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Dr. Ahmed Mahmoud Amin



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Introduction

Egypt abounds in a great and unique heritage, which is rich and diverse, reflecting the various civilizations and the history it has witnessed for thousands of years. This human heritage is the most wonderful thing left to us by our ancestors over time. Those who visit the monuments of Egypt, from various epochs, locations and with their diverse architecture and embellishments, can only Praise Allah! Praise be to Allah, the Eternal! Praise be to Allah who taught Man what he did not know! Praise be to Allah when we think of the endless numbers of humans who passed by these monuments before us! Who constructed them? How? Why? There are so many questions that take us in the end back to say Praise be to Allah.

This architectural and artistic heritage represents a visual history of Egyptian civilization across various epochs of prosperity and power, as well as periods of weakness, with all the moments in between. Seeing this physical heritage with one's own eyes has a greater impact than reading the books written by historians or viewing facsimiles of manuscripts.

This book is a survey of one such human architectural heritage, namely the House of Prince Ibrahim Katkhuda al-Sinnari, located only a few steps away from the Mosque of Sayeda Zeinab. In addition to the architectural and artistic value of the monument, it embodies the history of Cairo during a pivotal era of Egypt's history, namely the end of the Ottoman Era and the advent of the Egyptian Campaign. The translation of the house-owner depicts the system of rule during that historical period, to which he himself was an essential instrument.

The Sinnari House represents one of the finest examples of residential buildings, be they houses or palaces owned by princes and statesmen in the Ottoman Era. The owner and founder endowed the house by force of a

legitimate deed registered with the Sharia Court, and which is now kept in the archives of the Egyptian Ministry of Religious Endowments. The deed is a treasure of information, which is useful in various fields, such as history, archaeology, documents, language, philology, jurisprudence, Sharia and endowments. The meticulous architectural description of the house in the document is amazing, for it almost coincides with the current state of the house.

In addition to its great architectural and artistic value, the house has a special historical significance, in particular in terms of its connection with Napoleon's Egyptian Campaign (1798–1801). A number of the members of the scientific and cultural committee, mostly painters and engineers, lodged in the house.

The history and the architecture of al-Sinnari House captivate all those who are interested, whetting their appetite to find out more. The best means to explore this wonderful monument is to visit it, and learn about the details of its history and architecture. This is the purpose of the book in hand. I, thus, invite you to visit al-Sinnari House—and the other fine monuments of Egypt—in reality; for to see for oneself is a totally different experience.

Dr. Ahmed Amin

22 Shaaban 1433 AH / 12 July 2012.

The Endower and the Endowment Document

(Biography of Ibrahim Katkhuda al-Sinnari)

Ibrahim Katkhuda¹ al-Sinnari² is the owner of the House endowed to him by force of a legitimate deed, registered at Court and preserved in the archives of the Ministry of Religious Endowments. It is dated 18 Ramadan 1209 AH/1795 CE³.

The biography of the owner of the House, Emir⁴ Ibrahim Katkhuda al-Sinnari, illustrates the historical context of Egypt at the end of the Ottoman Era and on the eve of Napoleon's Egyptian Campaign. It is rich in fascinating details; thus the legal document reports that the house owner is "The pride of his peers, and the greatest of great landowners, of high standing among the stately, the regally served Emir Ibrahim Katkhuda, known for his fine ancestry al-Sinnari, the Katkhuda, pride of great princes, of high standing among the stately, the wealthy, the venerated, the glorious, the respected, the generous, the possessor of grand honors, his excellence the Emir of the Brigade⁵, the Sultanic Sherif and the fine Khaqani man of renown, his highness Emir Murad⁶ Bek Mohamed Amir Al Haj⁷, the former Egyptian Sherif, may God grant him long life and glory, and ennoble the endower referred to above, Amen."⁸

These many pompous titles reflect a time when Prince Ibrahim Katkhuda al-Sinnari enjoyed power and authority. The early beginnings of his appearance in Egypt were, according to

al-Jabarti's report, in Mansoura as a doorman. al-Jabarti states that, Ibrahim al-Sinnari⁹ is originally from the Moors of Dongola in Sudan. He came to Egypt and settled in Mansoura, where he worked as a doorman.

He learnt to read and write, and studied astrology and witchcraft. He soon became famous as a fortune-teller, who prepared amulets and spells. He showed great intelligence and brilliance, which soon drew the attention of Mamelouk princes to him. Thus he soon entered the service of Mustafa Bek al-Kabir, and in a short period of time became his confidant. Having learnt Turkish, he was running his affairs and his correspondence.

Following his personal interests, he shifted from one Mamelouk's service to the other, until he managed to win over Prince Murad Bek al-Kabir. After he had ordered the latter to be killed, he pardoned him, and made him his closest confidant, who accompanied him on his travels¹⁰.

Ibrahim al-Sinnari became the Katkhuda of Prince Murad Bek al-Kabir, then his deputy, and soon became one of the greatest landowners, who was in possession of commitment, a revenue, Mamelouks, concubines and servants. He became a man of high standing who was an active participant in issues, great missions,

and serious affairs. He now had an entourage, khushdashis, envoys and followers as intermediaries between the people and himself¹¹.

During this phase of his life he bought the house, which is the subject of this book, and endowed it—as will be shown below—in accordance with the splendid titles mentioned in the endowment document mentioned above.

The end of Prince Ibrahim al-Sinnari's life was tragic, just like the lives of most Mamelouk princes at the time. al-Jabarti reports that Hussein Pasha al-Kuptan summoned Emir Ibrahim al-Sinnari with a group of princes and was killed by Hussein Pacha among the princes killed on 17 Jumadi Akher 1216 AH/25 October 1801 CE. He was buried in Alexandria¹². In fact, the historical events of this period reflect the corruption¹³ of the administrative system as well as the plundering and pilfering of the country's resources and the people's livelihoods.

The Endowment Document

Document* number 936 (picture 1) is preserved in the archives of the Egyptian Ministry of Religious Endowments, and is dated 18 Ramadan 1209 AH/8 April 1795 CE. It is in the form of a writing code for the disposal by Ibrahim Katkhuda al-Sinnari. The type of disposal is an endowment, and the type of endowment is a house and the land it is built upon. The document consists of 49 pages, written in black China ink within a rectangular frame of red China ink consisting of three parallel lines. Each page has 11 lines, and each line, in average, contains nine words, written in a clear legible hand (picture 2). At the right bottom of the page there is the connecting word with which the following page begins. There is a round stamp (picture 1), bearing a 3-line inscription: "Sons . Benda . Mohamed Ahmed".






Picture 1: The first page of the al-Sinnari Document 936 (Endowments)



Picture 2: Page 22 of the al-Sinnari Document 936 (Endowments)



Picture 3: The last page of the al-Sinnari Document 936 (Endowments)



The document concludes on the last page with five signatures in beautifully ornamented Tughra¹⁴ script (picture 3). On the cover of the document is written:

“Indicated in the fire records under number 244, that the endowment specified in this document has been transferred to the Mosque and Shrine of Al Sayeda Zeinab as of the month of Ragab 1279 AH/December 1862, upon the demise of the Honored Lady Zeinab freed by the Honored Lady Zulaikha, who died in the month of Ragab 1279 AH.”

She is the last who was entitled to the Endowment as is made clear in and in accordance with the text of the Document. This Document endows the House to the lineage of the Endower, his offspring and his descendents. Upon the lineage dying out, the Endowment is transferred then to the lineage of the redeemers, both males and females, be they white or black or Habbush, equally. After each one of them to their children, on conditions that they be redeemers of each other as stipulated in the document.

The Body Endowed to, and the Aspects of Expenditure according to the Document

The document states that in the case of the extinction of the Endower’s lineage, as well as the redeemers and their lineage and offspring, “If all should become extinct and they all disappear from the surface of the earth”¹⁵, it becomes an endowment, to be leased, and the revenue spent on a number of things according to the following

order. First, the necessities to continue the rituals of worship in the Mosque of Al Sayeda Zeinab, which is located only a few meters from the house: “The needs, tasks and rituals of the Mosque and Shrine of Al Sayeda Zeinab the Virtuous, daughter of Maulana Imam Ali Ibn Abi Talib, May Allah bless him, Amen. The shrine and mosque are located in Al Anwar, on the line of the Seven Barrages in Egypt. The revenue is to be spent on conducting Islamic rituals and worship there”.¹⁶

If expenditure for this becomes impossible, the revenue from leasing the house is to be spent on the poor and desolate Muslims¹⁷, widows and dropouts wherever they may be, in presence or absence, when possible or impossible, for ever and ever, to the end of time, until God inherits the earth and all that be found upon it. The Endower stated a number of relevant stipulations necessary for the aspects of expending the revenue of the House, which are¹⁸:

“Priority is to be given to expend from this revenue for the preservation and maintenance of this House, to sustain its existence and ensure its usefulness, even if all its produce be spent for that.

A 100 halves and 80 halves of silver¹⁹ spent as follows: a 100 halves were to be spent on 5 reciters of the Holy Quran, who would read daily 5 parts of the Holy Quran in the House (twenty for each recite), 5 halves for the preacher, 30 halves for a reciter reciting the Sura of Fath, and 45 halves for a reciter reciting the Holy Quran by the grave of the endower and his children. In

addition, there is the price for fresh wicker and basil to be placed on the mentioned graves on Fridays and feast days.

The History of the House

The House represents two main phases, the first of which extends to the time of compiling the Document, in 1209 AH/1795. The second phase represents the current state of the House, including the works undertaken during the Egyptian Campaign or by the people living in the house, as well as the works undertaken by the Commission for the Conservation of Arab Antiquities, down to the present time.

The first phase: consists of three consecutive periods, represented by the purchase of the plots of land comprising the House, the construction and renovation of some architectural parts, and the removal, renewal and integration of other architectural parts of the House, until it attained its final shape at the time of compiling the Document.

The document states that the total area of the House represents four plots of land bought consecutively which were then merged to comprise the House. The Document explains the architecture of the House, elaborating that the buildings are constructed on the two first-mentioned plots of land, while the two later plots remained open areas (a garden) annexed to the north eastern side of the House.

The first plot of land

It is the core of the House, where it is rather easy to separate the architecture of this part in the form of a complete autonomous house

(Figure 1). Prince Ibrahim al-Sinnari bought this plot by force of a legitimate deed on 22 Zul Qiada 1198 AH/7 October 1784. It is the most expensive of the four plots comprising the House, as its value amounted to 3100 Egyptian riyals. Much was spent on the architecture and reconstruction until it attained its present shape at a cost of 3688 Egyptian riyals. A further sum of 1398 Egyptian riyals was spent to complete and accomplish its architecture, by which the expenses of this part of the House, including the price of the land, amounted to 8186 Egyptian riyals.

The second plot of land

It was bought by the Endower by force of a legitimate deed, dated 1 Moharram 1206 AH/1791. It is perpendicular to the first plot on the southern side forming an L shape (Figure 1). It was bought for the price of 800 Egyptian riyals, which is a small amount of money when compared to the first plot. The buildings, including the cement, equipment, raw material, wages and other expenses, cost 6977 riyals, which exceeds the expenses of the buildings on the first plot. This may be attributable to the fact that the Endower had demolished the old buildings on this plot of land and then rebuilt them anew to be amalgamated with the architecture of the first plot. The construction became one entity in its present shape, where the original construction of the House consisted of these two plots together.

Plots three and four

They had been owned by the woman redeemed by the Endower. It then fell to the ownership of the Endower upon her death in

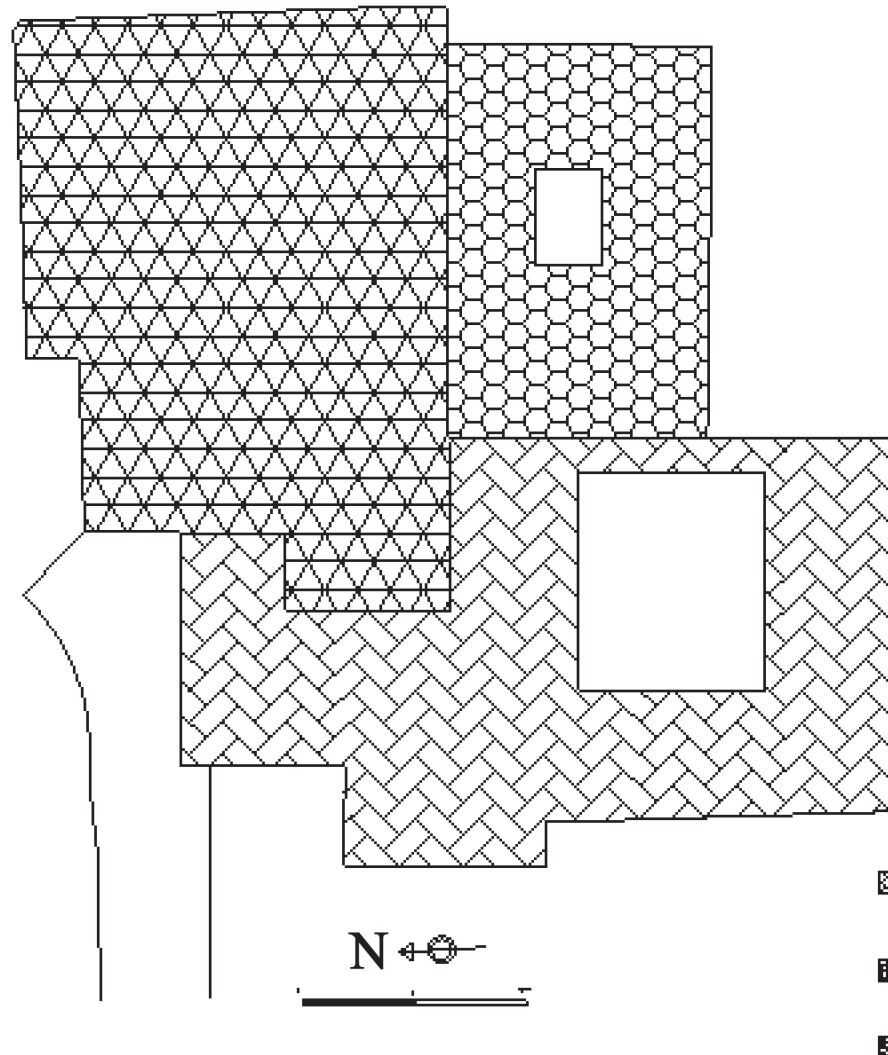


Figure (1) al-Sinnari House. A graph representing the plots of land comprising the House (drawn by the researcher)

Table (1) The plots of land constituting the total area of the House, their prices, the costs of construction, the cement and the wages in Egyptian riyals according to the Document

The Cost	Plot 1	Plot 2	Plot 3	Plot 4	The full House
Price of land	3100	800	965	650	5515
Cost of construction	3688	6977	-	-	12063
Mortar and wages	1398		-	-	
Total	8186	7777	965	650	17578

1206 AH/1791, having been endowed to his redeemed by force of two legitimate deeds dated 11 Shaaban and 15 Zul Qiada, both in the year 1203 AH/1789. They cost 965 Egyptian riyals in exchange for due payments related to them **(Figure 1)**.

The fourth plot

It was bought by the Endower by force of a legitimate deed dated 16 Zul Qiada 1208 AH/1794, for 650 Egyptian riyals.

It is obvious that the Endower did not undertake any construction or renovation works on the third and fourth plots, for the Document

mentions only two buildings, stating their costs, namely those of the first and second plots. The third and fourth plots represent a vacant area annexed to the House on its north eastern front. Architectural spaces were later constructed there for the use of the artists of the Egyptian Campaign, which were used as ateliers and storerooms.

In accordance with the above, it is possible to chronicle the history of al-Sinnari House during the period 1198–1208 AH/1784–1794 in accordance with what is stated in the Document. The year 1209 AH/1795 stated in the Catalog of Islamic Monuments²⁰ as the date for the House, represents the date of the legitimate endowment deed for the House.

The history of the House of Ibrahim Katkhuda al-Sinnari is associated with the Egyptian Campaign²¹ (1798–1801). A number of the members of the scientific and cultural committee, such as Rigo, a painter; Savigny and Redoute who were physicists; Edouard de Villiers du Terrage, Prosper Jollois, Fevre who were engineers, used the House as an atelier such as “Monge and Caffarelli, etc.”²². In a study by Georges Legrand, it is reported that the painter Rigo and other artists, as well as the physicist Savigny²³, and the engineers Edouard de Villiers du Terrage, Jollois, and Fevre²³ lived in this House.

The fact that so many painters and engineers of the Egyptian Campaign lived in the House explains their interest in it as part of a set of beautiful Cairene houses. They had all been the focus of the Campaign’s attention and documentation, through pictures



Figure 2 (A-C) al-Sinnari House: A horizontal cross-section of the three floors of the house in sequence from the left. By the scholars of the Egyptian Campaign, *Description de l’Egypte*. Vol. 13. Figure 57/ 4

and paintings, published in *Description de l’Egypte*. Among these houses is also the house of Osman Bek²⁴, the house of Soleiman Agha²⁵, the palace of Kassim Bek²⁶, the palace of al-Alfi²⁷ Bek (the headquarters of the French Army), the house of Hassan Kashef²⁸ (the headquarters of the scientific institute of the Egyptian Campaign). The latter, the house of Hassan Kashef, in addition to the house discussed in this book—al-Sinnari House²⁹—had the greatest share of drawings of detailed horizontal and vertical perspectives, in addition to various pictures.

In the horizontal sections of the house, designed by Jollois and Fèvre (Figures 2A–C), that the House and its buildings constitute

two parts 1, 2 (Figure 1). The cross-section of the ground floor (Figure 2A) shows that the house is in fact one unified architectural unit, with one single entrance as stated and as described in the legitimate deed in the Alley of Moussa Gaweesh (the Alley of Monge). It shows the details of modifications, additions and changes undertaken on the House, though they do not, in their totality, change the planning of the house or its monumental architectural nature. These changes are mainly concentrated on the ground floor in that part known as the garden, and on the second (last) floor (Figure 2C) in some of the spaces that will be discussed below.

Most of the new construction works in the garden resulted from the stay of the scientific and cultural committee members of the Egyptian Campaign in the house. They introduced a special entrance to that section, the garden, which is the north eastern section of the House. At the time it was an empty plot of land as can be seen in the cross-sectional diagrams in *Description de l’Egypte* (Figure 2A). This section was connected on the inside with the interior of the original house by introducing architectural spaces on the southern part of the second yard (Figure 5). Doors were opened to link this part with the house through a corridor and the living area spaces. Later on a set of rooms were built L-shaped on two floors on the south eastern and the north eastern sides of the garden. The spaces on the upper floor and the arches fronting the spaces on the ground floor have been demolished. These spaces were used as ateliers and storerooms for the artists and painters of the Campaign. They were later used to practice, display and store the hand-made³⁰ crafts when the House was used as a center for antique crafts in the period from the sixties of the twentieth century to its end.

The Commission for the Preservation of Arab Monuments and the Maintenance of the House³¹

The interest of the Commission for the Preservation of Arab Monuments in the House and exerting efforts in maintaining, renovating and preserving its historical and monumental style started with the early years of the twentieth century. In 1939, Ahmed Zaki Pasha, Head of the Commission for the Preservation

of Arab Monuments drew the Commission’s attention to the House of Ibrahim Katkhuda al-Sinnari, as well as its historical and monumental significance. Immediately afterwards, Ahmed Zaki Pasha and Hertess Pasha visited the House to decide on how to preserve and maintain the House³².

The Commission immediately proceeded with the maintenance works, based upon the recommendation of the senior engineer, and the costs thereof amounted to EGP 50, according to the estimate prepared by the administration. The Commission also decided to retain the current tenant of the House, obliging him to maintain it, and to deduce the rent of the takhtaboush seat and the hall, since those were the areas under maintenance. The same tenant was also assigned to sell entrance tickets to the visitors³³.

In 1916, M. Gayardon Bek submitted a request to the Commission to use the House of al-Sinnari to display his collection, explaining that the House used to be a meeting place for the scholars of the Scientific and Artistic Committee during the Egyptian Campaign. It was, therefore, a suitable place for his collection for the time period decided by the Committee, making him the curator thereof. In 1917, M. Gayardon’s collection was displayed at the House upon the approval of the Commission for the Preservation of Arab Monuments and the Ministry of Religious Endowments, at a rent of EGP 11. The lease contract stated in the third article that the contract is valid for one year from the date of the contract. Article four stated that M. Gayardon remains an attaché of the Ministry of Religious Endowments for a five-year period, to end on 8/10/1922³⁴.



Picture 4: The cover of the Records of the Commission for the Preservation of Arab Monuments of the reports on the period (1946–1953)



Picture 5: Report 877, dated 26 May 1948, stating the decision to purchase al-Sinnari House for the Antiquities Authority, at a sum of EGP 2000



Picture 6: Page 2 of the previous report giving a detailed account of the discussions for the purchase of the House and the final decision taken to buy it

M. Gayardon Bek's collection included many documents, drawings, inscriptions, pictures and books related to the French Campaign on Egypt and Syria. Lutfi Bek El Sayed, the director of the Sultanic Library (Dar El Kutub El Masreya), and B. Kleish, superintendent of the Ministry of Public Information, had written a report about this collection, pointing out its importance and scientific value. They stated that that part of the collection pertaining to Bonaparte's campaigns in Egypt and Syria are obviously of great importance, in addition to the fact that the inscriptions therein are not available at the Sultanic Library. After listing the most significant pieces, the report concluded with an expression of deep gratitude to Gayardon Bek for his strong wish to place his collection at the disposal of the public, hoping that this initiative be an example followed by many other. In accordance with this report, the Commission consented to Gayardon Bek's request to use al-Sinnari House for the display of his collection. On this occasion, a tender of EGP 360 for the preservation, maintenance and renovation of the house was endorsed³⁵.

After that, the Commission for the Preservation of Arab Monuments continued to care for the House, undertaking renovation and repair works when needed. In 1920, renovations and repairs amounting to EGP 200 were undertaken, with a similar sum appearing on the budget of 1925 to renovate the house. A further EGP 100, for the renovation of the buildings, paint, and tiles of the House, as well as for making window-panes and screens, were approved in the budget of 1926. In 1934, repairs were undertaken amounting to



(Figure 3): The general location of the House of Ibrahim Katkhuda al-Sinnari.
Adapted from: Revault, J and Maury, B., *Palais et Maisons*, Fig. 22



(Figure 4). The House of Ibrahim Katkhuda al-Sinnari and the surrounding buildings. Adapted from: Refaat Moussa, *Residential Buildings*, Figure 108

EGP 360 in accordance with a tender submitted by M. Pauty and Mahmoud Ahmed Efendi. It had been planned to use the House as a museum for Napoleon, due to be inaugurated in 1935. The museum, however, was never accomplished. On 26 May 1948, the sum of EGP 2000 of the 1948/1949 budget was allocated to the deposal of the House, considering it a monument owned by the Antiquities Authority³⁶. It is worth mentioning that the decision to purchase the House of al-Sinnari was taken based upon a vote by the Commission for the Preservation of Arab Monuments. At first the vote was a draw,



(Picture 7): Overview of the House, Alley of Monge and the House's Façade

then the group of which the Head of the Commission was part won in favor of buying the House³⁷ (Figures 4–6). After the earthquake of 1992, the House of Ibrahim Katkhuda al-Sinnari was renovated as part of a renovation plan undertaken by the Islamic Monuments Sector in collaboration with the French Delegation³⁸.

Location and the Surrounding Urban Texture

The House of al-Sinnari—as stated in the document—is located in the Zaher area in Cairo near al-Sibaa Barrages³⁹

(al-Sayeda Zeinab District), at the furthest dead-alley bend, known then as the Moussa Gaweesh Bend⁴⁰ (pictures 7, 8, Figure 3) (currently in the Alley of Monge, the Neighborhood of al Hayatem⁴¹, adjacent to the Neighborhood of al-Nassereya, both of which fall into the District of al-Sayeda Zeinab). The House can be reached through the Alley of Hassan al Kashef, which in turn is accessed from the alley adjacent to the Sabil of Sultan Mustafa⁴² in al-Sayeda Zeinab Square, or via an alley that branches off the beginning of al-Koumi Street to⁴³ the right (Figures 3, 4). The House limits itself in its contact with the outer world to the northern façade, extending along 15.5 meters, and overlooking the Alley of Monge. This is where the main entrance to the House is located.

To get to know the urban texture surrounding the House, it is worth imagining it at the time of construction, and not as it stands now. For the House was constructed on the outskirts of the crowded Fatimid Cairo, at a short distance from the al-Masry Bay⁴⁴. There flowed a small canal emerging from the Nile, surrounded by a set of palaces and houses belonging to the nobility, princes and the aristocracy at the time. When we imagine al-Sayeda Zeinab Square today, with Port Said Street, and in their place flowing a small river, on both banks of which were gardens, orchards and the houses of the rich, we understand the nature of the location of al-Sinnari House.

The House of al-Sinnari was—as stated previously—surrounded by a set of houses belonging to the princes, such as Prince Hassan al-Kashef⁴⁵ Jerkis—and was taken by the Egyptian Campaign as a headquarters for the *Scientific Institute*. The Egyptian Scientific



(Picture 8): The façade of al-Sinnari House at the end of the Alley of Monge in al-Nassereya District



1. Entrance & corridor vestibule
- 1a. Terrace for the doorman
2. Doorman's housing
3. Stables
4. Main yard (b. Mazirah; c. fountain)
5. Seat steps
6. The Takhtaboush
7. Facilities (a. a well, d. rest-seat, e. bathroom furnace)
8. Holder (d. rest-seat)
9. Corridor
10. Secondary yard (d. rest-seat)
11. Kitchen
12. Annexed kitchen (b Mizarah)
- 13a. Water storage
- 13,14. Storage and facilities
15. Stairs to the services and facilities areas
16. Storage
17. Backyard
18. Garden yard
- 18a. Garden, derkah
- 18b. Garden, small room
- 18d. Garden, waterclosets
- 18e. Garden, remains of the arcade the was at the front of the rooms
- 18f. Garden, corridor

(Figure 5). A horizontal cross-section of the ground floor of the House of Ibrahim Katkhuda al-Sinnari (drawn by the researcher). Architectural works introduced to the House after the Egyptian Campaign, and were not mentioned in the legitimate endowment lease of the House.

Academy (*L'Institut d'Egypte*) held its first sessions there in 1799, and it was inhabited by astrologists, scholars and engineers of the Egyptian Campaign. In addition to al-Jabarti's description of the House, *Description de l'Egypte* provides various detailed paintings and drawings of the demolished House, which illustrate that it was one of the most luxurious Ottoman houses and palaces, in terms of architecture and decoration. Its location is today's al-Mubtadeyan School, which is located facing al-Sinnari House and occupies a large area. Close by al-Sinnari House was the house of Prince Kassem Bek Abu Seif. al-Jabarti states that, "In the days of Murad Bek he became renowned, and built his house which is located in al-Nassereya, spending huge sums of money on it. He enjoyed great talent and vision in architectural engineering. He rented a great plot of land, which was part of the Nassereya Lake lands, close by his house from the al-Mawlaweya Endowment, which he surrounded with a fence, constructing on it a decorated palace with a spacious entrance hall ..."⁴⁶.

Thus, it is possible for us to grasp the nature of the location of the House of al-Sinnari and the surrounding urban texture, with the stream "the riverbed", the houses of princes and the nobility of the time, the fields, gardens, trees, flowing waters, water-wheels, ...


A General Description of the House

A general cross-section of the House shows an irregular shape on the outside (picture 7, Figure 5). The total area of the House amounts to 1150 m², including 810 m² which represent the area of the original buildings as described in the Endowment Document. In addition, there is the area of the annexed garden (represented

in two plots of land annexed without any constructions) which amounts to about 345 m². The area of buildings (other than the area of the garden and the newly introduced buildings) is about 643 m². The House consists of a ground floor (Figure 5) and two upper floors (Figures 10, 12). The House can be divided⁴⁷ into five⁴⁸ main sections, namely the entrance and elements of movement and communication, the section of the services areas, the section of the reception area, the section of the family and the private life (Harem), and the garden.

The House has one façade on the north western front, which faces north and represents the dead-end of the Monge Alley to the east. On the western part of this façade is the main entrance to the House. The façade bends at the eastern end to the north across the width of the alley (about 4 meters) with a structure and constructional appearance different from the above-mentioned main façade. A second entrance was opened in this part of the façade, higher than the level of the original entrance (picture 8).

The House contains three clearly defined yards (as illustrated and stated in the Egyptian Campaign drawings of the House) in addition to the garden which occupies around one-quarter of the area of the House. The first yard represents the main reception yard. It is rectangular in shape, and of relatively large area, measuring 8.40 m × 10 m. The second yard is more connected to the Harem and the living area. Its dimensions are closer to a square, measuring 8.30 m × 7.30 m. The third yard is a small inner yard connected to the service area, measuring 2.9 m × 4.4 m.



Various raw materials were used in the House, such as limestone, gypsum, stones, wood, marble, tiles, rubble, bricks, cinder, and whitewash ... A team of laborers, builders, engineers, sculptors, carpenters, sawyers, marbleizers, plumbers, tile-layers, wall painters, and etchers⁵⁰

The Structure and Sections of the House⁵¹

We will review the structure of the House by dividing its architectural spaces in accordance with their function into five main sections—as mentioned above. These are as follows:

- 1- The Entrance and Elements of Movement and Communication. These are horizontally distributed, and represented in the corridors⁵², the vestibule and the distribution areas, represented mainly in the yards on the ground floor. Vertically, they are represented in mobile ladders for movement.
- 2- The services area section. These include the mill, the kitchen, the stables, the holders (storage areas), the Mazirah, the bathroom and the restrooms. They are mainly located on the ground floor, close to the entrance and the yards, with the exception of the last one, which are located on the two upper floors.
- 3- The reception area section. It is the core of the House in terms of architectural focus. Reception areas are mainly on the first floor, containing the seat and two halls, in addition to some places on the ground floor that can be used for reception, most importantly the Takhtaboush and the Mandara.

- 4- The family and private life section (the Harem). It exclusively occupies all the spaces on the second floor, in addition to some of the spaces on the first floor. It consists mainly of living rooms and bedrooms for the inhabitants of the House, but there may also be some rooms for the servants.
- 5- The garden. It is the most recent part of the House. There used to be buildings in the garden area that dated back to the time of the Egyptian Campaign when they made use of the House, and the subsequent period. The buildings mostly fell into ruin, with some traces remaining. This part is, today, the garden which occupies the north eastern part of the House.

It is noted that this division, though it was not separate as an autonomous architectural unit expressive of each section, there remain architectural signs and decorative indicators, in addition to the names of places and the elements reported in the document, which all confirm this functional division. The document identifies the door that leads to the secondary yard where the stairs lead to the private family chambers, in addition to the areas where they conducted their daily activities, as the “Harem Door”⁵³. Examples of architectural evidence that confirm this include the luxurious entrance rich in decoration inside the main yard, which the document referred to as “the Seat Door”⁵⁴. It leads to the main private reception spaces, namely the seat and the grand hall respectively. The main reception spaces (the seat and the two halls) are also distinguished by the lofty height of two floors unlike any of the other spaces around them, or indeed those spaces adjacent of overlapping with them, such as the distribution

corridor, the bathrooms, the cupboards—which were only one floor high, in addition to the decorative and architectural richness of these spaces.

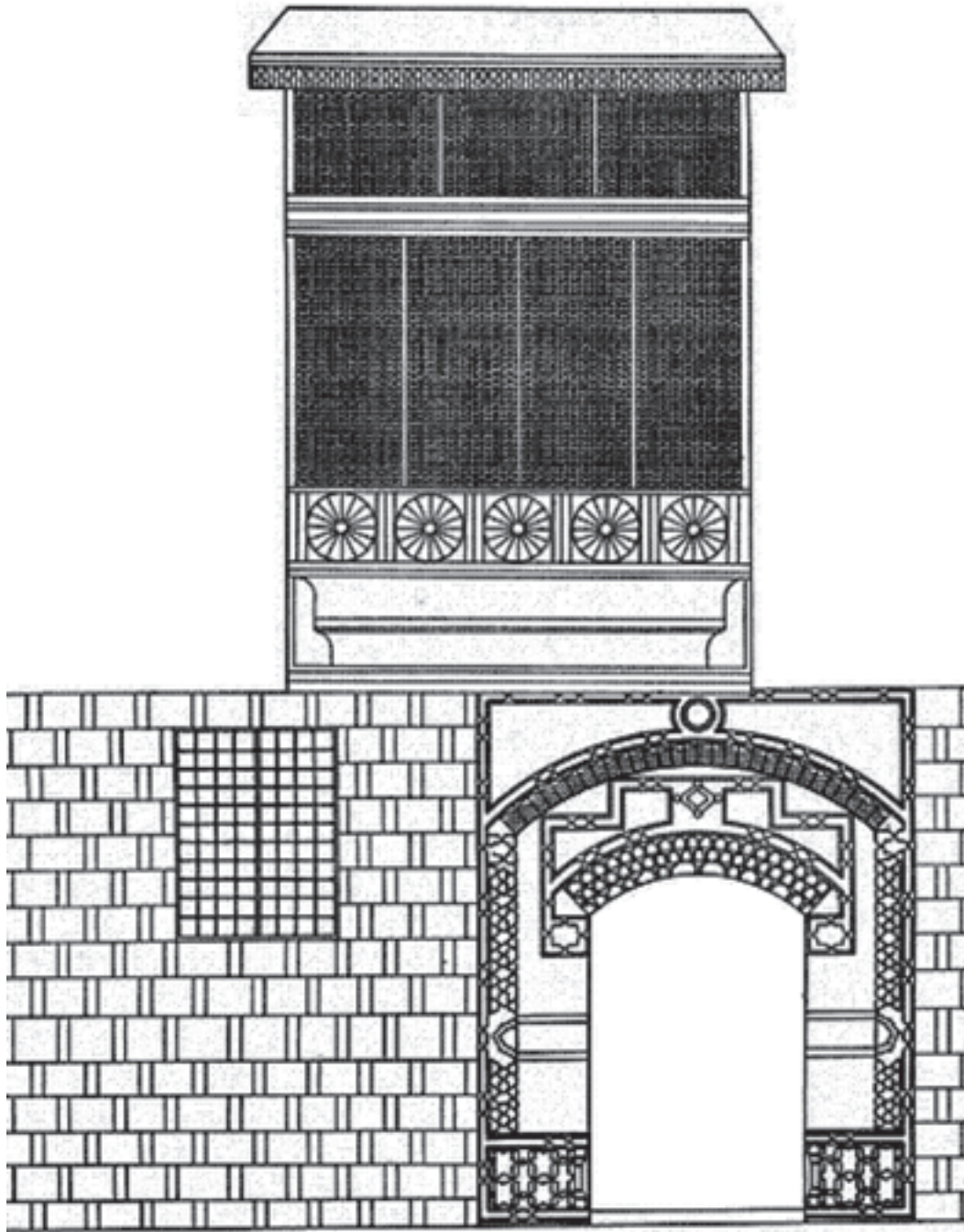
The architectural spaces of the House—like all contemporary houses—were also distinguished by multiple functions⁵⁵. Indeed, there was no clear-cut separating line between the architectural spaces in terms of their functions, since each space had a variety of functions. Most spaces serve multiple purposes during the day, being of common usage for the family and for living at various times during the day and in accordance with their needs. This use of the House's spaces reflects flexibility in designing historical and monumental houses on the one hand, and the nature of life at that time on the other. The architectural space at the time was not limited to one function, such as bedrooms, dining rooms, the study or the reception halls. The same space fulfilled all of these functions in accordance with the lord of the house. The same hall would function as a reception area; when it was time to eat, the food tray would be placed on a stand (a chair) turning it into a dining room, then the tray was removed after eating; in the evening, beddings would be spread out, and the hall would be turned into a bedroom; the next morning the bedding would be folded up and stored in the adjacent cupboards.

Thus, the use of these rooms or halls was defined by a number of factors, most important of which was the time of day (morning, noon, evening), and the requirements and tasks of each of these times.

Secondly, the different seasons of the year (summer, winter); thirdly the social status of the visitors (strangers, relatives, friends) and their importance to the owner of the house. Thus, the rooms would in general be used for instance in the morning as reception areas; at noon, they would be used to have lunch; in the evening, they would be used as a space for a family gathering, where all the members of the family would come together to chat; and at night, they would be used for sleeping. As for the seasons, they would be decisive in choosing the location and functions of the rooms according to the climate. In summer, when the temperatures are very high, the large lofty halls which contained a fountain with cooling water would be used. In winter, rooms and halls with smaller areas would be chosen for easier heating, or upper-floor rooms that were sunny. The use of the halls and rooms was also decided by the visitors and their importance to the home-owner, and hence the degree of warmth he intended to extend or degree of pride he wanted to show. Thus, the great hall, with its roomy design and rich decorations was used for big parties and the reception of groups; while the secondary hall was used for more private or family parties, or for individual visits.

The House also has a variety of ground and ceiling levels, not only on the same floor, but even within the same architectural space. This can be seen in the hall, for example, where the floors and ceilings have diverse heights with a variety of significations. This is a recurrent architectural feature in Cairo's historical buildings⁵⁶. This difference in levels signifies the importance and the function of the place. Heightened floors and a high ceiling, thus, indicate the





(Figure 6). The façade of the House of Ibrahim Katkhuda al-Sinnari. In: Revault, J. & Maury, B. Palais et Maisons. Fig. 23

importance of the area. The high ceiling also helps cool the area, and thus reflects places of dense usage during the summer, while the spaces with a lower ceiling indicate control over the area. They tend to keep the warmth, which qualifies them for sleeping and living during the winter. The difference in the floor levels indicates the move from one space to the other, or from one function to the other. The Durka'ah, for instance, represents an area of communication and movement within the hall, as well as a space for the servants to stand while serving the house owners and their guests during their visits and celebrations.

The House and the Outside World

In accordance with the description of the legitimate endowment lease and the drawings of the Egyptian Campaign, there was no contact between the House and the outside world—at the time of its construction—except the sole façade on the north eastern side of the House at a length of 10.5 m (picture 8). The Document states that the House is located in the Bend of Moussa Gaweesh (the Alley of Monge today), overlooking the Alley with “a façade built of burnished red lobe stone, with a large arched gate which was closed with a pure wooden door”⁵⁷. Later, at a date far beyond the date of the Endowment, a second entrance was added at the end of the Alley, which led into the garden. The outer façade, in its current state, took the shape of an inverted L, the longer side of which was the original façade, with the main entrance (the only one at the time of construction as stated by the document and confirmed by the Campaign drawings in Figure 2A), while the shorter side represents

the end of the dead-end of the Alley of Monge on the eastern side, with a second newly introduced entrance leading into the garden (picture 8).

The original façade was built of burnished red lobe stone⁵⁸. This stone level reaches a height of 13 stone⁵⁹ rows. In the western side of this façade there is the main entrance to the House. The main entrance consists of a rectangular entry, crowned with a garland of tendons (mawtoor)⁶⁰ and is closed with a “gate” door made of pure wood⁶¹. Above the main entrance there is a large Mashrabeya⁶² made of etched⁶³ wood (pictures 7–10, Figure 6), which overlooks the alley and belongs to the iwan (dais) of the upper hall.

Main Entrance

The document describes the House façade and the entrance block, stating that the House consisted of “a façade built of burnished red lobe stone, with a large arched door closing it made of pure wood”⁶⁴. Elsewhere, the document describes the façade and the entrance block stating that the House included “a western façade with an archway (qantara)⁶⁵, a niche (khawarnaq) and two pilasters, as well as an arched gate. All were built with burnished red lobe stones, and a door made of pure wood closes the above-mentioned gate.”⁶⁶

The entrance block façade consists of two intertwining tendoned arches (picture 11). The frame of the outer arch is etched in zigzag shapes and geometrical decorations, surrounded on the outside by juft⁶⁷, with hexagonal Memat (forms of the letter “m” in Arabic م), above which there is a circular medallion at the center of the



(Picture 9): The Mashrabeya above the main entrance



(Picture 10): The Mashrabeya above the main entrance, details of the decorative wooden fillings



(Picture 11) Tendoned arches crowning the main entrance opening

arch. The façade is fronted by a warbler 0.60 m deep, surrounded by two pilasters the fronts of which have been decorated with etchings in stone. It is joined to the entrance frame through delineations of a juft of hexagonal Memat. The door jambs⁶⁸ have been etched with geometrical decorations on stone inside round medallions (picture 14). At the front of the entrance there is the main gate, described by the document as “an arched gate ... the above-mentioned gate is closed with a gate-door made of pure wood”. It is a rectangular opening arched with a tendoned arch, the outer frame of which has also been etched with two rows of graded stone stalactites⁶⁹ (pictures 12–13). Its keystone⁷⁰ is topped by a certain shape, the angles of which have been shaped by hexagonal memat, as well as a frame of juft, which also contains hexagonal memat and geometrical decorations etched in stone (picture 11, Figure 6).

To the east, the main entrance is followed by two windows at a height of about 1.80 m from the ground. Both are covered by wooden grills. The first opens only a corridor leading into the yard, while the second opens onto a store-room⁷¹, and is similarly covered with wooden grills.

Above the entrance, at the level of the first upper floor, there is a large and splendid Mashrabeya (about 5.5 m high, and protrudes at about 0.75 m from the wall), made of beautiful etched wood (pictures 9–10). It opens on the inside onto the northern iwan of the upper hall. The Mashrabeya is followed to the east by a window covered with a screen made of etched wood. It is a bedding cupboard⁷², connected to the iwan of the above-mentioned hall.



(Picture 12) The entrance block, main entrance opening



(Picture 13) The entrance block, details



(Picture 14) The entrance block, motifs etched in stone

At the end of the Alley of Monge a second entrance was introduced in addition to the main entrance of the House, which is not mentioned in the endowment deed nor found in the Egyptian Campaign drawings. In addition, this is obviously seen in the constructional state of this façade with its entrance and the techniques followed in construction. This entrance is located about a meter above ground level, and reached through a number of steps of a side-staircase that leads to a landing which in turn leads into the garden of the House. It

also leads into the Harem yard and its outbuildings through newly-introduced connecting doors, aimed at linking all the parts of the House on the inside (picture 8; Figures 5, 7).

The Interior of the House

The Entrance and Elements of Movement and Communication

The horizontal cross-section of the ground floor illustrates the two above-mentioned entrances, as well as a set of spaces for movement and communication. These include the vestibule of the entrance which follows directly after the main entrance. It is connected to a corridor that leads at its end to the main yard of the House. It represents the main distributional area of the spaces on the ground floor (Figure 7). The movement of communication in the House is completed by the second yard, which is the living and service section yard. It is reached through the above-mentioned main yard, across service spaces and a connecting passageway. The ground floor also comprises the stables, the Takhtaboush, the kitchen, and a set of store-rooms, in addition to the stairs that transmit movement to the upper floors. There is also the backyard and the garden of the palace, with their newly-introduced architectural spaces. There was no contact between these and the interior of the House as can be detected from the drawings of the Egyptian Campaign. This has changed now (Figures 2A, 6).



(Figure 7). A horizontal cross-section of the ground floor of the House of Ibrahim Katkhuda al-Sinnari, showing the elements of movement and communication (diagram by the researcher)

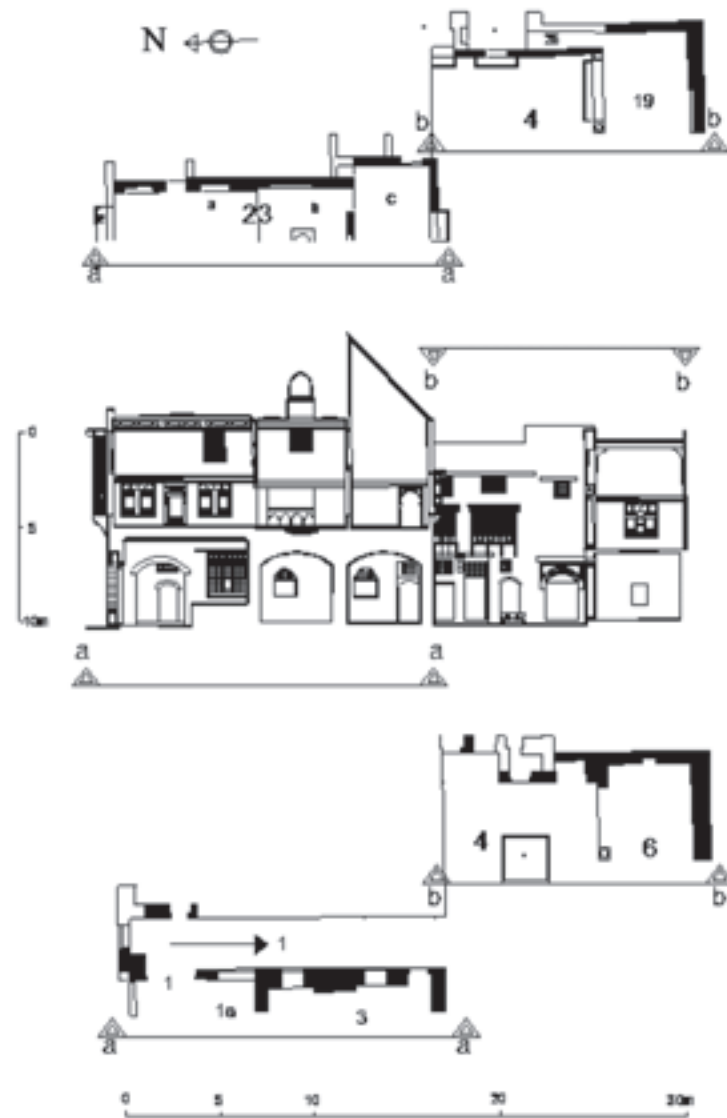
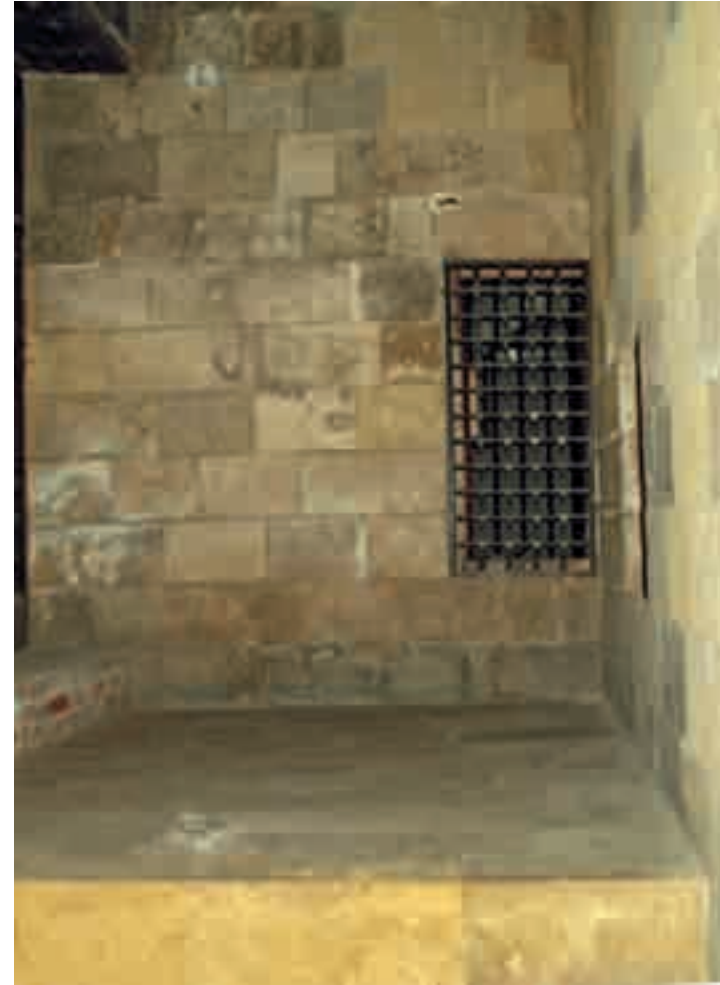


Figure (8). The House of al-Sinnari. A vertical north-south sector, passing through the main yard towards the east (center).
 The horizontal cross-section above is at the ground-floor level (lower). The horizontal cross-section of the vertical sector above at the first-floor level (upper).
 (Drawn by the researcher)



(Picture 15) The entrance derkah from the inside



(Picture 16) The doorman's landing at the front of the entrance derkah



(Picture 17) The entrance corridor from the derkah side towards the internal yard



(Picture 18) The entrance corridor from the internal yard towards the outside



The Vestibule and the Entrance Corridor

The document states that the door of the House “leads into the vestibule with a landing/assigned to the doorman. The mentioned landing has a window that overlooks the corridor/which leads into the yard”⁷³. Elsewhere, it states that “the vestibule is roofed with/a landing beneath which is the doorman’s cupboard. It has an exceptionally arched door/through which one enters the roofed corridor and hence into the yard.”⁷⁴ Therefore, the main entrance currently leads into the rectangular-shaped vestibule (3.40 m × 2.75 m). At the front of the vestibule there is a landing⁷⁵ assigned for the seating of the guard (the doorman), which is elevated by 0.90 m from the ground. The landing is rectangular (3.30 m deep × 2 m wide). At the front of this landing is a window⁷⁶ that opens onto the stables. On the north western side there is a recess which usually formed a wall-cabinet. On the south eastern side of the landing a window was opened, covered with wooden grills, which opens onto the corridor leading to the House yard (Figure 8, pictures 16–17). Nowadays, it is noticed that the cabinet beneath the landing, as mentioned in the document, is absent. It has probably been blocked when parts of the landing were rebuilt during renovation works. The landing, with its area and architectural components, is closer to a doorman’s room rather than a mere landing for sitting there.

The vestibule is perpendicularly connected to the entrance corridor through an arched opening which forms the south eastern side of the vestibule (picture 15). The corridor is rectangular in

shape (16 m × 2.5 m), and overlooks the yard through an arched opening (picture 17).

The floors of the vestibule and the corridor are covered in diamond-shaped tiles. The ceiling of the corridor is divided into three sections, the middle of which represents a semi-cylindrical vault (picture 18). It represents the area above which are the floors of the Durka'ah of the upper hall, while the two sides of the ceiling of the corridor are covered with pure wood. The corridor has two doors and four windows. The first door to the left of the person coming in through the main entrance at the vestibule-end of the corridor leads to the store-room (picture 2, Figure 5). The second door is at the yard-end of the corridor to the right of the person entering, and leads to the stables. As for the four windows in the corridor, one is on the main façade, and is covered in wooden grills overlooking the Alley of Monge. It is faced on the axis along the length of the corridor by an arched opening taking up the entire width of the corridor, and overlooking the yard. The three other windows are in the wall to the right of the person walking in. The first overlooks the landing, the second and the third overlook the stables (pictures 3, 17, Figures 5, 7, 8).

The Main Yard

The description of the yard and its outbuildings in the deed are almost identical with its current state, with hardly any changes worth mentioning. It is as if I am walking into the House over 220 years ago. It contains:

“A large yard open to the sky with a door to the right that can be entered through to a certain well with a rest-seat next to it and stairs next to it by which one climbs up to/the bathroom furnace in the Harem to the water storeroom next to the mentioned stairs/there is a door through which one enters the storeroom with a mill inside/and next to the mentioned storeroom door there is first a circular stairway made of burnished lobe stone/used to climb to the seat door to be mentioned below and next to/the mentioned circular stairway there is Tashitkhana in the midst of which there is a column of transparent white marble/the floor of which is covered in transparent white marble/with benches made of pure wood and two cupboards and the mentioned Tashitkhana is/a Mazirah with a shisha made of pure wood by the etcher next to which is the storeroom/inside which there is the water sink reaching to the Harem facilities and next to the mentioned door/of the storeroom there is the Harem door.”⁷⁷

The yard is open to the sky⁷⁸, of rectangular shape (7.10 m × 7.90 m). At the center of its floors there is currently a square-shaped marble fountain⁷⁹ (picture 20), which is not part of the House architecture⁸⁰. The yard is circumscribed and overlooked by four fronts which are three floors high (picture 21). The yard represents the lungs, the outlet and the center of movement in the House. Through the yard all the architectural places in the House can be reached horizontally and vertically. As stated in the description of the House in the deed above, all spaces overlooking the yard and connected to it on the ground floor are service areas, with the exception of the Tashtakhanah, the “Takhtaboush”, since it is a reception area.



(Picture 19) The main yard, the arched corridor opening that leads into the yard, above it a Mashrabeya



(Picture 20) The main yard, the floors and central fountain of the yard



(Picture 21) Main yard, the north western façade

It starts to the right of the person walking in from the corridor, where there is a recess with the main water-well of the House (picture 22). At the front of this recess, there is a door that leads into the rest-seat area, followed by a skylight for the bathroom, where there were stairs leading upstairs. These were used to reach the bathroom furnace annexed to the hall above the entrance corridor (7, Figures 5, 7). Next is a door that leads into the storeroom, which is divided into two areas and was prepared to hold a mill (8, Figures 5, 7). In the inner space is the flight of stairs leading to the seat from the yard. Facing the yard the person walking in from the corridor finds a half round stone staircase (5, Figures 5, 7) which leads to the seat and the other spaces on the first floor. To the east, the stairs are followed on the ground floor by the front of the Takhtaboush (6, Figures 5, 7). Facing the yard, to the left of the person walking in from the corridor there is a recessed entry on the side of the Takhtaboush, the “Tashtakhanah”. It is a Mizarah, i.e. the place where the *zeer* (pot-in-pot cooler) is placed, for cool drinking-water. It was protected from the sun or dust by means of an etched wood screen, “a shisha of pure wood made by the etcher”. The Mizarah, to the north, is followed by three doors, which are in order as follows: the first leads to the store-room inside which there was a water basin connected to the Harem facilities (13a, Figures 5, 7). It is now connected to the kitchen and the yard of the Harem section, the “living area” (10, Figures 5, 7). The second door leads to a passageway or a corridor that leads to the kitchen and the above-mentioned yard. The third and last door leads to the



(Picture 22): The main yard, the western corner is a recess in front of the service areas



(Picture 23) The main yard, the south eastern façade

store-room, in which a second door was introduced, linking it to the backyard and the garden (17, Figures 5, 7).

The Façades of the Yard

The façades of the yard represent the inner façades of the House, since the philosophy behind the design of Cairene houses at the time was based on opening up to the interior by opening most of the spaces in the House onto the internal yard, while limiting the opening up to the outside world to the Mashrabeyas and the narrow upper windows covered with wooden grills. The latter were mainly meant for lighting and ventilation. Hence, these inner façades reflect the architectural spaces they represented, and their importance was reflected in the amount of their representation on the façades.

The four façades of the yard reach to the height of three floors (± 10 m). They are built to the level of the first ground floor with burnished lobe stone, and then with bricks covered with whitewash. The exception to that is the south western façade (where the Takhtaboush and the seat are located), since this façade is fully built with burnished stone as an indication of its importance (picture 23).

First: The North Western Façade

(to the right of the person coming in from the corridor).

It represents the façade of the Takhtaboush and is topped by the seat façade (picture 23, Figure 9). The front is made entirely of stone, and begins to the right (the front of the entrance for the

person walking in from the entrance corridor) with the seat entrance block, and to the left there is the Takhtaboush façade, topped by the seat façade which is two floors high.

The Seat Entrance Block: It is of great splendor, as well as architectural and decorative elegance, like all seat entrance blocks, as can be seen in the drawings of the Egyptian Campaign and other travellers' books, as well as most contemporary models of other seats. It reflects first and foremost the status of the homeowner and the importance of the architectural space that leads to the seat as it leads to the main reception spaces of the House. The importance of the seat entrance block (or the seat door, as it is referred to in the document) can be illustrated through the fact that it is located on the axis of the entrance corridor, and dominates the visual communication with the interior as of the moment of stepping into the House (pictures 17, 24). Its architectural importance is reiterated by the circular stone staircase (five steps) which ends in the opening of the entrance block door, and leads in turn to the landing, followed by the ascending steps leading to the seat. The opening of the entrance block door is rectangular (2.40 m high \times 1.10 m wide), topped by a straight architrave. Both sides of the door and the entrance façade have been decorated with geometrical decorations in round, square and rectangular shapes, separated from and framing the decorations of the façade as a whole with *juft la'eb* and hexagonal *Memat* (picture 25). The straight architrave crowning the entrance opening is topped by an arch that encloses precious stones, the façade of which is covered in tiles with blue floral decorations against a white

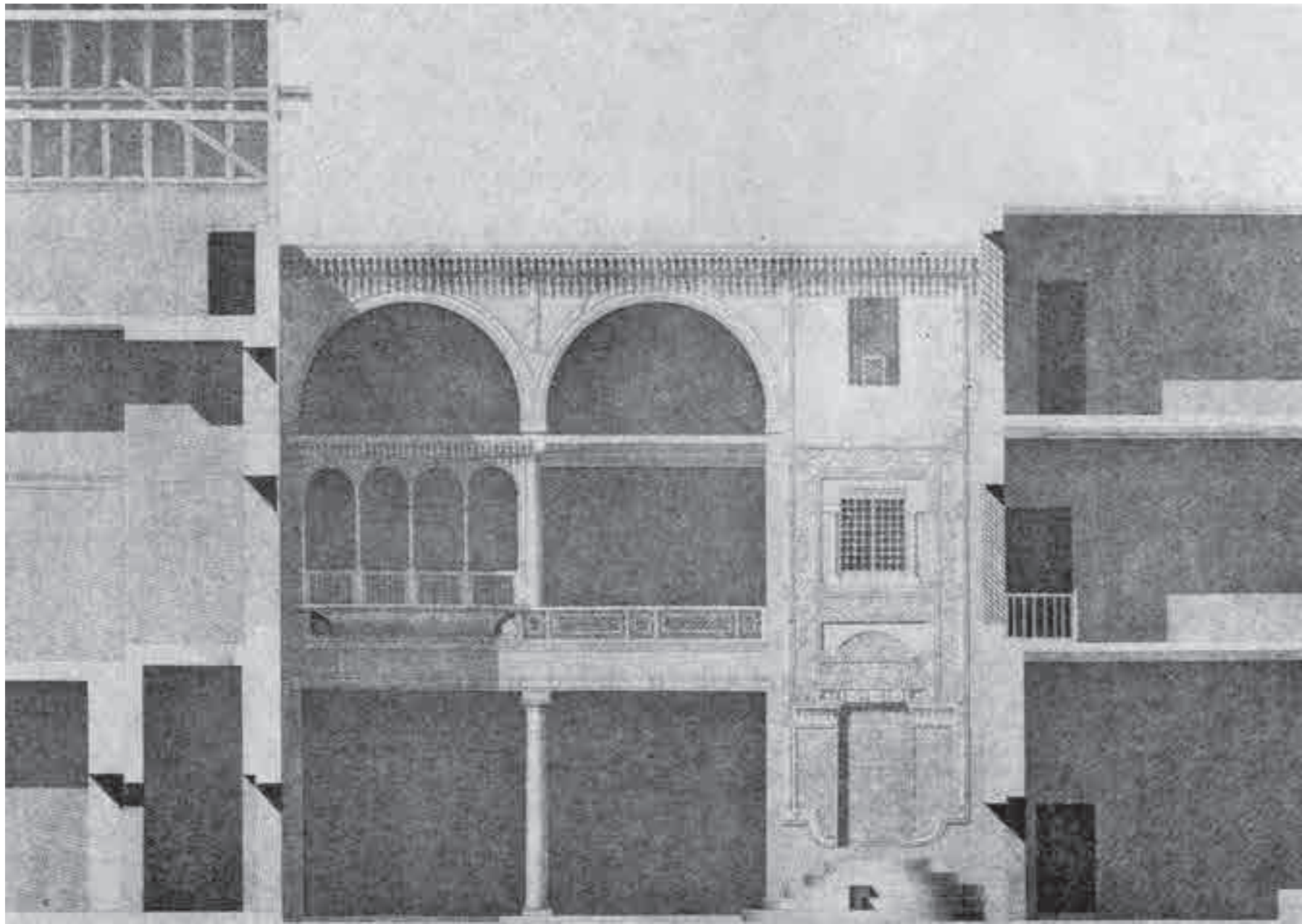


Figure (9): al-Sinnari House. A vertical sector north west, passing through the main yard towards the south, containing the Takhtaboush and seat façade.
By the scholars of the Egyptian Campaign, *Description de l’Egypte*. Vol. 13, picture 59



(Picture 24): The seat entrance block in the main yard, from inside the entrance corridor



(Picture 25) The seat entrance block





(Picture 26) The seat entrance block, stone etchings and the faience tiles



(Picture 27) The seat entrance block, stone etchings and the faience tiles, details

background (picture 27). This is topped by a rectangular window covered with wooden grills, enclosed between two columns, and crowned with two rows of stone stalactites (picture 26). Each unit in this entrance façade has a juft la'eb of hexagonal Memat that intersect with the general frame of decorations belonging to the entrance block, which also consists of a juft of hexagonal Memat (pictures 25–27, Figure 9).

The Takhtaboush Façade⁸¹: The Takhtaboush, or the Tashtakhanah⁸², as it is called in the document. The architectural form of the Takhtaboush is almost identical in all the other models of historical houses. It opens onto the yard at full width through two openings that separate them. At the center of the Takhtaboush façade is a marble column that carries the ceiling. The column is made of “transparent white marble”, as described by the document. Transparent here signifies the intense whiteness, unstreaked by any other colors. It is round, and topped by an ionic crown that carries a wooden pallet, which in turn carries wooden eaves (pictures 20, 28).

The Seat Façade: The Takhtaboush façade mentioned above is topped by the seat façade. It rises to the height of two floors (around 6.30 m). The seat façade overlooks the yard in the form of an arcade consisting of two horseshoe arches (pictures 29, 30). In the middle there is a round marble column which carries a wooden pallet connected to the walls through wooden connections to support the building (picture 29). The outer edge of the arch (or culmination)⁸³ is sculpted with consecutive refracted arches, which gives it the form of “stacked pillows” (picture 30). The two arches and the façade as a whole outline the juft of hexagonal Memat (picture 31). Both the Takhtaboush and the seat open northwards (the wind side) to receive the breeze, which qualifies them functionally to serve as summer reception areas. The right arch—for the person standing in the yard—is covered with a wooden screen, which serves as a balustrade, while the second arch is decorated with a wooden



(Picture 28) The seat façade and the takhtaboush overlooking the main yard



(Picture 29) The seat façade



(Picture 30) Details of the seat façade arch

look—which was present in the Egyptian Campaign pictures, and was restored during the latest renovation works. It protrudes outside the façade and seat walls by about 0.50 m and takes the shape of an arcade that overlooks the yard with four arches and two side-arches, following the same pattern as the seat arches (picture 29). It is used for sitting and enjoying the open air in the yard. The House deed described it as the balcony (roshen), “a balcony made of pure wood with arches and etched columns”. The yard façade as a whole is



(Picture 31) al-Sinnari House, details of the stone etchings of the seat façade arch

crowned with a protruding wooden eaves, to keep the seat shaded during the day.

Second, the Two Side Façades: North Western and South Eastern Façades

Some features of these two façades can be observed, such as the relative similarity between them. Both lead to the services

areas, both have recesses to indicate services areas (pictures 21, 22, Figures 5, 7). The two façades are similar in the lower part on the ground floor. The south eastern façade is distinguished by the presence of a rectangular recess that represents the “Mizarah” (picture 32, Figure 8). The same façade is distinguished on the upper floor by the presence of two Mashrabeyas made of etched wood, which belong to the reception hall of the Harem (picture 32, Figure 8). Each Mashrabeya is topped by a window covered with a screen of etched wood. The opposite façade—the north western—is distinguished by the presence of three floors that are reflected on the façade by three levels of windows covered with etched wood in various dimensions (picture 21).

Third, the North Eastern Façade

It represents the side that contains the corridor opening which leads to the yard from outside the House. The corridor opening is topped by an arch, and there is a Mashrabeya made of etched wood (picture 19). The distribution area⁸⁴ in front of the hall belongs to the top of the entrance corridor (or the Salamlek, as it is called in some studies). The façade, with the exception of the corridor opening and the Mashrabeya, is solid with no further openings.

The Secondary Yard

It represents, in fact, mainly the services yard. It is the center for the services places since it opens onto the kitchen (11 Figure 5), the



(Picture 32) The main yard, the south eastern façade

storage rooms, and a set of other service areas, in addition to the stairs leading upstairs to the family and private area from the living room. The open-air yard is relatively small and rectangular-shaped. It is located on the ground floor and measures 2.9×4.3 m. On the level of the upper two floors, the south eastern wall swerves at a curved angle, which is an architectural technique to create more space on the upper floor, as will be explained below (21 Figure 10). The façades of the yard are made of burnished stone up to the level of the ground floor, to be then continued with whitewash-covered bricks to the height of two upper floors. This entrance was reached at the time of construction as is shown in the Egyptian Campaign drawings published in *Description de l’Egypte* (Figure 2) across a corridor (9 Figures 5, 7), which leads to the main yard of the House. Later, a door was introduced in the store-room (13s Figure 7), which opened onto the secondary yard (10 Figure 7) itself from the northern side. It was linked by a door opening with this garden (18 Figure 7) in the north eastern part of the House. Windows covered with etched wood screens opened onto this yard on the upper two floors.

The Stairs

They represent the vertical axis for movement and communication between the various floors of the House. In this respect, there are three staircases in the original construction. The first is the staircase leading to the seat from within the main yard. The stairs end with

a landing that represents an area of distribution, which branches out to the left and to the right to form the paths for movement and communication to all the spaces on the first floor in a circular manner (Figure 11). The second staircase is in the room where the seat stairs lead to the right (26 Figure 10), to the spaces on the second floor on that side of the House. The third staircase is located in the secondary yard, “the service yard”, and leads to the spaces on the first and second floors. On the first floor, it branches out to the right and the left, forming two movement paths that meet their counterparts branching out from the seat stairs, thus forming the movement circle on this floor (Figures 10, 11). The third staircase, then, continues to lead the movement to the spaces on the second floor in the eastern part of the House. It leads to a distribution area (30a Figure 12) which leads to two rooms. In the distribution area there is a ventilation opening (30b Figure 12) which belongs to a similar distribution area on the first floor (21a Figures 10, 11).

Distribution and Communication Areas on the First Floor

The first floor is reached either via the seat stairs or the secondary yard stairs. Both lead to the distribution area where movement branches out both to the left and the right, to reach the spaces on the first floor. What is meant here by the distribution and movement area is the space that has no separate and autonomous function, except to connect the various spaces of the House. There are areas which clearly serve this function on this floor, such as



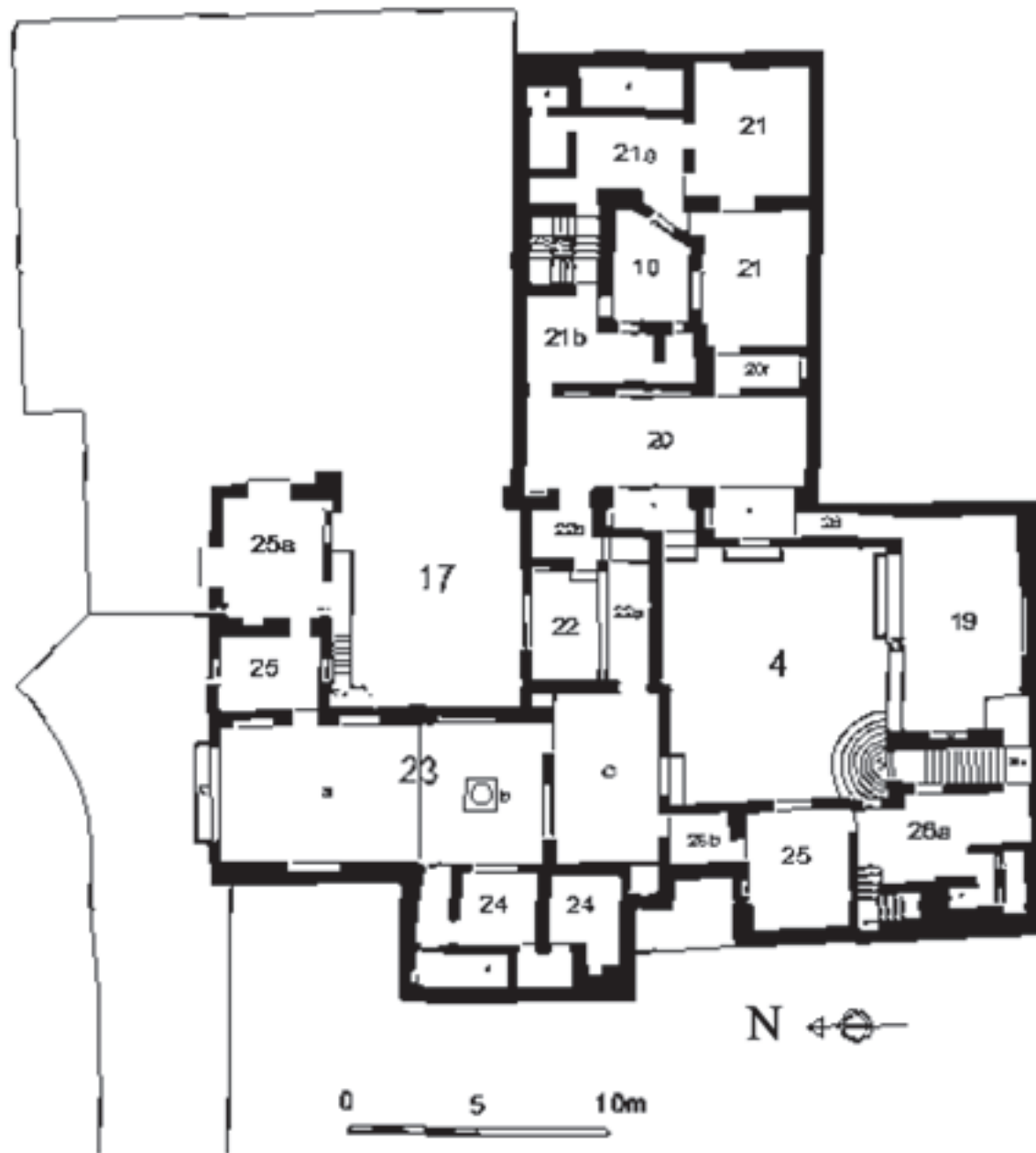


Figure (10): al-Sinnari House. A horizontal cross-section of the first floor (by the researcher)



Figure (11): al-Sinnari House. A horizontal cross-section of the first floor illustrating the movement and communication system (by the researcher)

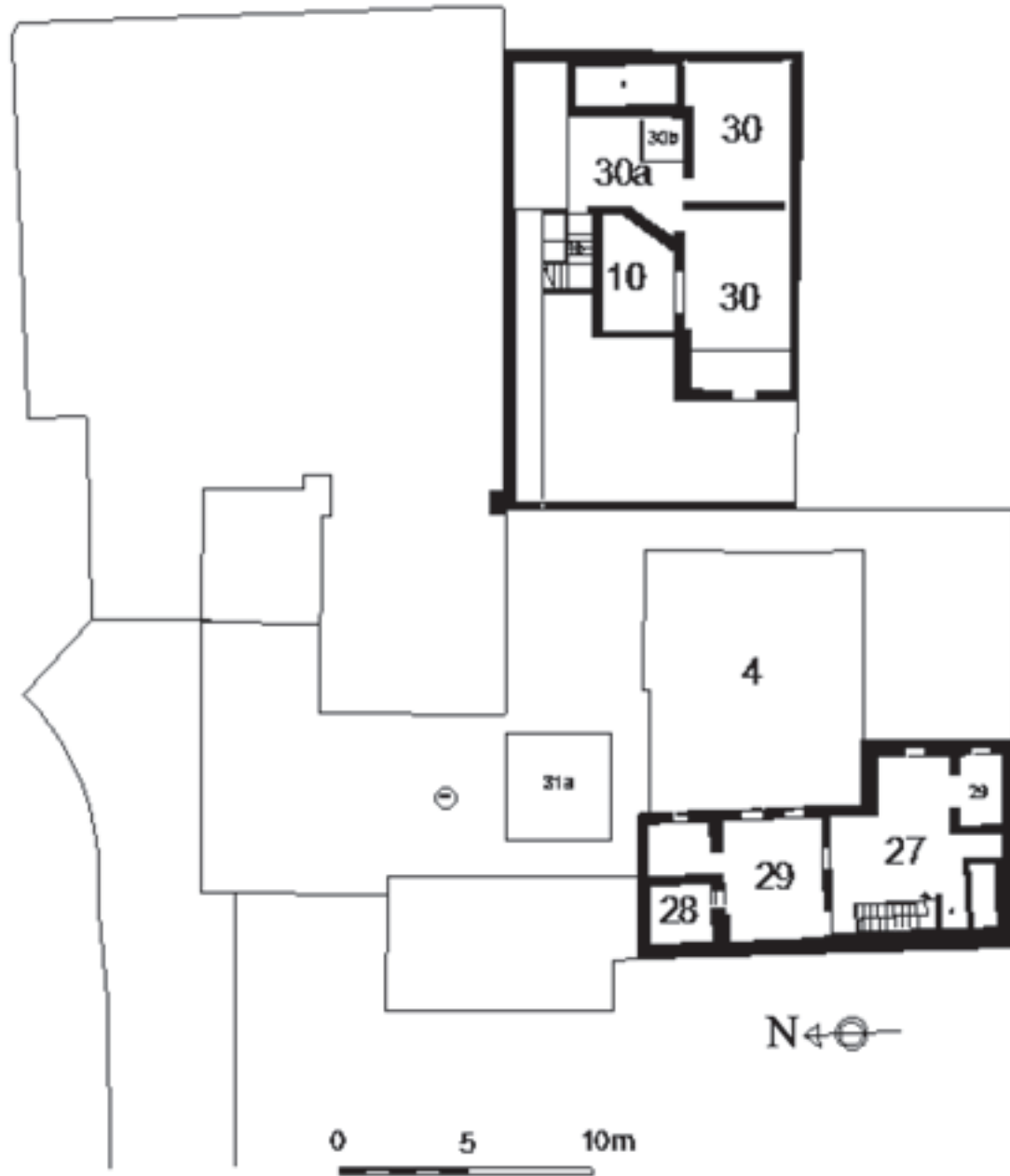


Figure (12). al-Sinnari House. A horizontal cross-section of the second floor (by the researcher).

the spaces 26, 26a, 26d, 21a (Figures 10, 11). Space 26 (Figure 11) represents a narrow passageway that connects the seat and the Harem, while 26a (Figure 11) represents a distribution area where the stairs lead to the spaces on the second floor, and to the other spaces of the House in this section, most important of which is the Salamlek, by crossing intermediate spaces. It is faced with the same functional role in the eastern section of the House (the Harem and the living area) space 26c (Figure 11). There are other spaces as well which serve this function, namely of movement and communication between the parts of the House, in addition to their main function, such as spaces 20, 21a, and 23c (Figure 11). The walls of these halls and rooms contain doors that link the movement between the surrounding spaces. There is a third set of architectural spaces that indirectly connect the parts of the House, indeed at times in ways incomprehensible architecturally. These are referred to in Islamic architecture as secret doors. These doors take the form of cupboards, shelves or closed doors, and are used for the private movement of the master or owner of the House to move between the hall for receiving men (the Salamlek) and the Harem. They are also used for as an escape route when needed, 22, 22a, 22r (Figure 11), since these spaces represent a communication area between the two House halls.

Distribution and Communication Areas on Second Floor

These are limited to the areas where the stairs leading to the second floor terminate. They are merely direct distribution areas that lead to the living rooms on that floor (27, 32 Figure 12).

2. The Services Area Section

Al-Sinnari House is rich in most types and forms of services areas known in the Mamelouk and Ottoman houses alike. The House, thus, contains a bathroom in its full architectural form and rooms, restrooms (seats), a Mizarah, a kitchen with all its component elements, stables and various storerooms (storage areas). There used to also be a fully equipped mill. The availability of these services areas, such as stables, mills, equipped kitchens,



(Picture 33) The secondary yard

storerooms, bathrooms and various sources of water (Mizarah), as well as the rest-seat, clearly illustrate that the House belonged to a rich owner and falls into the category of palaces and mansions.

The services areas are mainly located on the ground floor, and they are usually near the entrances and the yards, with the exception of the bathroom and the rest-seat; these are located on the first floor, where there are the family and private life areas of the house-owners. This is due to the greater functional connection between them. We will review the services areas in accordance with the order of reaching them as one walks in through the main entrance.

The Stables⁸⁵ (3 Figure 5): It can be reached from the entrance corridor where the only door is. It is rectangular in shape (*ca.* 8.7 × 5.4 m). In the middle of the stables, there is a cross-shape, each arm of which is based on an arch, and the other end is based on the facing wall. It divides the stable into four almost equal sections, which are covered by intersecting vaults (picture 34). The stables overlook the entrance corridor through two windows covered by wooden grills (pictures 17, 18). The legitimate deed of the House indicates the present location of the stables, describing them as “a large stable that is roofed with raw wood⁸⁶ with a horse manger⁸⁷”.⁸⁸

The absence of a separate entrance to the stables is one of the drawbacks in the design of the House, though it may be attributed to the fact that there was only one main entrance to the House at the time of construction, due to the presence of only one façade. There is



(Picture 34) The interior of the stables

no side or second façade that would have allowed the presence of a separate entrance to the stables and the services facilities in general. The location of the stables, also, raises queries concerning the degree to which it adapts to the design of the House, as it overlooks the main entrance corridor and is near the main yard. This requires constant and incessant care to avoid the spread of unpleasant odors emitted by the stables.

The Mill⁸⁹: The mill represents a storeroom of two consecutive but connected areas, as stated in the Endowment deed which also located its place in the House (number 8, Figure 5). The deed also states that the mill was of a small type known as “Fard Farsi” which was fully equipped and operational. Unfortunately, the mill disappeared. In the light of the remaining contemporary monuments (such as the mill of the House of al-Hawari), it is possible to identify its component parts. It most probably was located in the middle of the storeroom (number 8a, Figure 5), and consisted of a grinder to grind the grains needed for the household. The storeroom was connected to it (number 8b, Figure 5) and was usually used to store the grains that had not been ground yet. The mill is very close to the stables (number 3, Figure 5) to supply the latter as well with ground grains for the horses in the stables.

Mizarah⁹⁰: It is the place from which the people in the House were supplied with the necessary drinking water. It is the most widespread element in the House, regardless of the architectural formation, for its existence in the House has been mentioned in about five places in the legitimate deed. It also occurs once in connection with an architectural description of the Mizarah in the main yard towards the Takhtaboush on the eastern side. It forms an arched entry with lobules delineating a *juft la'eb* with hexagonal Memat (picture 35, Figure 8). In this entry a water container (*a zeer*) made of pottery was placed to preserve the cool temperature and purity of the water. The entry is covered with a hollowed wooden



(Picture 35) The Mizarah in the eastern corner of the main yard



(Picture 36) A water basin in one of the services areas that opens onto the secondary yard

screen, “a Mizarah with a shade made of pure wood by an etcher”⁹¹, to keep it constantly shaded.

The Kitchen (numbers 11, 12, Figure 5): The kitchen is the central point of daily service activity, such as the preparation and cooking of food, as well as washing. We, thus, find that the kitchen at the center of the services and living section (numbers 11, 12, Figure 5). It opens onto the services yard. The kitchen is supplied with a large skyward opening to get rid of smoke (number 11, Figure 5); the document states that the kitchen was equipped with braziers and an ascending chimney. The braziers consisted of a number of stones that formed the props. They represent a hollowed base above which an iron grid was placed. The fire was kindled in the space under the grid, and the pots were placed above it. It was placed in the direction of the opening prepared to get rid of the smoke. There is a second kitchen (number 12, Figure 5) that opens onto the services yard (number 10, Figure 5) with a wide tendoned arch. Adjacent to this kitchen are supplementary services spaces, such as a water well “Mizarah” (picture 36, number 12b, Figure 5). This indicates that this part was usually used for washing pots and plates. A rest-seat completes the area (number 10d, Figure 5) to serve the staff and those living in the services section, as well as a means to dispose of organic waste. The kitchen is surrounded by a number of storerooms to keep and preserve the kitchen utensils, such as copper pots.

The Bathroom and Rest-Seats⁹²: The House contained, like all mansions and palaces, a bathroom in its architectural structure, in addition to a number of rest-seats to serve the people living in the house. The bathroom (number 24, Figure 10) was annexed to



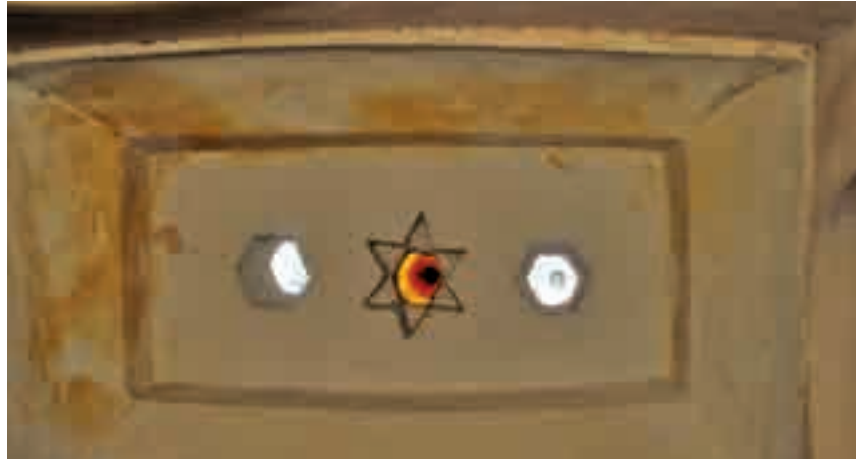
(Picture 37) The bathroom annexed to the grand hall, the bathroom door from inside the derkah

the grand hall (number 23, Figure 10), in contemporary houses the bathroom is always close to the grand hall (the Salamlek), as we can see in the Houses of Jamal al-Din al-Dahabi, Zainab Khatoun, and al-Suhaimi. The bathroom was reached through a door in the Derkah (picture 37, 33b Figure 10), as indicated in the document of the House: “It—meaning the Derkah of the grand hall—also included a door that led into a corridor which led to two doors from which one could enter/the rest-seat and from the second the bathroom which had a *beit awal* with



(Picture 38) The bathroom annexed to the grand hall, a screen made of etched wood overlooking the derkah of the grand hall

a window overlooking/the above-mentioned Derkah (picture 38) and harara with a marble basin on which is installed/copper studs, the ceiling of which was arched with skill/and with glass medallions”⁹³.



(Picture 39) The bathroom annexed to the grand hall, a covering of the bathroom spaces from the inside

The first part (or *beit*) is the *Maslaj*, which is a square-shaped room, each side of which is 3 m long. It is furnished with marble and covered with a low dome made of perforated plaster and stained glass (*Madawi*) (pictures 39, 40). This section leads to the transfer chamber, which in turn transfers us to the *Beit al-Harara*. This section represents the *Maslaj* room architecturally. There is also the restroom (the *privy*) on the north western side of the *Harara*.

There is a second small bathroom in the family section or the *Harem* as indicated in the document: “on the landing of/the mentioned harem door stairs to the left is a staircase by which one ascends to the door that leads to the hall/at the beginning of which is the *Mizarah* and a small bathroom inside which is the *rest-seat*”⁹⁴.



(Picture 40) The bathroom annexed to the grand hall, a covering of the bathroom spaces from the inside

The bathroom here means the washroom, annexed to which is the *rest-seat*.

In the House, there are six areas of “*rest-seats*”⁹⁵ or *pivy* (*kaneef*)⁹⁶: three on the ground floor, and the same on the first floor, distributed so as to cover the whole area of the House and serve the inhabitants with ease. These spaces are covered with domes and have small upper windows (pictures 41, 42). They are in the corners and close to the courtyards, or open-air areas. They are reached indirectly for reasons related to privacy and prudence. They are also always associated with the presence of a water source (a well, or a



(Picture 41) Services areas, the rest-seat in the western corner of the secondary yard, appearing with the narrow upper window in it



(Picture 42) Services areas, one ceiling of the rest-seat in the Harem section, with the narrow upper window in it appearing

Mizarah) nearby to provide water. The document states that there is “a well near which there is a rest-seat”⁹⁷, “a room and two rest/seats and a Mizarah”⁹⁸, “a door through which a hall is entered/at the front of which is a Mizarah and a small bathroom with a rest-seat”⁹⁹.

The rest-seats are aired via upper openings connected to skyward open-air areas, which was the preferred style in many contemporary houses¹⁰⁰. The rest-seats are entirely made up of stones to ensure necessary weatherproofing.

Storerooms: There are a number of storerooms distributed throughout the ground floor, used mainly to store supplies and the household needs, especially food items that can be stored for long periods of time, such as Egyptian ghee, oil, honey, dried *molokheya*, and grains such as fowl (fava beans) and wheat. These storerooms were of different sizes, and mostly covered in kedan tiles, while the roof was rafts of palm trunks. These are known in documents as ghasheem (raw wood) ceilings (2, 13, 14 Figure 5).

3. Reception Areas

It is a group of areas (or architectural spaces) used mainly for reception and hospitality purposes. They do not fall into a separate architectural section, but are rather distributed across the House. Yet they are clearly present, dominating the general scenery of the House. They are concentrated on the first floor and the major part of the first floor area, with the exception of the Takhtaboush which represents a movable reception space. The services areas, on the other hand, are concentrated on the ground floor, while the living spaces are on the second floor. The reception areas have certain features in common, such as overlooking the main yard or the outside through large areas via arcades or Mashrabeyas; they



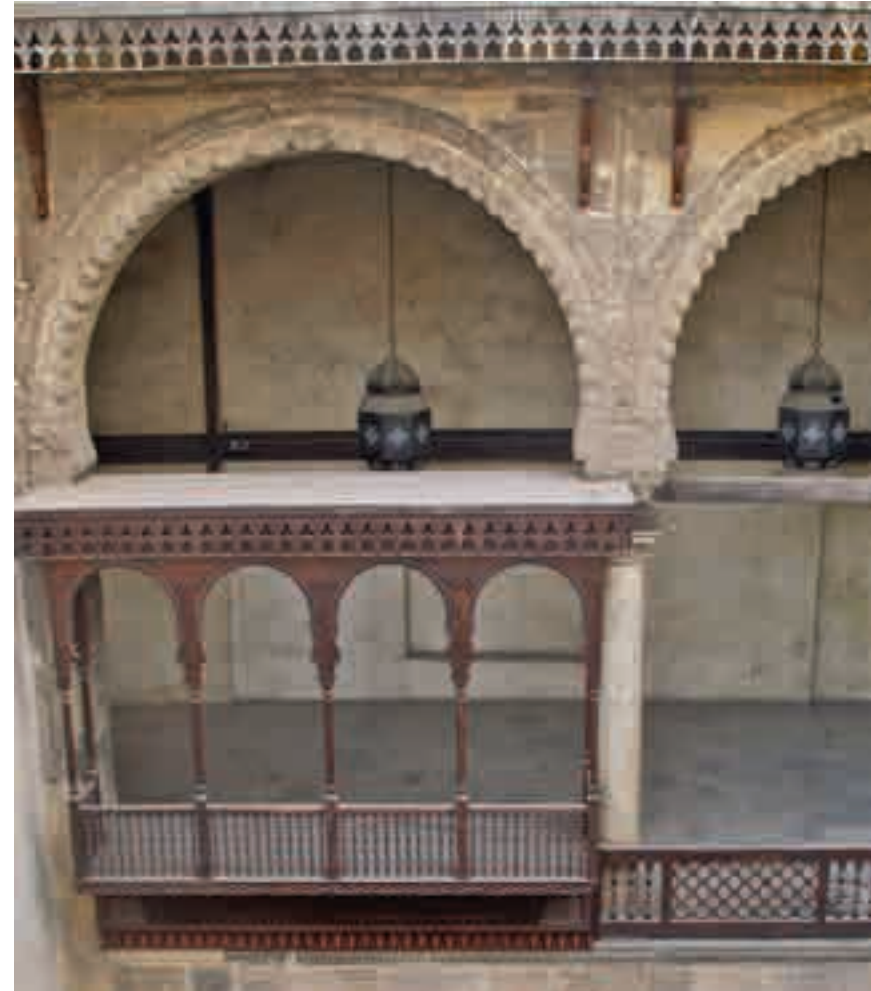
(Picture 43) Reception areas, the takhtaboush ceiling

are all of large areas and two storeys high; and they all received much attention as well as architectural and decorative wealth. The reception areas also contained complementary architectural units or they were connected to cupboards, storage, niches, incense burners, shelves, and Mashrabeyas. In themselves, they are movement connectors among each other.

Takhtaboush: (pictures 28-43, 6 Figure 5) It is the intermediate reception space located on the ground floor to the south western side of the yard. It is used to receive the guests of the House, be they the elderly or those who do not want to climb the stairs for any reason. It may be used for the visits of close relatives or those who are used to visiting the House due to the ease of reaching it. It may be said that it was the unofficial reception area. The document states the current location of the Takhtaboush and calls it the “tashtakhanah”. It is described in the document as “the tashtakhanah in the middle of which is a column of/white transparent marble the floors of which are covered in white transparent marble/and in it are benches of pure wood and two cupboards”¹⁰¹.

The Takhtaboush is rectangular shaped (8 × 4.7 m). Through its entire width it opens onto the main yard, with the presence of the white marble column in the middle of its façade. The ceiling has been decorated with wooden boards made of square- and rectangular-shaped geometrical forms and rosettes (picture 43).

The Seat¹⁰² (pictures 23-44, 31–50, 19 Figure 10): It is the first reception space that can be reached from the main yard after the



(Picture 44) Reception areas, the seat



(Picture 45) Reception areas, the seat, the seat stairs landing leading on the left to the seat



(Picture 46) Reception areas, the seat from the inside, the western section, at the center of the wall of which is a niche with marble

Takhtaboush, and is an intermediate reception area. It is reached through a staircase adjacent to the Takhtaboush in the main yard, via an entrance block that reflects the wealth and value of the spaces leading to it. The above-mentioned stairs lead to a landing (26d Figure 10), from which two doors branch out (pictures 45, 46), the left of which leads to the seat. The document states that to reach the seat from the entrance block in the yard: “One enters the seat/



(Picture 47) Reception areas, the seat from the inside, the eastern section, at the center of the wall of which is a shelf (a wooden cupboard)

door mentioned above to the stairs climbing up to the landing on which/left hand side there is a western square door that is entered to reach the seat with two partitions in the midst of which is/a column made of white transparent marble and a roushen¹⁰³ made of pure wood/with arches and etched columns and a small cabinet and two cupboards made of pure/wood¹⁰⁴.



(Picture 48) Reception areas, the seat from the inside, the opening of one of the arches, decorated with a wooden relief roushen



(Picture 49) Reception areas, the seat from the inside, the protruding wooden roushen overlooking the main yard

The seat is rectangular-shaped (8.5×5 m), and overlooks the yard through a partition of two horseshoe-shaped arches carried on round marble columns (pictures 44, 47–49). The first arch overlooks the entrance from below through a wooden screen made of etched wood; while the second arch includes a protruding roushen. The screen and the roushen have been repaired and reinstalled during renovation works in accordance with what the above-mentioned document states, and with the help of the pictures in *Description*



(Picture 50) Reception areas, the seat from the inside, a long passageway connecting the seat and the Haramlek hall from the side of the seat

de l’Egypte. Together with the seat entrance, the middle of the surrounding sides forms two parietal niches that were used as two cupboards (picture 47) as mentioned in the document, “and two cupboards made of pure wood”. In the eastern corner of the seat there is a door opening that leads to a rectangular (1 × 4 m) passageway (picture 50, 26 Figure 10), which links the seat and the Haramlek (20 Figure 10).



(Picture 51) Reception areas, the Harem hall, the eastern wall in the middle of which is a large wooden cupboard (the derkah)



(Picture 52) Reception areas, the Harem hall, the wooden cupboard in the middle of the inner wall



(Picture 53) Reception areas, the Harem hall, the interior, the side towards the yard (left of the picture)



(Picture 54) Reception areas, the Harem hall, the sudla west of the derkah overlooking the yard through a Mashrabeya



(Picture 55) Reception areas, the Harem hall, the south western iwan, decorated on the side of the yard with a sudla in its southern corner of the door that leads to the seat

The Harem Hall¹⁰⁵ (or the Small Hall or the Haramlek): (20 Figure 10) The Hall represents the most important reception space in the House and the most decorated and attended to. Usually marble is used to cover its floors and its marble fountain, if available, in addition to good wood, painted and decorated, used for doors, cupboards and the ceiling. This Hall is known as the Harem Hall and it is mainly reached via the interior of the family and private



(Picture 56) Reception areas, the Harem hall, the sudla of the south western iwan, with the door (left of the picture) leading to the seat

section, the “Harem”. It is not the main hall for the reception of guests (nor the grand hall). The term Haramlek was not commonly used in Egypt in reference to the family and living section. Instead, words such as “*bab el-Harem*”¹⁰⁶ and “*masaken el-Harem*”¹⁰⁷ were used, as reported in the endowment document of the House under discussion. The Document itself used in reference to this hall the term “semi-Egyptian hall with two curtains which had two windows that



(Picture 58) Reception areas, the Harem hall, from inside the sudla of the south western iwan and its Mashrabeya overlooking the yards and the seat. The sudla is followed by the door of the passageway that leads to the seat from the side of the hall

(Picture 57) Reception areas, the Harem hall, from the inside of the sleeping cabinet annexed to the hall towards the sudla of the south western iwan where the door leads to the seat



(Picture 59) Reception areas, the Harem hall, from inside the south western iwan where the door to the sleeping cabinet annexed to the hall is. The door opening leads to the sleeping cabinet, which in turn leads to the rest of the family and private life areas, the “Harem”



(Picture 60) Reception areas, the Harem hall, from inside the sudla of the south western iwan and its Mashrabeya overlooking the yard, the seat and the takhtaboush



(Picture 61) Reception areas, the Harem hall, the two sudlas overlooking the internal yard through two Mashrabeyas

overlooked/the mentioned yard and a sleeping cabinet”¹⁰⁸. The term “semi-Egyptian hall” is a rare documentary term which raises many questions relating to its signification! For the hall is traditional and of common design in Cairene residential architecture, as it consists of a central *derkah*¹⁰⁹ and two *iwans*.

The Rectangular Hall (ca. 3.5 × 11.5 m), consists of a central *derkah* and two *iwans*¹¹⁰. The floor of the central *derkah*

(3.5 × 3.9 m) is currently on the same level as the floors of the two *iwans*¹¹¹, though usually the floors of the *derkah* are lower than those of the *iwans*. At the center of the inner wall of the *derkah* is a recessed wall-cupboard (picture 45), opposite to which is a deep *sudla*¹¹² (about 3 m wide and 2 m deep), which overlooks the *derkah* through a pair of wooden *karadi*¹¹³ that hold between them a passage. Each *karadi* ends with a long falling tail with stalactites, a date and niche (*khwarnaq*)¹¹⁴. The *sudla* overlooks the main yard through a *Mashrabeya* made of etched wood.

The south western *iwan* is rectangular-shaped (4.7 × 3.5 m). Its side, towards the yard, is occupied by a *sudla* similar to its counterpart in the above-mentioned *Derkah*. On the south western side of the *iwan sudla* there is the passageway door that leads to the seat. The *sudla* faces on the opposite side a door opening that leads into the sleeping cabinet, which in turn leads to the other family and private areas, the Harem.

The opposite *iwan* is the north eastern, and is of the same size as the *Derkah*. In the internal *iwan* side there is a recess, next to which is a door that leads to the stairs and the spaces of the Harem. In the opposite side, towards the main yard, there is a door-recess that leads to a hall, with two doors. The first leads to the landing, and the second leads to the corridor that leads to the grand hall, or the *Salamlek* hall.

The Grand Hall (or the Salamlek Hall): It is the main reception hall in the House (23 Figure 10), and can be considered the most



(Picture 63) The secret door (the passageway) that connects the Harem hall and the grand hall from the side of the Harem hall

(Picture 62) Reception areas, the Harem hall, from the door by the Harem stairs towards the secret door that connects it to the grand hall via a passageway which also shifts the floor level, for the floors of the grand hall are about 50 cm higher



(Picture 64) The area facing the seat (reached via the seat stairs landing to the right) which leads to the grand hall. It has the stairs that lead to the residential rooms on the second floor on this side



(Picture 65) The secret door (passageway) that links the Harem hall and the grand hall from the side of the area in front of the grand hall

important space in the House, both architecturally and decoration-wise. It is mentioned in the endowment document that this hall was called the “grand hall” to indicate that it is the main reception hall in the House. The term “Salamlek” means the reception section, and though it may not have been used in the Cairene architecture during the Ottoman Era, it became common in modern studies. This may be attributed to the absence of an equivalent term in Egyptian architecture to indicate the total reception spaces inside the house. The term was restricted to the reference to the architectural space itself, such as the hall, the seat, the Takhtaboush, etc.

The hall was described in the document as follows:

In the above-mentioned area there is a square door closed with one door manufactured/beside which is cupboard and through the mentioned door one enters the grand hall which included/one iwan and derkah, the floors of which were covered in marble with a fountain/made of marble and a spout with an etched window overlooking the mentioned area/and there, too, was a door that leads into a corridor through which one reached two doors, one leading/to the rest seat and through the second to the bathroom where there was a beit awal with a window overlooking/the mentioned derkah and a harara with a basin made of marble adorned with/copper studs the ceiling of which was arched skillfully/with stained glass and in the iwan of the mentioned hall



(Picture 66) The area in front of the grand hall. In the right corner of the picture is the Mashrabeya that overlooks the inner yard

there was a sleeping cabinet/at the front of which is a large roushen overlooking the mentioned bend completing the mentioned/hall with cupboards, niches and shelves”¹¹⁵

The hall is rectangular in shape (*ca.* 14 × 5 m), and consists of a derkah and one large iwan. Annexed to the hall are a bathroom and a sleeping cabinet, in addition to a corridor—which the document referred to as the area—which comes before the hall on the side of the main yard. The hall is reached through the above-mentioned



(Picture 67) The area in front of the grand hall, the entrance to the grand hall and the window covered with a screen of etched wood overlooking the derkah of the grand hall



(Picture 68) From one of the Mashrabeya openings: the area in front of the grand hall that overlooks the inner yard, revealing the yard, the seat and the takhtaboush



(Picture 69) The area in front of the grand hall. The window covered with a screen of etched wood overlooks the derkah of the grand hall

corridor, which (23c Figure 10) is rectangular shaped (*ca.* 4×7 m) in which the movement of the ground floor flowing in from the seat stairs (picture 64) and the Harem and private life section via the Harem hall (picture 65, 23 Figure 10). Movement pours into this corridor from the western and southern angles respectively. Some studies consider it the south western iwan of the hall, as it is connected to the yard via a Mashrabeya made of etched wood (pictures 66–68), and connected to the middle hall via a large window covered with a screen made of etched wood (picture 69). Thus, the person standing there is able to follow and watch what is going on in the hall and in the yard alike. The document states that the hall floors were covered with marble, above which is a skylight¹¹⁶ made of pure wood (*bazahanj*)¹¹⁷ (picture 70, Figure 8). It is a large area, and opens northwards to receive the cool breeze, which helps in ventilation. In the southern corner of the corridor is the “secret door”¹¹⁸, which, as the document states, leads to the corridor, which in turn takes us to the Harem hall (pictures 63, 65).

The Hall: The grand hall, with its annexes—the bathroom, the sleeping cabinet—represents a semi-autonomous architectural unit. It is possible to live in it without contact to the other parts of the house. It, thus, serves more effectively for the reception of guests or visitors who may prolong their stay.

Architecturally, the hall consists of the derkah (22a Figure 10), which is rectangular-shaped (6×5 m). Its floors are lower than those of the iwan by 30 cm, and at the center there is a marble fountain (picture 71). The iwan overlooks the derkah via a pair of karadi (picture 71). The ceiling is of pure gilded and colored wood. In the middle of the ceiling, there is an octagonal *shoukhsheikha*,



(Picture 70) The wooden ventilation daylight that covers the area in front of the grand hall

based on skillfully manufactured wooden stalactites (picture 72). In the eight sides of the *shoukhsheikha*, windows have been opened to help in lighting and ventilation. Together with the daylight it completes the renewal of air in the hall. In the south eastern side of the *derkah*, there is a recess, the lower part of which (*ca.* up to one meter high) is occupied by a marble arcade made of four-lobed



(Picture 71) The grand hall, the *derkah*, the pair of wooden *karadi* holding between them the passage, separating the ceilings of the *derkah* and the *iwan*

arches. The arcade is carried by three columns that can be used to hold lamps and other needs used in the hall (pictures 73, 74).

On the opposite side is the bathroom annexed to the hall, with a door in the northern corner of the *derkah* (picture 75). The *derkah* is overlooked by a large window covered with an etched wood screen (pictures 37, 38).



(Picture 72) The grand hall, the derkah, the octagonal shoukhsheikha that is in the middle of the wooden ceiling of the derkah. It is based on skillfully made wooden stalactites

The north eastern iwan (picture 76) is the only iwan in this hall. It is rectangular (8.5 × 5 m) and overlooks the derkah via a pair of wooden karadi that hold between them a passage. At the front of the hall is a large roushen (Mashrabeya) made of etched wood (ca. 4.5 m high × 4 m wide × one meter deep) along about the full width of the hall. It overlooks the iwan via a pair of wooden



(Picture 73) The grand hall, the derkah, the fountain in the middle of the derkah, with a mural niche in the middle of the inner wall, below which is a marble arcade of four arches used to place lamps and the various needs of the hall

karadi that hold between them a passage (picture 76), and overlooks the outside (picture 77), i.e. the Alley of Monge where the main entrance to the House is. The two sides of the iwan are furnished with cupboards, niches and shelves as stated in the document. At the center of the south eastern side are two identical recesses with a door in-between. The two recesses represent two wall-



(Picture 74) The grand hall, the derkah, details of the marble arcade arches in the previous picture



(Picture 75) The grand hall, the derkah, from inside the bathroom annexed to the hall



(Picture 76) The grand hall, the iwān, and at its front is the large Mashrabeya overlooking the outside. In the inner wall, there are two wooden cupboards, in between which there is the door to the sleeping cabinet annexed to the hall



(Picture 77) The grand hall, the iwān. Details of the large Mashrabeya that overlooks the outside



cupboards, while the door, though it seems to be a cabinet or shelf door, leads to the room annexed to the hall, used as a sleeping cabinet (25 Figure 10). Opposite this door, on the opposite side (north western) of the iwan, there is a wall-cupboard recess identical to the above-mentioned cupboards. This level of iwan walls is crowned with a protruding wooden cornice (picture 76).

The iwan ceiling (picture 78) is made of pure wood. It is rectangular and decorated, and the middle in turn is divided into a square area that represents the center of the ceiling. It is surrounded on both sides by a rectangular area that is also divided into squares. The middle area is hollowed into an octagonal shape, the sides of which take the form of semi-circles. The octagonal is decorated with a second inner octagonal via collective frames. The last octagonal is decorated with eight almond shapes to form a fan. The corners in the areas between the square and the outer octagonal are decorated with circles. The decorations of the small squares surrounding the central area are similar to those decorating the octagonal in the central area of the ceiling.

(Picture 78) The Grand Hall, the Hall's decorated wooden ceiling inside the *iwan* and towards the *derkah*; and a pair of wooden *karadi* bordering a passage that separates the ceilings of the *derkah* and the *iwan*

The Sleeping Cabinet (25 Figure 10): It is a small room (*ca.* 4 × 3 m) annexed to the iwan. Its ceiling is lower than that of the hall. It is used, as can be seen in its name, for sleeping. It is simple with hardly any decoration, and opens to the outward via two windows, the first overlooks the Alley of Monge, while the second faces the first and opens only onto the backyard of the House. Later, a door was opened in the wall facing the door to the room from inside the iwan to lead into a second newly introduced room (25a Figure 10), for which there is no trace in the Egyptian Campaign drawings. It is worth mentioning that in this latter room a second door was introduced that leads into the backyard via a newly introduced wooden staircase, the fact which made movement flow continuously (Figure 11) rather than terminate in the sleeping cabinet as was meant in the original design of the House (Figure 2A).

4. Family and Private Life Section (the Harem)

The Islamic aspects of family needs were reflected in the design of houses in Islamic architecture. One of the most prominent aspects of this reflection can be seen in the dedication of private areas for the family, which provided the inhabitants of the house with the space to lead their daily lives and move freely inside the house, with no hindrances. This architecture provided for privacy apart from the reception areas, and provided for rear passageways and corridors to enable the Harem, in particular, to reach all the places of the house without having to pass through the yard or the reception areas when guests were visiting the house. Nor were

they restricted to one path, for the architecture also provided for a continuous circular flow of movement, connecting the Harem hall with the rest of the places in the Harem section. In addition to the ease of movement, this architecture also achieved, through simple means, a visual connection between all the family places and the other parts of the house, by using Mashrabeyas in the Harem hall. These opened onto the inner yard, and allowed the women to observe what was happening in the yard and the seat (pictures 60, 68) without being seen by the eyes of the visiting strangers. The same communicativeness is achieved through a large window made of etched wood (picture 69), which enabled the Harem to undertake the same activity of observing and watching what was happening in the grand hall, similar to the concept in the musical seats¹¹⁹ that were established in Mamelouk and Ottoman palace halls, which allowed women to follow what was happening in the reception halls without being noticed. In general, all family areas were designed to look fully inwards with only few openings onto the outside. They indirectly overlooked the inner yard from where they derived light and air. All openings in these areas were covered with windows or etched wood Mashrabeyas, which served to screen vision from the outside inwardly, while providing air, light and shade. The provision of a second small yard ensured, in addition to privacy, both light and air in the inner places that were further away from the main yard. The majority of rooms in this section are of simple structure. The walls contain numerous recesses and wall-cupboards, used to keep luggage and the family's supplies and belongings. Each set of these rooms had a water source (mizarah) nearby, as well as a rest-seat, and sometimes even a small bathroom for washing.



(Picture 79) The living rooms on the second floor, accessed through the area to the right of the seat stairs landing. They are dedicated to house the Mamelouks as stated in the document



(Picture 80) The secondary yard stairs (the Harem door) that connects the rooms and the areas in the Harem section

The family places included rooms (named *Owad* in the document) for living and sleeping, mainly for the people of the house. There may also be some rooms for the servants, which were usually separated from the Harem section, in particular if they were intended for Mamelouk men, as is the case in this House according to the document. The spaces for the living area were concentrated in the side spaces of the first floor and exclusively occupied all the spaces on the second floor.

These spaces can be divided into two major sets. The first set lies towards the Salamlek on the second floor, and is reached via the seat stairs. The second set lies in the living area, distributed across the first and second floors, and is reached via the stairs of the secondary yard.

The first set is reached from right of the landing of the seat stairs, which leads to an area (picture 64, 26a Figure 10). It had a staircase that led to the living spaces on the second floor, where there was a skyward open-air area (picture 79, 27 Figure 12), leading into three rooms (29 Figure 12). These were dedicated for the Mamelouks. Beside these rooms is a rest-seat to serve the people living on this floor. Dedicating these rooms to the servants is suitable for their location among the main reception areas of the House where the seat and the grand hall were located. The document describes these spaces as follows:

“In the mentioned area/there is first a staircase by which one ascends to the skyward open-air area with three rooms/dedicated to the Mamelouks, and in the room to the



(Picture 81) The area around which the Harem rooms are distributed on the first floor. To the right of the picture, there is door to the secondary yard stairs. To the left of the picture, there can be seen the slope in the secondary yard wall on this side, intended to make space for the door to one of the rooms



(Picture 83) The area on the second floor in the Harem section, onto which two rooms open. The window of one appears: it overlooks the secondary yard

(Picture 82) The area around which the Harem rooms are distributed on the first floor, above which is the wooden ventilation skylight which is the source for fresh air



(Picture 84) The area on the second floor in the Harem section, onto which two rooms open. There is the ventilation skylight which receives the air for the area beneath it on the first floor

left there is a sleeping cabinet and in the mentioned/area there is a rest seat¹²⁰

The second and main set lies in the Harem section and includes a number of rooms on the first floor, reached via the stairs of the secondary yard (the Harem door). These stairs lead to the right into an area (pictures 80-81, 21a Figure 10), above which there is



(Picture 85) The second entrance introduced at the front of the Alley of Monge

a skylight made of wood (picture 82) for the renewal of air-flow in this section of the House. Two rooms open onto this area, in addition to the Mizarah and the rest-seat serving them. Through the above-mentioned stairs, the rest of the rooms on the second floor are reached, for they lead to the area onto which the rooms open (picture 83). In the area there is a skylight (picture 84), which





(Picture 86) The backyard to the House

receives the air for the area beneath it on the first floor. The rooms on the second floor are known in the documents by the terms “*qasr*” (palace), “*al qasr al latif*” (the gentle palace), or “*al tayara*”.

“On the landing of/the mentioned Harem door stairs to the left there are stairs by which one ascends to a door to enter the area/at the front of which is the Mizarah and a small bathroom inside which



(Picture 87) The buildings that occupy the south eastern and north eastern sides of the garden

is the rest-seat and there are also two adjacent/rooms and stairs by which one ascends to the roof with a door/by which one enters the Mizarah and the rest-seat and a second door by which one enters the room/and goes to a second roof with a *qasr latif* which has a window overlooking the area/by the Harem door which contains the mentioned original buckthorn and to the high/roof where there is a skylight made of pure wood.”¹²¹



(Picture 88) The garden of the house. The Harem section can be seen, as well as the newly introduced door which was let into the storeroom next to the Harem stairs to link it to the garden and the new buildings in it

The rooms of the second floor, towards the Harem section, were rebuilt in accordance with the Egyptian Campaign drawings published in *Description de l’Egypte*.



(Picture 89) The ceiling of the house. The large ventilation skylight and the dome to air the grand hall can be seen. To the left of the picture is the small wooden ventilation skylight used to air the rooms and areas in the Harem section

5. The Garden

The entrance to this section is new, and lies at the front of the Alley of Monge. It is above the ground-level of the Alley and the other parts of the House by about one meter (picture 85). This part of the House is the newest addition, and was, at the time of construction, just barren land. At a later time, about the middle of the 19th century, buildings were constructed in the garden, which date back to the time of the Egyptian Campaign, when the Campaign made use of

the House, as well as to a later time; the buildings, however, mostly collapsed. Some ruins are still present, and this part represents today a garden that occupies the north eastern part of the House.

The entrance to this section of the House leads to an almost rectangular-shaped open-air space (18a Figure 5, 7) on the same level as the heightened entrance level. To the left of the entrance in this area there is a small room (18b Figure 5). By the end of this area to the right there is a descending staircase that leads to the center of this section where there is the backyard of the House (pictures 86, 17 Figure 5) and the garden yard (18 Figure 5). The buildings exist in the south eastern and north eastern parts of the yard, elevated from the yard floors, they are on the same level as the entrance floors (picture 87). The buildings consisted of two floors and were preceded by a porch. The first floor buildings are completely destroyed, and the arcades that fronted them collapsed. However, ruins of their columns and some (18e Figure 5) of the bottoms of their arches still exist. The buildings present now are used as water closets (18d Figure 5), storage rooms (18c Figure 5) and security (18f Figure 5).

A door opening was introduced in the walls of the Harem section overlooking the garden yard in the part where there are the secondary yard stairs of the Harem section to reach this garden and its new buildings inside the House. During the latest renovation works, this door was blocked and replaced by the current door which opens onto the storeroom adjacent to the living and Harem stairs space

(Picture 90) A Mashrabeya in an old house in Cairo, very similar to the Mashrabeya above the entrance to al-Sinnari House



(picture 88, 13s Figure 7). This opening leads across the storeroom to the secondary yard of this section. This was done to achieve the best use of the garden area, and achieve best movement flow to establish communication between the spaces.


The places in this section (the garden) were used as ateliers, exhibition areas, workshops and storerooms during the various uses of the House, whether by the French or when the House was used as a center for historical artefacts during the 1960s of the twentieth century until about the end of the century. They were also used as workshops for women's arts.

Thermal Balance, Ventilation, Lighting and Water Movement

Thermal Balance and Ventilation: The design of the House, as part of the urban texture surrounding it, is based on the principles of old city planning, where compact planning separated architectural sets and included streets and narrow winding alleys. This ensured the protection of the outer façades of houses from the sunlight and dusty winds. The total surface area exposed to these climatic effects in each building would be minimized in comparison to the internal size of the house, thus reducing the amount of external heat moving into the house.¹²²

To achieve thermal balance and ventilation, as well as lighting, the House relied mainly upon the internal yards and the skyward open-air areas. The internal yard represents one of the most important¹²³ climatic solutions in the regions with dry hot climates, in addition to functioning as an axis for movement and communication.

The yard helps to ensure an internal miniature atmosphere that is temperature-wise comfortable, and resistant to the rough external climate which is usually hot and dry. This is achieved through the thermal regulation of the internal spaces of the House. The yard is thus the regulator of the temperature; depending on the automatic flow of air, cold air, being heavier than warm air, would move downwards during the night in the yard, making the yard and the spaces around it cool and humid into the late hours of the day¹²⁴. The yard also utilizes the phenomenon of re-radiating heat at night to cool the place, since all surfaces re-emit the heat acquired during the day, in addition to detaining the cold air during the night for the longest period possible during the day¹²⁵. The yard also plays a role in protecting from direct sunlight, while at the same time preserving natural cooling, on condition that its degree of containment is high¹²⁶. The internal yard also secures continuous automatic ventilation inside and outside the house, based on the same concept of automatic air flow from parts with high pressure (greater thermal balance), to parts with lower pressure (lesser thermal balance, hotter). Air moves from the internal yards in the houses across passageways and the entrances outside the houses, where the narrow streets are less shaded, and from hence to the sunny or little shaded urban spaces, thus securing continuous ventilation between the inside and the outside of the house, and renewing the air in the house¹²⁷. The yard, also, represents a storage for moisture and for warming at the same time, since the air in the yard is not affected by the outside air that passes above it, according to aerodynamic rules, which causes eddies without landing inside the yard. This can be tested using the smoke experiment.¹²⁸



Thus, the role of the yard can be summarized in securing and achieving thermal balance (or thermal comfort), as well as ameliorating and cooling the house spaces, achieving continuous automatic ventilation and natural lighting. It further protects from sandstorms, pollution, exposure and heat, noise, smoke and odors.

The role of the yard in achieving thermal balance and ventilation inside the house is complemented by windows and skylights for ventilation. Windows fall into three categories:

- 1) Windows (or Mashrabeyas) that open to the outside
- 2) Windows (or Mashrabeyas) that open to the inside
- 3) Windows at the top or in the ceiling, such as dome-windows, in addition to ventilation skylights. The design of the House is characterized with an openness to the inside that exceeds its openness to the outside. Hence, most window openings overlook the internal yards. The abundance of windows and their various levels and diverse dimensions helps in completing the cycle of airflow and thus achieving a greater amount of ventilation. In the design of windows, the neighbor's rights are also taken into consideration so that the windows would not infringe upon the privacy of any other house.

The ventilation skylights (or the bazahanj) distinguish Cairene houses as can be seen in the pictures by travelers visiting Cairo, as well as the pictures by the Egyptian Campaign, and others, which

are witness to the widespread use of ventilation skylights in the houses of Cairo. These are a pyramid-shaped opening made of wood towards the north to receive the moist cool breeze with the intention of cooling the area beneath the skylight. The skylight opens towards the north through openings that were similar to niches and occur in a number of rows. The skylight could be opened or closed as needed, during renovation works the skylight and grand hall dome openings were closed with glass panes, for it would be closed during cold weather, especially in winter. In the House, there are two ventilation skylights (picture 89): a large one above the area in front of the grand hall, to distribute cool air into the grand hall and the other surrounding spaces, as well as to complete the renewal of the air-flow cycle. It functioned together with the hall dome and the Mashrabeya beneath the skylight which overlooks the internal yard. The second skylight is above the distribution area at the center of the living room in the Harem section on the first floor, which reflects its role in distributing cool air into these rooms.

The thermal balance and better ventilation of the House is completed through the design and orientation of the halls and different architectural spaces. The high ceilings of the reception spaces in particular allow hot air to rise, and be replaced by cool air. The living rooms and bedrooms, on the other hand, have low ceilings, which allows these rooms to retain their temperature. The best example of this is the grand hall, the ceiling of which is high, with great Mashrabeyas, a fountain, and a dome. This secures excellent cooling and ventilation of the hall. In contrast,

the sleeping cabinet, annexed to the hall, has a low ceiling and a small area which makes it retain adequate temperatures qualifying it for easy heating. The orientation of the open spaces is directed northwards, as in the seat and the takhtaboush, to receive cool air. Thus, the elements achieving thermal balance and ventilation in the House are complete. They are aided by the wooden flap crowning this block used to shade the seat and keep it ready for reception at all times.

Lighting: Natural lighting abounds in the House all day long, from sunrise to sunset, through the internal skyward open-air yards, and windows of all three above-mentioned kinds. Yet, the yards play the main role in this. In the evening, when night falls, lanterns are lit in the yards. Movement and life are concentrated in certain rooms, such as the living room, where chandeliers, lamps and candles are used for lighting as needed.

Water Movement: The movement of water is based on two points: the first is to provide the house with water; and second getting rid of the sewage and wastewater. The main water point for the buildings in general is supplied with water through either a waterwheel that pushes water up from a main source of flowing water connected to the Nile or one of its branches, through a water well¹²⁹, or through the filling up of a water storage¹³⁰, a main water basin that always existed next to the main water source to distribute water to all the different parts of the house. It is usually covered on the inside with plaster and insulation material¹³¹ or with marble—by a water-carrier or someone else. The main water point was usually located in the main yard or closeby.

The main water point in al-Sinnari House, according to the document, is the spring well (a well whose water exists all year round). The well (the main water source) is located in the services area in the western corner of the main yard of the House (7a Figure 5) near the entrance corridor, as stated by the document:

“... the corridor/through which the large skyward open-air yard is reached has to the right a door through which one enters to/a spring well next to which is the rest seat next to which are stairs by which one ascends to/the bathroom furnace in the harem and to the water storage”¹³²

Water movement on the ground floor: The water is distributed from the above-mentioned main water point to the opposite side of the yard where the water storage (basin) is (13a Figure 5), which is connected to the Harem facilities, where the kitchen and rest-seat are located. The document describes this in rare details:

“The mentioned tashtakhanah/Mizarah has a shisha (flap) of pure wood made by an etcher next to which is the storage/and inside it is the water basin connected to the harem facilities and next to the mentioned storage/door is the harem door”¹³³

The Mizarah in the yard is, of course, supplied with water from the water storage itself. It is worth noting that the water is moved from the main point where the well is to the water storage near the Harem door leading into the kitchen via absent (buried) reeds¹³⁴ (pipes), and passing through the fountain in the middle of the yard to supply it with water.

The water would be distributed from the water basin in the direction of the Harem facilities to the kitchen, the laundry area and others, and the pot-in-pots would be filled. The movement of fresh water would usually terminate by passing through the rest-seat for cleanliness. The excess, carrying wastes, would be driven out via unseen pipes which all poured into ditches (*kahareez* or sewage), built with mortar and insulation material, which are regularly swept.

The water reaches the ground floor from the main water point in the House mentioned above to the water storage above on the first floor as stated by the document¹³⁵. From this storage (water basin) the water is distributed. It is moved to the *derkah* fountain in the grand hall, and supplies the pot-in-pots with the necessary water. The water then moves to the bathroom and the rest-seat, then to the sewage, in accordance with the same mechanism explained above for the ground floor.

An Idea about Life inside the House

The tools available to discuss life inside a Cairene house during the Ottoman era, to which al-Sinnari House belongs, are mainly represented in the physical remains of the elements of architecture in the first place, in addition to the many contemporary artefacts that had been found in these historical houses, or were mentioned in documents and sources, or recorded in travellers' drawings, such



A drawing by a traveler depicting the daily life inside a Cairene house

as furnishings, clothes, wooden boxes, pots, chandeliers, etc. The conjecture of the lifestyle adopted within these houses at the time is completed by documents and court records, as well as excerpts in the books of contemporary historians, most notable al-Jabarti. In addition to these, the pictures of travelers are rich in depicting the daily life in some Cairene houses.

No doubt the lifestyle in palaces and mansions differed from that in moderate or traditional homes. The lifestyle in a house occupied by one family also differed from the style of life when more than one family lived in the same house. The House under discussion here is a model of a mansion with varied and diverse architectural areas and spaces, means for resting, and facilities for conducting daily chores to make life more comfortable.

We can imagine that Prince Ibrahim Katkhuda al-Sinnari lived in his House that we see today, after spending great sums of money on it as reported by al-Jabarti, having at times himself contributed to the design of its structure. With him lived in the House his owned Mamelouks, concubines, and servants. Prince Ibrahim Katkhuda al-Sinnari, as a statesman at the time, would arrive home in a procession. A Mamelouk would take his horse to the stables, where it would be cared for with fodder, water and cleanliness. The Prince would walk into the main yard of the House, take off his weapon, and rest for a while in the *Diwankhanah*

A drawing by a traveler depicting the daily life inside a Cairene house



(the takhtaboush or tashtakhana) to observe and conduct business, either relevant to the household or to public affairs.

During the morning, whether the Prince was at home to receive the princes and nobles, or to conduct his duties, such as writing correspondences, or whether he was outside, we can imagine the house to be a beehive operating quietly and regularly. The servants would carry out the daily cleaning chores, such as sweeping, washing, cleansing; while another group of servants would grind the grains and store them in the prepared storerooms. A third group of servants would be shopping for the various household needs, in particular food; while a fourth group would be working on preparing the food for cooking in addition to the actual cooking. It is only natural that the House of the Prince would witness a daily process of cooking great amounts of meat and vegetables, for there would be receptions of numerous statesmen and visitors, not to mention the parties and feasts. Another group of Mamelouks would be in charge of guarding the House, tending to the horses and supervising the order and movement in the house.

Among the main scenes of the Prince's life inside his House is the scene of dining and eating fruits, the scene of smoking the *hookah*, the scene of celebrations and nightlife, and the scene of conducting business, as well as scenes of the private life. The House's architectural spaces which witnessed these scenes are the takhtaboush on the ground floor, the seat, and the two halls on the first floor. The place would change according to the time and the

A drawing depicting an Egyptian astrologer conducting his work at home



season, as well as the nature, rank and status of the guests or the company of the Prince.

While the yard was a center of movement and activity inside the House all day long, family life would move into the rooms during the night. These rooms were flexible in design, since they did not include any architectural or wooden blocks that would occupy space and limit their function to one role. Thus the rooms played a variety of functional roles depending on the different times, using lightweight movable furniture that could be easily stored. The rooms were used for eating, for long evenings of chatting and for sleeping at night.

The House distinguished itself by the presence of autonomous units that would achieve self sufficiency in terms of daily needs. The grand hall was the most complete and fully equipped of these units. In its main design, the hall has a derkah supplied with a fountain and a large iwan. Annexed to it is a complete bathroom equipped with a water-closet. Annexed to the iwan is a sleeping cabinet. The hall is characterized with its good ventilation through the huge Mashrabeya, the windowed derkah dome, the etched window connected to the corridor at the front of the derkah and the large ventilation skylight above it. A hall with this description makes it highly qualified to be the Prince's favorite place where he spent most of his time when at home.

During the day, especially in winter, this hall would witness the Prince's meetings and appointments. At night, celebrations, whether public or private, would be held there. The Prince and his company

A drawing depicting an Egyptian poet at home.



would sit in the iwan, where couches and cushions would be spread out. They would be served with trays of delicious food and drinks, usually accompanied by the *hookah*, which spread in the mansions at the time. In the derkah the servants and Mamelouks would be waiting to serve the house owner and fulfill his needs. During celebrations, the musicians, dancers or singers, if any, would also be in the derkah. At the end of the day, the Prince would sleep in the sleeping cabinet annexed to the hall, as it was easy to heat due to its small size and low ceiling. This hall was connected to the Harem hall and section through a corridor and a private door. This made the women's movement from and to the hall easy and private.


Another aspect of the daily life in the House was the women observing the celebrations and other events held in the reception areas, such as the seat and the grand hall, as mentioned above. They would easily watch and observe what was happening in the yard or the seat through the Mashrabeyas in their hall (the Harem hall) without being seen or noted. They would also observe and watch the celebrations in the grand hall in the same way through a large screen of etched wood in the corridor preceding the hall.

A drawing depicting Prince Murad Bek sitting on what looks like a house seat



Endnotes

1. al-Katkhuda is a job title. The word is originally Persian, and consists of two syllables: *Kat*, which means the house, and *khuda*, which means owner and lord. Thus Katkhuda is the owner. The Persians use Katkhuda to refer to a venerable gentleman and the king; while the Turks use it to refer to an official, authorized agent, the corporal, the captain and the president. It is worth mentioning that the word *Kakhia* is derived from it, as used by the Turks in the Ottoman era. See Ahmed El-Said Suleiman, *An Etymology of Borrowings in al Jabarti's History* (Cairo: Dar el-Maaref, 1979), p. 176. Mohamed Ahmed Dahman, *Dictionary of Historical Terms in the Mamelouk Era*. (Damascus: Dar El Fikr, 1990). p. 129. Mostafa Barakat, *Titles and Ottoman Jobs. A Study in the Development of Titles and Jobs since the Ottoman Conquest of Egypt to the Annullment of the Ottoman Caliphate (through Monuments, Documents and Manuscripts) 1517–1924*. (Cairo: 2000), p. 144.
2. The title of al-Sinnari is an attribute to the city of Sinnar, in the South East of Sudan on the West Shore of the Blue Nile. During the period 1504–1821, Sinnar was the center for the Fung Kingdom, which became one of the most important Sudanese Kingdoms. In the nineteenth century, it became a commercial center and became part of the Sudan Province, under Egyptian rule and administration. For further information, see Jay Spaulding, «SINNĀR», *Encyclopedia of Islam*, (Leiden, new edition, 1986–2004, vol. IX, 1997), 650–651.
3. The Document of Sinnary 936 Endowments (Archives of the Ministry of Religious Endowments, Document # 936, dated 18 Ramadan 1209 AH). [henceforth referred to as Document Sinnari 936 Endowments].
4. An emir is a person with power and authority, and it is used to mean a leader or a ruler. The word was used to denote a class, a rank or an honorary title. In the Ottoman era the title was followed by a set of honorary titles. For further information, see Hassan El-Basha, *Islamic Titles in History, Documents and Monuments*. (Cairo: Al Dar Al Fanneya, 1989), pp. 179–182. Mustafa Barakat, *Ottoman Titles and Jobs*. 109, 112.
5. Prince of the Brigade is an official honorary title. It occurs in the compound phrase “Prince of the Brigade, the Sultanic Sherif”. The title means that its bearer is of a Sultanic Brigade, i.e. the Sultanic banners are hoisted for his procession, as a sign of his



high stature. This right was reserved in Ottoman Egypt for the Pasha, master of the State, the Beks, and the 24 Sanjaks who were assigned important posts in the administration of Egypt such as the rule of territories, the treasury, and the pilgrimage administration.


see Mustafa Barakat. *Ottoman Titles and Jobs*. 153.

6. Murad Bek Mohamed is one of the Mamelouks of Mohamed Bek Abu Al Zahab, who bought him in 1182 AH/1768–1769. He is described, as reported by al-Jabarti, as being blond with heavy beard, short, with a robust physique and rough voice, his face scarred by a sword wound. His manners, according to al-Jabarti, were always described as unjust, reckless, proud, and arrogant. al-Jabarti also reports that, despite this he was a great admirer of scholars, and observed his manners in their presence, attentively listening to their words. He did not mind their intercession, and liked to keep the company of the penitent, the eloquent, and people of taste. He also kept the company of speakers, never tiring of their talk. He played chess, and sought out the experts in the game. He loved listening to musical instruments and songs. His gifts were generous, his talents amazing. He never had any children. He spent some time as a slave, but was soon set free by Mohamed Bek Abu Zahab, who blessed him and was generous to him, introducing him to his peers. When Mohamed Bek Abu Zahab became the sole ruler of Egypt, Murad Bek and Ibrahim Bek were his greatest princes. After the passing onlay of Mohamed Bek, they shared the actual rule of Egypt, though the presidency fell to Ibrahim Bek. al-Jabarti mentions that Murad Bek was preoccupied indulging his desires, spending most of his time moving between his palaces for the expansion and decoration of which he had paid great sums of money. He also spent great sums of money on his princes and followers. He built a great arsenal spending much money on it, which in the end fell into the hands of the French. He passing onaly in Suhag on 4 Zil Hijja 1215 AH/18 April 1801. al-Jabarti mourns him saying, “He was the greatest cause for the ruin of Egypt; may the distress disappear with his demise”. See, Abd al-Rahman al-Jabarti, (1230 AH) *The Wonders of Biographies and News*. (Cairo: Boulaq, 4 volumes, Vol. 3) pp. 167–171. [henceforth referred to as *Al Jabarti Wonders*]. Abdel Rahman Bin Mohamed Al Jabarti (1230 AH). *Aspects of Consecration with the Departure of the French*. Edited Abdel Rahim Abdel Rahman Abdel Rahim (Cairo: Dar El Kutub Al Masreya, 1998) pp. 251-256. [henceforth referred to as *Al Jabarti, Aspects*]
7. *Amir al-Haj*: A job title consisting of two words: Prince (Amir) means leader or *Wali* or president, and al-Haj means the pilgrim to Mekka. Pilgrims used to come from each country joining one procession accompanied by the Amir al-Haj, who was in charge

for their safety, their protection, their safe arrival and safe return. Hence, the Ottoman State in Egypt preferred to assign this significant post to a Mamelouk Bek who had proven to be capable and respected to be able to carry out these tasks. It is observed that the title *Amir al-Haj* is preceded by the title Prince of the Brigade, the Sultanic Sherif, especially after the year 967AH, when a Sultanic Decree was issued, requiring that he who holds the post of Amir al-Haj be the owner of a Sultanic brigade. The Amir al-Haj had a number of assistants to help him accomplish his tasks. The most famous to occupy this post in the Ottoman era was Mustafa Ibn Abdallah Al Rumi, in the period 938–940 AH, and again during the period 943–947 AH. The tribes of Araban called him the *Nashar* (saw) because he would saw any thief from top to toe into two. He was brave, generous and modest. The post of Amir Al Haj remained in Egypt until 1954, when the Egyptian government abolished it, replacing the title with “Head of the Haj Delegation”.

See Ahmed Al Rashidy. *The Joys and Pleasures of Listing the Occupier of the Post of Amir Al Haj*. Edited by Laila Abdel Latif (Maktabit Al Khangy, 1980) pp. 149-154. Mustafa Barakat. *Ottoman Titles and Jobs*. 112-117.

8. *al-Sinnari Document 936 Endowments*, p. 7, line 11, 12; p. 8, line 1-7.
9. al-Jabarti, *Wonders*, Vol. 3, pp. 168-169, 219-220.
10. al-Jabarti. *Wonders*. Vol. 3, pp. 219-220.
11. al-Jabarti. *Wonders*. Vol. 3, pp. 169, 220; al-Jabarti, *Aspects*. 254.
12. al-Jabarti. *Wonders*. Vol. 3, pp. 197, 201; al-Jabarti, *Aspects*. 294, 297.
13. Egypt reached its worst condition during the Ottoman Era in the second half of the eighteenth century, in particular towards the end after the murder of Ali Bek Al Kabir. The princes exploited the time of famine and harsh conditions to accumulate wealth. They thought of nothing but enriching themselves and bestowing riches on their Mamelouks, who were the source of suffering for the Egyptians. The Egyptian people now suffered two evils, and suffice it here to read the translation of Murad Bek. See, Al Jabarti. *Wonders*. Vol. 3, 167, 71. The Scientists of the Egyptian Campaign, *Description de l’Egypte*. Vol. 11, “*Mamelouk Cairo*”. Translated by Mona Zoheir El Shayeb (Cairo: Reading For All Festival, 2002), 146-147.



It is worth mentioning that the situation makes us immediately recall the condition of Egypt throughout various historical periods until the period preceding the Revolution of 25 January 2011. It may be true that Egypt was luckier during the older periods of its history when compared to the recent years. For though it was plundered in all cases, the earlier periods were characterized by the fact that the plundered wealth remained within the country, and was invested, thus benefiting the Egyptians indirectly. The ownership of most buildings and businesses may, due to these plunders, have reverted to the people and the State upon confiscation or through endowment. However, in the modern age, the wealth of the country was plundered and smuggled out of the country. Thus, it was of benefit of the countries it was smuggled to and not the Egyptians.


* I would here like to express my sincerest gratitude to my dear friend Dr. Mohamed El Sheshtawi for providing me with the full copy of the Document.

14. The oldest mention of the name Tughra (also known as Torah or Tughry, with a difference in meaning between the latter two terms) occurred in the *Diwan* of the Turkish language by Mahmud al-Kashgari. In the Oghozit dialect the word means stamp of the Kings signature. It moved to Persian and was finally borrowed by the Turks. It was used in the Arabic language with the advent of the Mamelouk Era, and was then used in the plural form Tughrawat. From it derived the verb tughr, i.e. “to add Tughra to a document”. The use of Tughra spread at the hands of the Sultans of Bani Othman, and the first to use it was Sultan Orkhan Ghazi (680–761 AH/1288–1360 CE). It attained full artistic maturity and aesthetic dimensions during the reign of Sultan Soleiman Al Qanouni (926–974 AH/1520–1566). For additional information see Mayssah Dawood, *Arabic Scripts on Islamic Monuments from the First Century to the Beginning of the Twelfth Century of Hijra*. (Cairo, 1991) pp. 63–64. Muhammad Tahir bin Abdel Qadir al-Kurdi al-Makki the Calligrapher, *The History and Art of Arabic Calligraphy*. (Cairo, 1939) pp. 121–126. Clifford Edmund Bosworth and J. Deny, “Tughra”. *Encyclopedia of Islam*. Vol. X (2000). 595–598.
15. *al-Sinnari Document 936 Endowments*, p. 42, line 2, 5.
16. *al-Sinnari Document 936 Endowments*, p. 42, line 6, 10.
17. *al-Sinnari Document 936 Endowments*, p. 43, line 1, 4.
18. *al-Sinnari Document 936 Endowments*, pp. 43-46.

19. Half a silver is an Egyptian currency. Its price varied across the years. According to the al-Sinnari Document, every 90 halves of silver were equivalent to one Egyptian riyal. Hence every one-half of silver was at the time equivalent to two full piasters. See *al-Sinnari Document 936 Endowments*, p. 17, line 5-6.
20. The corresponding Gregorian date is incorrectly mentioned in the Index as 1794. The correct date is 18 Ramadan 1209 AH/ 8 April 1795.
21. Ibrahim Katkhuda al-Sinnari completed the construction of his house only a few years before the advent of the Egyptian Campaign. The members of the Egyptian Campaign used the House as one of the houses and palaces belonging to the Mamelouk princes, after those had fled from Cairo for as long as the Campaign remained in Egypt (1213–1216 AH/1798–1801). It made the House its headquarters for the residence of a number of its artists and scholars; see Mahmoud Ahmed. *A Brief Guide to the Most Famous Arab Monuments*. (Cairo: 1937), 215.

It is worth mentioning that Prince Ibrahim Katkhuda al-Sinnari managed to retrieve his House from the Egyptian Campaign, though this happened only briefly before his murder. See Jacques Revault and Bernard Maury, *Palais et Maisons du Caire du XIVe au XVIIIe siecle*, vol. 1 (Le Caire, IFAO, 1979): 86.


22. Mahmoud Ahmed, *A Brief Guide*, 215. Ghazwan Mustafa Yaghi, *The Houses of Cairo and their Locations in the Mamelouk and Ottoman Eras: A Cultural Archeological Study*. (Cairo: Zahraa Al Shark, 2004), 203.
23. Refaat Moussa, *Residential Buildings Remaining in Cairo in the Ottoman Era: A Historical Documentary Study*. (Cairo University, Faculty of Archeology, Department of Islamic Archeology, PhD thesis, unpublished, 1995), 212.
24. The scholars of the Egyptian Campaign, *Description de l’Egypte: Vol 13, Figures of Modern Egypt* (1). Translated by Mona Zoheir Al Shayeb, (Cairo: Reading for All Festival, 2002), Figure 50.
25. The scholars of the Egyptian Campaign, *Description de l’Egypte: Vol 13, Figure 51/1*.
26. The scholars of the Egyptian Campaign, *Description de l’Egypte: Vol 13, Figure 51/2*.
27. The scholars of the Egyptian Campaign, *Description de l’Egypte: Vol 13, Figure 52/1*.

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28. The scholars of the Egyptian Campaign, *Description de l’Egypte*: Vol 13, Figures 54/1: 4, 55/1:4, 56/1: 6, 57/1, 60.
 29. The scholars of the Egyptian Campaign, *Description de l’Egypte*: Vol 13, Figure 57/2: 4 which shows three horizontal cross-sections, 57/5: 6 an inner view, Figure 58 the front, Figure 59 a vertical section that includes the takhtaboush façade and the seat.
 30. Revault, J. & Maury, B., *Palais et Maisons du Caire*, p. 83.
 31. Researcher Refaat Mousa collected all the efforts that the Commission for the Preservation of the Arab Monuments has made towards the preservation, maintenance, renovation and use of al-Sinnari House in accordance with the reports of the Commission. To review these reports, see Refaat Moussa, *Residential Buildings*. pp. 211-216.
 32. *Comité de Conservation des Monuments de l’Art Arabe*. (Le Caire, Bulaq, XXXII, 1922), 191; Refaat Moussa, *Residential Buildings*. 211.

Refaat Moussa, *Residential Buildings*. 211.
 33. *Comité de Conservation* (XXX, Pr. Verbal 200), 26; *Ibid*, (Rapp. 464), 83.
 34. Refaat Moussa, *Residential Buildings*. 213.
 35. Refaat Moussa, *Residential Buildings*. 213; Mahmoud Ahmed, *A Brief Guide*. 215.
 36. Refaat Moussa, *Residential Buildings*. 215-216. Mahmoud Ahmed, *A Brief Guide*. 215.
 37. *Comité de Conservation* (Imp, gounv., XL, 1961, Rapp, 877), 81-82.
 38. Refaat Moussa, *Residential Buildings*. 216.
 39. For more on Al Sibaa Barrages, their history, architecture and names, across times, see:

Taqiey al-Din Ahmad ibn Ali ibn Abd al-Qadir al-Magrizi (845 AH/1442 CE), *Preachings and Considerations in Plans and Monuments* (Cairo: Al Adab, 4 volumes, 1996), Vol 3, 238-239 [subsequent references to which will read: al-Maqrizi: Preachings]; Ali Pasha Mubarak, *New Plans for Egypt: Cairo, its Cities and Old and Famous Places*. (Cairo: Bulaq Press, 12 volumes, first edition, 1305 AH), Vol. 3, 15-16. [subsequent references to which will read: Mubarak: Plans].

40. *al-Sinnari Document 936 Endowments*, p. 9, line 11; p. 10, line 1, 2.
41. Both the neighborhoods of Al Hayatem and Al Nasseriya were known before as the Nasseriya District, as al-Jabarti stated the location of the House to be in Al Nasseriya. The District is one of the greater districts known in Al Sayeda Zeinab in Cairo. Al Maqrizi states that this district extended from the land of al-Khashab Gardens—between Al Fustat, Al Askar and Al Kata'ea—and used to be submerged under the waters of the Nile. In 714 AH, Sultan al-Nasir Muhammad ibn Qalawun constructed a Square in this place known as the Square of Al Nasser. It was planted with trees and surrounded by gardens and parks, and became one of the most beautiful Squares overlooking the Nile. The Sultan would ride to it from the Citadel each Saturday when the weather became warmer after the celebrations of the Nile. He would visit the Square for two months each year. He visited the Square in an official procession, described by al-Maqrizi as a display of the Sultan's forces and soldiers, for the cavalry princes would ride with him. In 720 AH, Sultan al-Nasser wanted to build a garden and needed great amounts of soil. He chose a place near Al Nasser Square, and when the digging was underway, a lake appeared which came to be known as Al Nasseriya Lake. The soil was moved from there to the garden, and water was channeled to it from the Al Sibaa Barrages, al-Sayeda Zeinab Square today, filling it with water on an area of seven feddans. The citizens constructed huge buildings around it, which soon became Al Birka Al Nasseriya District. In 806 AH, the level of the Nile dropped and a famine occurred, which led the citizens to destroy the buildings they had constructed, and the Lake was filled up. Life, returned to the neighborhood once more, and buildings and houses were constructed. For more on al-Nasseriya street and the Lake, see al-Maqrizi, *Al Mawaez*. Vol. 3, 268, 325-326. Mubarak, *The Plans*. Vol. 3, 96-101.
42. Monument number 314, dated 1172 AH/1758, established by the Ottoman Sultan Mustafa Khan III, son of Sultan Ahmed III. It is the second and final Sabil constructed in the name of an Ottoman Sultan in Cairo, after the Sabil of Sultan Mahmoud Khan in Habbaneya (monument number 308). Above the Sabil there is a school (*Kuttab*) for children, thus representing one of the most wonderful models of a Sabil built in Turkish style with an arched façade. See, Mubarak, *The Plans*. Vol. 6, 63. Mahmoud Hamed Al Hussein, *Ottoman Sabils in Cairo 1517 AH/1798*. (Cairo, 1988), 255.
43. The beginning is from the Barrage of Sayeda Zeinab (al-Sayeda Zeinab Square), and the end is al-Nasseriya Street, extending along 140 meters. See, Mubarak, *The Plans*. Vol. 3, 101.


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44. Al-Masry Bay is an artificial channel that emerged from the Nile in the current district of Misr al Qadima, which is today known as Fum El-Khalig. The Canal then flows north east, taking a bend until it reaches today's Al Sayeda Zeinab Square, then on to Darb Al Gamameez, in front of the Khedeweya School, to reach Bab El Khalk, Bab El Shareya and then Al Hussaineya near al-Zaher Baibars Mosque. The Canal then flows among the fields outside Cairo to Al-Zawya El-Hamra and Al-Amereya, which are today residential districts—back then, they were agricultural lands which were watered by this Canal. The Canal also played a commercial role, as it linked the navigation between the Nile and both the Mediterranean Sea and the Red Sea. The Canal moves on, as part of it passes by the current bed of the current Al Ismaileya Canal which still provides the Suez Canal area with fresh water. The bed of the Canal passes by the cities of Belbeis, al-Abbaseya, Al-Tal al-Kabir and Sarabium, flowing into El Timsah Lake and the Murra Lakes which opened unto the Red Sea. This Canal is an old construction, it was first dug during the reign of the Twelfth Dynasty of Old Egypt, and was known as the Canal of Sesostris. It was renewed during successive historical periods whenever the need arose, and it was re-dug after the Islamic Conquest of Egypt, when Amr ibn El Aas had the Canal reopened in 23 AH (644 CE), after six months of digging; the Canal was known then as the Amir el-Muminin Bay. With the passage of time, the name of the canal or the bay changed to the Cairo Bay in the Fatimid Era, Al Hakemy Bay as attributed to Al-Hakim b'amr Allah, and then Al Masry Bay in the third century of Hijra (the ninth century CE). The Canal flowed through Cairo and its suburbs until 1897, when Khedive Abbas Hilmi II issued a decree in February 1897 to have the Canal filled to protect public health. The Canal had been neglected and had become a garbage and waste dump for the districts overlooking it on both sides. The Cairo Tram Company undertook the filling works and the construction of a street in the place of the Canal where an electric tramway was laid. The filling of the Masry Canal was accomplished in 1898, and was transformed into a street known as al-Khaleeg al-Masry Street, traversed by a tram line in 1899, which linked the Districts of Ghamra, Bab al-Shaareya, al-Sayeda Zeinab and Al Kasr Al Aini. In 1956, the street name was changed to Port Said Street, by which name it is still known today.

Samy Mohamed Nawar, *Water Constructions in Egypt since the Islamic Conquest to the End of the Mamelouk Era: An Architectural Monumental Study*. (Alexandria: Dar Al Wafaa, 1999). pp. 39-45.

45. Today there is in the place of Prince Hassan Kashif's house the Al Moubtadeyan School. Hassan Kashif was one of the most famous Mamelouk leaders towards the end of the 18th century in Cairo. Al Jabarti mentioned in his translation: "He brought life to the great house in Al Nasseriya, spending immense sums of money on it. He had but completed its construction and had not yet

finished the painting, when the French arrived. Thus, the house was inhabited by astrologists, planners, scholars and engineers". Al Jabarti also stated that this was a reason for the house being maintained and preserved from demolition as occurred to other houses. Hassan Kashif fled from Cairo when the French arrived, and Al Jabarti states that he assumed the post of sanjaq in the Levant, and died of the plague. See, Al Jabarti. *Wonders of Monuments*. Vol. 3. p. 174. The Scholars of the Egyptian Campaign in *Description de l'Egypte*. Vol. 13. Figures 54/1:4, 44/1:4, 56/1:6, 57/1:60. Mubarak, *The Plans*. Vol. 3, pp. 96-97.

46. Prince Kassem Bek Abu Seif is the Mamelouk of Osman Bek Abu Saif. This Osman Bek is the Mamelouk of Osman Bek Abu Seif who was among the assassins of Aly Bek Al Domyatti, Khalil Bek Katamish and Mohamed Bek Katamish during the rule of Ragheb Pasha. Al Jabarti detailed the description of the house, its architecture, its construction, its waters, its trees, its water-wheels ... *Description de l'Egypte* preserved for us a picture of the interior of the house which reiterates this description. For further information see, Al Jabarti, *The Wonders of Monuments*. Vol. 3. pp. 218-219. The Scientists of the Egyptian Campaign in *Description de l'Egypte*. Vol. 13. Figure 51/2.
47. I sought to divide the buildings of the House in accordance with their functions to make it easier to follow, visit and understand its units and architectural elements. This division, however, has a problem, which is part of the problems of studying residential architecture in general, namely the difficulty of dividing its spaces according to function due to the multiplicity of functional usages of each space. Yet, since the model under study is considered a model of the grand houses and palaces of the 18th century, I was greatly assisted by the presence of various autonomous spaces which had specific purposes, to attain a degree of acceptability towards this functional division. There is also a reiteration of the multiplicity of the functions of some of these places. These places were included to the section that was most related to the main or obvious function, indicating other functional usages as well. There is no doubt that the function is the main criterion for gauging the success and validity of the design. Whenever the design fulfills the functional purposes behind it, the more valuable it becomes. For more on the functional theory of religious buildings as applied to the buildings of the Mamelouk Era in Cairo, see Mohammed Abdel Sattar Osman, *The Functional Theory of Religious Mamelouk Buildings Remaining in Cairo*. (Alexandria: Dar El Wafaa, 2000), pp. 255 onwards. This study is highly valuable and innovative. In addition to the theoretical study of the concept of functionality in religious buildings, there is an applied study, where the researcher classified the study of religious buildings according to their functions based on six criteria: elements of utility 255–382, elements of communication and movement 385–395, elements of service 399–405, elements of precaution 409–414, elements of ventilation and lighting, and elements of construction 435–456.



48. It is usual to divide residential buildings, in particular palaces and large mansions, into three sections according to their functions. These are: the reception area, the Harem (family and private life or the living area), and the services area. These are known in Levantine architecture during the Ottoman Era as the Salamlek, the Haramlek and the Khadamlek, respectively. The House of al-Sinnari, as discussed in this publication, is divided into five sections: the three above-mentioned sections, which represent the core of the structure, and two sections which I added: the first includes the entrance, the elements of movement and transportation, and spaces for distribution and communication, in between the spaces of these three sections. The second is an exceptional case in this House. It represents an area that was an empty space at the time of the construction of the House, then after a while some construction works took place, but they did not become part of the monumental architectural parts of the House. That is why I dedicated a separate section for discussing these at the time of the construction and development of the House. It is worth mentioning that the order of discussing these sections does not reflect their importance, but rather came to a great extent in accordance with the order of reaching the spaces of the House, beginning with the main entrance. I believed this to be the more suitable approach for the compilation of this work as a publication, not just as a research paper, and thus it can be considered a guidebook to visit the House. The approach may be useful in this respect.

49. *al-Sinnari Document 936 Endowment*, p. 28, line 7, 10.

50. *al-Sinnari Document 936 Endowment*, p. 29, line 1, 2.

51. The study relied mainly, in addition to the document, the drawings by the Egyptian Campaign scholars in *Description de l’Egypte* and the field study, on the previous references which dealt with the architecture of the House. Though my approach and methodology are different, the study was very beneficial since it contained various details on the current state of the House, namely:


Revault and Maury, *Palais et Maisons du Caire*, 82-101, Bernard Maury, Jacques Revault, André Raymond, Mona Zakariya, *Palais et Maisons du Caire II: Epoque ottomane (XVI^e-XVIII^e siecles)* (Paris: CNRS, 1983), 267-276; Refaat Mousa, *Presidential Buildings*, pp. 208-222.

When drawing the horizontal cross-sections of the House, I kept the same numbers (diagram key) as stated in the research (Revault & Maury, *Palais et Maisons du Caire*), which recurred in subsequent studies. The aim was to achieve ultimate benefit for those who may want to refer to them. I also added new numbers as needed. The drawings coincide with the current state of the House, and therefore differ in some details from the above-mentioned drawings.

52. The definition for these terms will be stated when they are dealt with in the next few pages.
53. *al-Sinnari Document 936 Endowment*, p. 21, line 5.
54. *al-Sinnari Document 936 Endowment*, p. 21, line 11.
55. This feature spread also in the Levant, Egypt and Morocco. See Soad Ramadan Ibrahim Al Sayed. *Housing in the Islamic City: An Introduction to House Design in the Contemporary City*. (Helwan University, Faculty of Engineering, Department of Architectural Engineering; an MSc thesis, 1998), p. 88.
56. This feature can also be seen in the houses of the Levant, where some architectural spaces are as high as two or three floors. The *Iwan*, for example, occupies the southern area and the yard of the House, and is three floors high.
57. *al-Sinnari Document 936 Endowment*, p. 10, line 3, 5.
58. *al-Sinnari Document 936 Endowment*, p. 10, line 4, p. 20, line 4-5.

The lobe stone is one of the best kinds of stones. It is called “naheit” (burnished), because after it had been cut, its edges were refined, making it smooth. Mohamed Mohamed Ameen, Laila Ibrahim, *Dictionary of Monumental and Document Terminology*. (Cairo: AUC Press, 1990), p. 33 (Henceforth referred to as Dictionary of Terminology).

59. A Medmak is a line of bricks or stones.
60. It is a garland, the arch of which is less than half a circle. It is called “Mowtoor” (tendon) as derived from “wattar” (tendon). It is also known as the lower garland. In the garland the cymal weldings of the garland have to all flow back to the center of beams. See, Farouk Abbas Haydar, *The Modern Encyclopedia of Construction Technology*. Vol. 1: The Basics for Constructing Buildings (Alexandria: Al Delta Printing Center, 4th ed., 1994. p. 506; Helmy Aziz, Mohamed Ghitass. *Dictionary of Monumental and Artistic Terminology: English/French/Arabic*. Revised by Dr. Mohamed Abdel Sattar Osman, edited by Wagdy Rizk Ghali. (Cairo: Longman, 1993), p. 35, 103, Fig. 1.
61. *al-Sinnari Document 936 Endowment*, p. 20, line 5-6.

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62. The Mashrabeya is an Egyptian Islamic architectural treatment, made of etched wood pieces that are interwoven and nested, within frameworks. They thus make up small rooms rectangular or polygonal in shape, which allow the flow of air into the room, but not the sun rays. The Mashrabeya also provides privacy, since those inside the house can see the people outside without being seen due to the narrow etches.

Yahya Waziry, *Islamic Architecture and the Environment*. (Kuwait: Alam Al-marifa, Issue 304), pp. 127-134.


63. Small pieces of rectangular wood that are criss-crossed to form perforated geometrical shapes. They are mounted on openings in the form of windows or screens that allow the air and light in, while at the same time preventing those outside from seeing what is going on inside, while those on the inside can see the outside. The most common types are the Sahrigi and the Maymouni. *Dictionary of Terminology*, 40.
64. *al-Sinnari Document 936 Endowment*, p. 10, line 3, 5.
65. A *qantara* is a structure built to cross waterways, and it is used here as a documented term to signify an arch. *Dictionary of Terminology*, 91. From it derives the term *moqantar*, an arched gate.
66. *al-Sinnari Document 936 Endowment*, p. 20, line 4, 7.
67. *Juft* in Persian means a curve, or a pair. In architecture it signifies extensive relief etching in stone or other material, taking the shape of a frame or a chain that consists of two parallel lines that intertwine at regular distances. They are interspersed with various circular, hexagonal or octagonal shapes, and are thus known as *juft la'eb*. *Dictionary of Terminology*, 29.
68. The door jambs are the vertical portions of the door frame. The door frame is what is also known as the doorway, and each door has two jambs, one to the right and one to the left. *Dictionary of Terminology*. 81.
69. Stalactites (*mokarnasat*), the singular of which is stalactite (*mokarnas*), is an architectural decoration similar to a beehive. In addition to being an architectural element that represents an engineering trick to shift from a square area to a circle area, and as a stand it at times replaces brackets, it is also a decorative formation used in architectural ornaments. It may also be used solely for decoration. Stalactites may consist of a number of rows. Stalactites have various forms, each of which has its own term according to its craftsmanship. See Helmy Aziz, Mohamed Ghitass. *Dictionary of Monumental Terminology*, Figure 3; Tawfik

Ahmed Abdel Gawad, *Islamic Architecture: Thought and Civilization* (Cairo: Anglo-Egyptian, 3rd ed, 1986) 103; *Dictionary of Terminology*, 113.

As a decorative form, the stalactite distinguishes itself by the presence of a third dimension in its formation.

Iman Mohamed Eid Atteya, *Islamic Content in Architectural Thought: Towards a Theory of Islamic Architecture* (Cairo University: Faculty of Engineering, Department of Architectural Engineering, PhD thesis, unpublished, 1987) 200.


70. The stones (*Singah*) of an arch are the constituent parts which make up the arch, whether they are made of stone, of brick or any other material. The keystone or the *Sngah moftaheya* is the center stone in the arch.
71. In residential architecture the word hasel is used as a term for storeroom. *Dictionary of Terminology*. 31.
72. *Khizana* or cupboard is the place where things are stored, but a *khizana* can also mean a bedroom. It is a documentary term and occurs here with a specific usage, “a bedding cupboard”. *Dictionary of Terminology*. 41.
73. *al-Sinnari Document 936 Endowment*, p. 10, line 5, 7.
74. *al-Sinnari Document 936 Endowment*, p. 20, line 6, 8.
75. *Derkah*, the vestibule, takes the plural form *derkawat*. It is a Persian word, consisting of two syllables: the first is “*der*”, meaning “door”, and the second is “*kah*”, meaning “location”. It is, thus, the area following the entrance, and precedes the main component of the building. It was used in palaces and houses to prevent the passers-by from seeing what was going on inside the palace or the house. *Dictionary of Terminology*, 47.
76. The landing (*mastaba*) is a construction that is slightly elevated and is used as a seat. It is always built; however, when it is made of wood, it is called a bench (*dikka*). *Dictionary of Terminology*, 106.
77. *al-Sinnari Document 936 Endowment*, p. 20, line 11; p. 21, line 1, 11.
78. *Samawy* (open to the sky) is an attribute of *samaa*, meaning sky. As such it means that the yard had no roof, nor was there anything above it. *Dictionary of Terminology*, 67.

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79. The slang word for fountain in Arabic is *Faskeya*, and it has a number of meanings, most important of which is that it is a water collector, which is the meaning intended here. Other meanings include also an ablution sink, or the place where the dead are buried. *Dictionary of Terminology*. 85.
80. This is affirmed by the lack of any mention thereof in the legitimate House deed. Mahmoud Ahmed reports that this fountain was moved to the House from the House of Salama Pasha in the district of Bighala. Refaat Moussa, *Residential Buildings*, 217, endnote 5.
81. The *Takhtaboush* is located on the ground floor of the House. It opens onto the yard at the full length of one, two or three sides. It is also one or two steps above the ground level of the yard. It consists of a deep recess, the ceiling of which centers on a column or a pillar in the middle of the outer edge overlooking the inner yard. Its floors are tiled with marble, and it is furnished with settees and benches. It was dedicated to the reception of guests from the general public.

Nelly Hanna, *The Houses of Cairo in the 17th and 18th centuries: A Social Field Study*. Translated by Halim Tousson (Cairo: Dar El Arabi, 1993), 65, 108.

82. In other documents it is referred to as the *Tashtakhanah*. *Tashtakhanah* is a compound noun made up of *Tasht* and *Khana* which is an Arabized Persian word, meaning the home of the *Tasht*. This is where the *Tasht* (the *washtub*) is located for washing hands and so on. It is also used in reference to the room where the pitcher and basin are placed. *Dictionary of Terminology*. 77. It is worth noting here that the term *Tashtakhana* is used to refer to an architectural unit known as *Takhtaboush* in the Ottoman Era, and which was known to be the reception area.
83. The outer curve of the arch.
84. Some consider it to be the *Iwan* to the south west of the hall. See, Refaat Mousa, *Residential Buildings*, 221.
85. The place where horses are kept. The word *Istabl* (اسطبل) is Arabized from Greek origins, and at times spelt with the letter س and at others with ص. The stables and their annexes are basic services areas in the palaces and mansions of Cairo during the Mamelouk and Ottoman Eras. *Dictionary of Terminology*, 13.

86. A documentary term that describes a certain type of roofing using pieces of raw wood loosely manufactured or made of palm trunks. *Dictionary of Terminology*, 83. The term indicates here a geometrically irregular roof with asymmetrical vaults. Hence it does not give any aesthetic value, nor is it artfully crafted.
87. A rectangular container in the stables which holds fodder for the horses. *Dictionary of Terminology*, 77.
88. *al-Sinnari Document 936 Endowment*, p. 11, line 11.
89. The place where different kinds of grain are ground to produce flour. It may be annexed to an architectural building or be an autonomous unit. It is different from a quern, as a mill grinds grain into flour, while the quern grinds grain coarsely, and is usually used for grinding horse-beans (*foul*). See, *Dictionary of Terminology*, 75, 102.
90. It is also known as the crock (*mazmalla*), which is a pitcher in which water is cooled. The word was soon used also for the place where the pitchers were kept to cool the water, which is also the origin of the word *Mizarah*, the house of the *zeer* (pot-in-pot refrigerator). *Dictionary of Terminology*, 104.
91. *al-Sinnari Document 936 Endowment*, p. 21, l. 9.
92. *Hamam* (bath-room) is derived from the word *al-hamma* which means a hot spring which people seek for healing. The bathroom as an architectural unit, has a generally almost fixed structure. It consists of the *maslaj* (the reception and changing area), the *beit awal* (which is the warm room for temperature adjustment for the body to avoid getting sick when entering and exiting the bathroom); the *beit harara* (the most important section of the bath). In addition, there were the annexes which differed in their presence from one bathroom to another. These are *beit al nura*, the toilet, the furnace, the well and the water-wheel. *Dictionary of Terminology*, 37, 107.
93. *al-Sinnari Document 936 Endowment*, p. 25, line 3:7.
94. *al-Sinnari Document 936 Endowment*, p. 25, line 9-11.
95. Rest-seat is a documentary term used in reference to the toilet. It is also known as the “Solitary Seat” or “Toilet Seat”. *Dictionary of Terminology*, 94-95.

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96. *Kaneef* means a cover or a screen. The term is used in documents on toilets which are places for washing. It is also known as the “beit khalaa” (house of solitude), “kursi khalaa” (solitary seat), “beit raha” (restroom) and “mustarah” (place for rest). *Dictionary of Terminology*, 96, 104.
97. *al-Sinnari Document 936 Endowment*, p. 21, line 1.
98. *al-Sinnari Document 936 Endowment*, p. 15, line 5-6.
99. *al-Sinnari Document 936 Endowment*, p. 25, line 10-11.
100. Nelly Hanna, *The Houses of Cairo*, 179-180.
101. *al-Sinnari Document 936 Endowment*, p. 21, line 6-8.
102. The seat (*meqaad*) is what people sit on, and the bottom (*miqaada*) is the place of sitting. The seat in Cairo’s residential buildings is one of the most important reception areas, for the element of the seat played a major role in the architecture. The seat appeared in residential buildings in various structural patterns, which differ in terms of design, form, location and function. This is seen in the other monumental examples and in many documentary indications. It is usually located inside the building on the first floor, reached through the stairs. It has arches opening to the north and overlooks the yard, garden, lake, bay or the street. For additional information, see *The Dictionary of Terminology*, 113-114; Ghazwan Mustafa Yaghi, *Houses of Cairo*, 235-304.
103. The word *roushen* derives from the Persian Rozen, meaning hole, window or balcony. In architecture it means the protrusions used for relief and to increase the area of the upper floors. They may look outwards or inwards. *The Dictionary of Terminology*, 58.
104. *al-Sinnari Document 936 Endowment*, p. 21, line 11; p. 22, line 1-5.
105. A hall dedicated to the womenfolk (the *harem*) which is also called in the documents the “Harmeya or the Hall of Harmeya”. *Dictionary of Terminology*, 36.
106. *al-Sinnari Document 936 Endowment*, p. 13, line 3; p.21, line 11; p. 22, line 11; p. 25, line 10; p. 26, line 4; p. 32, line 3.
107. *al-Sinnari Document 936 Endowment*, p. 11, line 5.

108. *al-Sinnari Document 936 Endowment*, p. 23, line 7-8.
109. The term *Derkah* consists of two syllables: “der” from Persian meaning door, and “kah” from Arabic meaning hall. The term is used in documents to indicate the part that is at the center of the hall. It can also be used to mean a light-opening or the part that is atop the center of the hall, known as the *shokhsheikha* (the skylight). *Dictionary of Terminology*, 50.
110. The word *Iwan* is an Arabized word derived from the Persian “ivan”, which means linguistically the throne-hall, such as the Iwan of Kisra. In architecture, the iwan is a square- or rectangular-shaped architectural unit that has three walls, i.e. on three sides only. The fourth side is open. For more, see, *Dictionary of Terminology*, 17.
111. The floors of the hall are currently all on the same level. The ceiling has been renewed, and hence the division of the ceiling for the *iwans* and the *derkah* no longer exist. The description of what it used to be like is taken here from Revault and Maury, *Palais et Maisons du Caire*, 95-97; Refaat Moussa, *Residential Buildings*, 221.
112. It is used to refer to a small *iwan* or shallow side-iwans in halls and other places. In documents, it is referred to as “*martaba*”. *Dictionary of Terminology*. 62.
113. A Kerdi or Keredi (pl. Karadi) consists of two wooden cantilevers atop the *iwan* opening to either side. The space in between atop the arch is called the “*Khatem El Karadi*”. *Dictionary of Terminology*. 94.
114. Documentary terminology used for the description of the components of the Karadi tail mentioned in the previous endnote.
115. *al-Sinnari Document 936 Endowment*, p. 24, line 10, 11; p. 25, line 1-9.
116. It is an opening in the ceiling for ventilation, and is used to air the area beneath with the possibility of opening and closing it. It is directed in such a way to receive cool air with the presence of ventilation outlets such as the *shokhsheikha*, or the dome, as well as windows and doors opening outwards into the yard. Hot air would flow out of these to be replaced by the cool air coming through the skylight, thus renewing the air in the room and ventilating it. See, Yahya Waziri, *Islamic Architecture*, 116-117.
117. An Arabized Persian word of two syllables, *baz* and *aahanj*, meaning puller of air or introducer of air or ventilation opening. In architecture it refers to the ventilation vent, and is found on the rooftops of buildings. It is used for both ventilation and lighting, and the opening and closing thereof can be controlled. *Dictionary of Terminology*. 19.

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118. *al-Sinnari Document 936 Endowment*, p. 11, line 5.

The secret door is a door that is usually in an unobserved place and takes the form of a cupboard or shelves to remain inconspicuous. In residential buildings, its purpose is the hidden entry, in particular in the case of the Harem. *Dictionary of Terminology*, 19.

119. Music seats are a kind of special seats different from others in terms of their location, form and function. The name of this famous seat, *aghany* (songs), is derived from one of its most significant functions, as it was used by the singer to sit on while singing. It occurs in the documents using the word *aghany*, and this type was used specifically to seat women. These seats are mostly found in large double halls, where they would be placed opposite each other, on both sides of the *derkah*. Beneath the seats are two *sudlas*. No doubt this kind of seat has been very common since the beginning of the Mamelouk Era, and became even more widespread in the Ottoman Era. For additional information, see *Dictionary of Terminology*, 114; Ghazwan Mustafa Yaghi, *The Houses of Cairo*, 285-293.
120. *al-Sinnari Document 936 Endowment*, p. 25, line 9-11; p. 26, line 1-5.
121. *al-Sinnari Document 936 Endowment*, p. 22, line 8-11.
122. Mohamed Mazhar Shurbagy, *Distinguishing Architectural Elements in Damascan Houses and their Adequacy for the Environment and the Climate*, (University of Damascus, Faculty of Architectural Engineering, Diploma Research, unpublished, 1988), 35.
123. Abdel Masih Youssef Ashy. *Internal Yards in Arab Housing Architecture: An Analytical Study of Internal Yards in Cairo, Homs, Damascus, Aleppo*. (Cairo University, Faculty of Engineering, Department of Architectural Engineering, MA thesis, unpublished, 1995), 67; Yahya Waziri, *Islamic Architecture and the Environment*, 107.
124. Mohamed Badr El Din El Kholy, *Climatic Effects and Arab Architecture* (Beirut: Beirut Arab University, 1975), 52; Rammah Ibrahim Mohamed Salem, *The Design of Urban Spaces in Hot Regions: The Impact of the Climate on the Design of Urban Spaces in the Egyptian Environment*. (University of Cairo, Faculty of Engineering, Department of Architectural Engineering, MA thesis, unpublished, 1984), 105, 106; Abdel Masih Youssef Ashy, *Internal Yards in Architecture*, 70; Azza Hussein Rizk, *The Visual Characteristics of the Islamic City in the Middle Ages* (University of Cairo, Faculty of Engineering, Department of Architectural Engineering, MA thesis, unpublished, 1984), 120; Hassan Fathy, *Arab Urban Architecture in the Middle East*. (Beirut: Dar El Ahad; a lecture given on 29 April 1971), 14; Ferial Mustafa Khodeir, *The Arab House in Iraq in the Islamic Era*. (Baghdad: Ministry of Culture and Information, 1983), 110-111; Mohamed Mazhar Shurbagy, *Architectural Elements*, 31.

125. Maha El Bakry, *The Islamic House, Report for MSC*. (London, 1973), 17.
126. The degree of containment is the ratio between the surfaces of the walls surrounding the yard, and the surface of the floors. This ratio affects the thermal changes, for the smaller the area of the walls surrounding the space, the less the degree of containment of the space, and thus the impact on the fluctuation in temperatures inside the space increases. It becomes clear, thus, that the higher the degree of containment, the less the fluctuation of temperatures inside the space and the greater the thermal balance in it. Rammah Ibrahim Mohamed Salem, *The Design of Urban Spaces*, 79.
127. Abdel Massih Youssef Asheh, *Internal Yards in Architecture*, 73-74.
128. Afif Bahnassi, *The Levant: Historical and Technical Glimpses* (Baghdad: Ministry of Information, 1980), 99.
129. A well is a construction or a digging in the ground with the intention of accessing water. The documents usually use “a spring well”, i.e. a well that had been dug until its water flowed all year round. *Dictionary of Terminology*. 24.
130. *Dictionary of Terminology*, 31. It is similar to a water divider. In the documents, it is a shallow basin which the water reaches from the waterwheel. It has several openings that may be of different diameters, connected by channels with the various parts of the building, while water is distributed from the basin depending on the amount needed to each part. *Dictionary of Terminology*, 113.
131. Called *Khafiqi*, it is an industrial term used to refer to a kind of mortar, made of lime, red brick powder, and Algosrml, which is mixed and kneaded, i.e. beaten then left to ferment. It is then used to cover surfaces and water tanks as it is a good insulation against humidity. *Dictionary of Terminology*, 39.
132. *al-Sinnari Document 936 Endowment*, p. 20, line 10-11; p. 21, line 1-2.
133. *al-Sinnari Document 936 Endowment*, p. 21, line 8-11.
134. In case it became impossible to transport water this way, the water basin connected to the Harem facilities (the kitchen, laundry, pot-in-pots, rest seats) would be supplied with water by a water-carrier or the servant.
135. *al-Sinnari Document 936 Endowment*, p. 21, line 2.





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