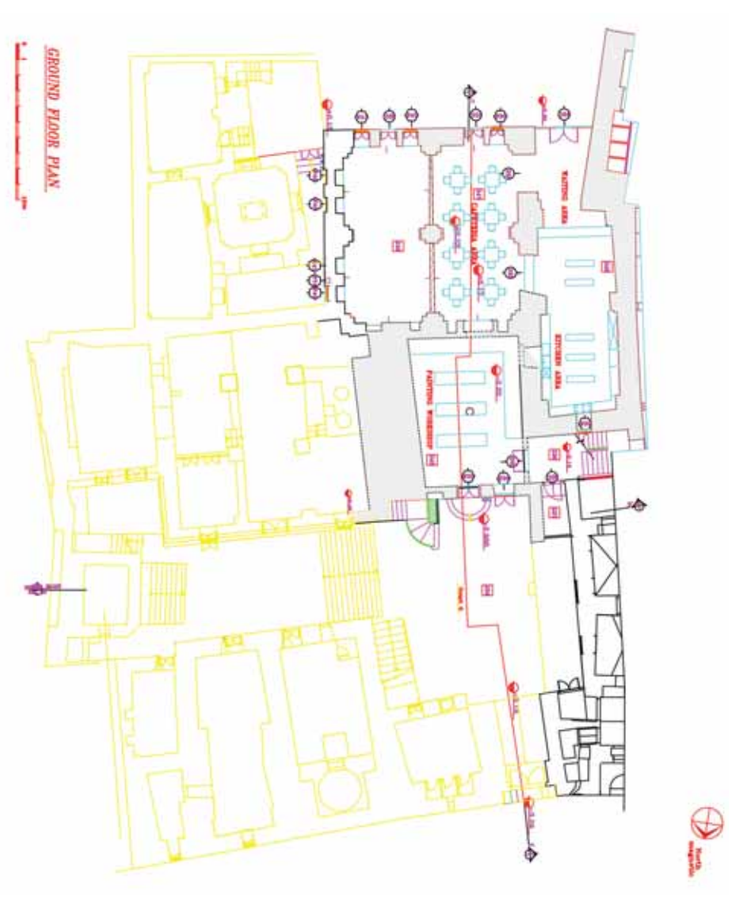
Project Drawings: Phase (5)

Phase (5):Ground floor plan for the Carpentry at the industrial school- Dar Al Aytam Complex

Phase (5):Mezzanine floor plan for the Carpentry at the Industrial School- Dar Al Aytam Complex

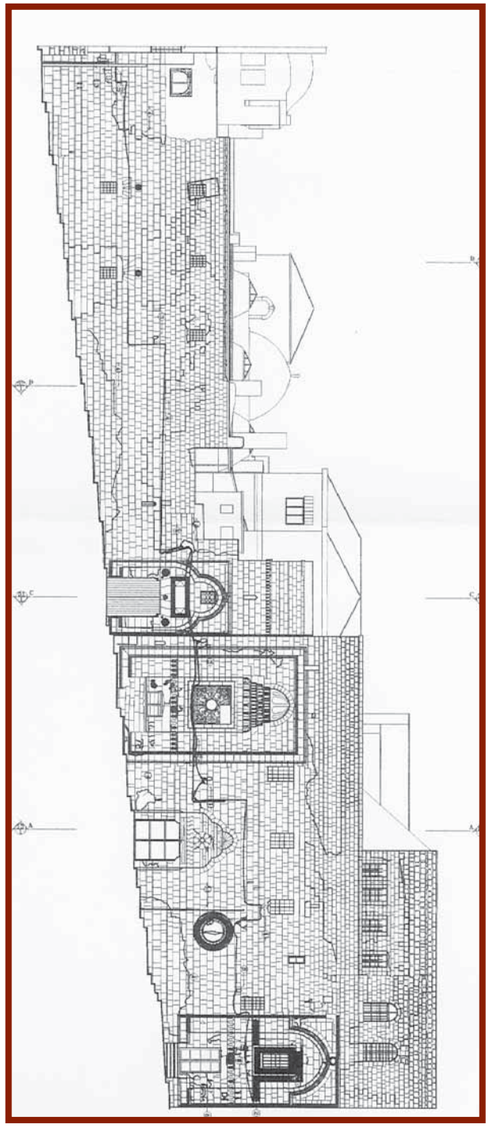
Project Drawings: Phase (5)

Phase (5): Ground floor plan for the Cafeteria – Dar Al Aytam Complex

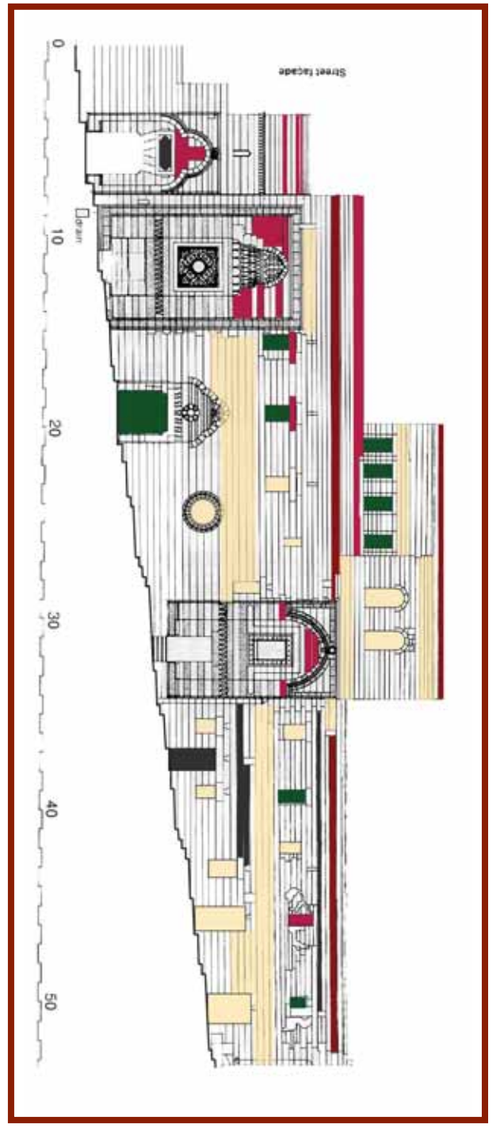


Project Drawings: Phase (6)

Phase (6): the main external northern facades- Dar Al Aytam Complex



Phase (6): the main external northern facades- Dar Al Aytam Complex



List of technical and idiomatic words

Ablaq
The courses of colored stones in construction, especially in the facades, and arches and lintels.

Arabesque
Arab art of decoration that spread in the Islamic periods with geometric or floral motifs .

Architectural complex
A set of buildings close to one another forming a big compound serving several purposes.

Arwiqa
Plural of *riwaq*, which is a series of bays open on three sides, covered with a cross vault based on a series of arches based from on one hand on pillars and on a wall on the other hand.

'Aqaba
A short road.

Baktashiyya
Sufi order that spread in eastern Islamic world.

Balata
Square area not surrounded by walls, with cross roof which is part of a *riwaq* often found inside mosques.

Billet moulding
Small and short stone either rectangular or square in shape and forming a frame.

Chamfered
Method to handle the edges and ends for decoration and to reduce the friction at entrances.

Chevron Decoration
Pointed ornamental decoration like the form of a sharp saw or Knight rank .

Dirka
Vestibule after the entrance.

Elevated entrance
An entrance higher than the level of the ground adjacent to it, reached by stairs.

Hadra(Impost)
Stone pillow which supports an arch often with decoration.

Iron grille
Metal ornament fixed in the jambs of the windows for protection

Iwan
A square or rectangular area closed on three sides, with the fourth side open by an arch.

Jift
See *mimi* decoration.

Joggled Voussoirs
Interlocked group of stacked stones nested to form an arch.

Khalawi
Pl. *khalwa,* a room with a few small windows and sometimes without windows where the Sufi mystic retires alone.

Khan(caravanserai)
A building dedicated to the descent of traders and their goods and beasts, inside and outside the city.

Lintel
A stone mass or several stones above the windows and doors.

Maktab
A location to teach the principles of reading and writing and the quran to children

Masjid
(Mosque) is a place for Muslim prayers and rituals.

Mastaba (bench)
A stone structure higher than what is around and used for sitting in front of shops and schools.

Medallion stone
Decorative stone ornament with a roundel shape that has geometric or floral motifs and sometimes commonly used in carved stone, copper, and called boss, disks, , and decorative geometric shapes and floral designs.

Mihrab
Mostly concave niche, refers to the direction of the Qibla where Mecca is located.

Mimi decoration
Extended decoration prominent and carved in stone in the form of frame consisting of two parallel lines intertwined at regular intervals.

Mujawer
someone who left his hometown and settled in one of the three Islamic holy cities (Mecca, Medina, and Jerusalem). The poor resident is that who lives in a *Ribat* or Zawiya.

Muqarnasat
(stalactite) architectural ornament of pieces of stone or wood in the form of niches or small arches.

Ribat
Building erected later within cities to accommodate the Sufis and the poor and also to visitors in the city of Jerusalem.

Sabil
A fountain that provides free water.

Saraiya
Palace or the residence of the Ottoman governor.

Stalactites (*dallaiya*)
Ornament in Islamic architectural has several forms and styles of the most famous hanging pieces of frozen ice or stone hanging from cave ceilings.

Stalactites (spear)
Architectural ornament taking the form of the spear made up of more simple Stalactites.

Tat'eem (incrustation)
means decorating or coating the surface with a more precious substance to less valuable material.

Ta'sheeq (goggled)
Insert and install the stones of an arch or lintel intermixed together

Turba
A building that contains graves often surmounted by a dome.

Waqfiyya
Endowment document registered or issued by the Islamic Religious Court describing the objectives, conditions, and motives of a specific Waqf

Waqf
The allocation of the proceeds of donations in kind or real estate to serve specific objectives of a charity under certain terms.

The list of sources and references

Arabic references

- Husseini, 1982, Muhammad As'ad al-Imam, ''al-*manhal al-safi fi al-waqf wa ahkamia*, Jerusalem.1982
- Dabbagh 1991, Mustafa Murad, *biladouna filistine*, Part 9, Section II, 1991 (Dar al-Huda)
- al-Arif 1961, Aref, al-mufassal fi tarikh al-quds, Jerusalem .1961
- al-Asali, 1981, Kamel Jamil, *ma'ahed al-'lim fi bayt al-maqdes*, Amman, 1981 .
- al-Asali, 1982, Kamel Jamil, *min atharuna fi bayt al-maqdes*, Amman, 1982
- al-Asali, 1983, Kamel Jamil, *watha'q maqdisiyya*, Section 1, Amman 1983
- al-Asali, 1989, Kamel Jamil, *watha'q maqdisiyya*, Section 3, Amman 1983
- al-Asali1992, Kamel Jamil, *bayt al-maqdes fi kutub al-rihlat 'ind al-arab wa al-muslimin*, Amman, 1989
- Ghosheh 2000, Muhammad Hashim, "the *ribat wa maktab* Bairam Jawish", Journal of Palestinian Archaeology, No. 1, January 2000, p. 60-62.
- Salhiyya 2010, Muhammad Isa, "*al-'uthmaniyoun wa madinat al-quds, al-hifaz 'la al-dawer al-thaqafi wa al-hadari*, ," in studies in the cultural heritage of the city of Jerusalem, Zaytuna Center 161 -216 Beirut, 2010.
- Mujir al-Din, 1973, Abdul Rahman bin Mohammed al-Hanbali, *al-uns al-jalil fi tarikh al-quds wa al-khalil*,, Amman, two volumes, 1973
- Lami'i, 1999, Saleh, the *Dar al-Itam al-Islamiyya*, *al-tuthiq al-mi'mari*, Center for the Revival of Heritage, the files of the technical bureau of the Welfare Association, 1999
- Salameh 1996, Khader, "*sijllat al-mahkama al-shar'iyya fi al-quds wa watha'quha wa dawer kamel al-Aslai*," in *''Kamel al-Asali al-'alama al-maqdisi wa qadiyyat ak-quds,* , 1996 Pasia.
- Raef Najm and others, 1983, *kunoz al-quds*,, Amman, 1983

Foreign References

- Bieberstein, K. and Bloedhorn,1994 H., Jerusalem, Grundzuge der Baugeschichte vom Chalkolkithkum bis zur Fruhzeit der osmanischen Herrrschaft.3 Band, Wiesbaden 1994.
- Burgoyne 1987, M. H., Mamluk Jerusalem. an Architectural Study, Buckhurst Hill, 1987.
- Cengiz Orhonlu1978, "Khasseki", EI2, vol.4, p. 1100.
- Cohen, A.1990, " The Projects of Sulayman the Magnificent in Jerusalem", Cathedra, 57, 1990, pp. 31-51 (Hebrew).1Heyd, U.960, Ottoman Documents on Palestine (1552-1615), Oxford 1960.
- Meinecke, M.,1988 "Die Erneurung von al-Quds/Jerusalem durch Osmanensultan Sulaiman Qanuni", in ed. Sh. Sha'th, Studies in the History and Archaeology of Palestine, 3 vol.(Proceedings of the first International Symposium on Palestine Antiquities), Aleppo, 1988, vol. III, pp. 257-283, figs.1-23, pp.338-360.
- Meinecke, M.1992, Die Mamlukische Architektur In Agypten und Syrien (648/1250 bis 923-1517), Teil I, Genese, Entwicklung, Und Auswirkungen Der Mamlukischen Architektur. Teil II, Chronologische List Der Mamlukischen Baumassnahmen. Abhandlungen des Deutschen Archaologischen Instituts Kairo, 1992.
- Myres, D.1992, " al-Imara al-Amira: The Charitable Foundation of Khassaki Sultan(959/1552)" , in Ottoman Jerusalem, The Living City 1517-1917, edited by Sylvia Auld and Robert Hillenbrand, part I pp.539-582.
- Natsheh, Y. S.1997,Sixteenth-Century Ottoman Public Buildings in Jerusalem. A study based on the standing monuments and the evidence of the Jerusalem *sijill*. Ph.D. dissertation, University of London.
- Natsheh, Y. S.1999, "My Memories of Khassaki Sultan or 'The Flourishing Edifice'", Jerusalem Quarterly File, 7 Winter 1999, pp. 29-35.
- Natsheh Y. S. 2000, "Architectural Survey. Catalogue of Buildings", *in* Ottoman Jerusalem, The Living City 1517-1917, edited by Sylvia Auld and Robert Hillenbrand, part II, pp. 657-1085.
- Peirce, L. p.1992, The Imperial Harem. Women and Sovereignty in the Ottoman Empire, London, 1992
- Pierotti, E.1864, Jerusalem Explored being a Description of the Ancient and Modern City with Numerous Illustrations Consisting of Views, Ground Plans, and sections, London 1864.
- Rogers, J. M. and Ward, R. M.1988, Süleyman the Magnificent, London, 1988.Skilliter, S. A.1986, "Khurrem", EI2, 5,1986, pp. 66-67.
- Stephan, St. H.1944, "An Endowment Deed of Khasseki Sultan, dated the 24th May 1552", QDAP, 10, 1944, pp.170-192.
- Van-Berchem, M.1920-27, Materiaux pour un corpus Inscriptionum Arabicarum, 2nd part, syrie du Sud. Jerusalem, 3 vols., (Memoires de l'Institut Francaise d'Archeologie du Caire) vols.43-45, Cairo, 1920-27.
- Jerusalem Ville vol.43, 1922-23 [part one 1922, part two 1923].
- Walls, A. G. and Abul-Hajj, A.1980, Arabic Inscription in Jerusalem, A hand List and

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