



MADRASA OF MUSTAFA PASHA AL-NASHAAR IN ZABID, YEMEN ARCHITECTURAL AND ARCHEOLOGICAL STUDY

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ABSTRACT

Madrasa of Mustafa Pasha Al-Nashaar is considered one of the most prominent buildings of Ottoman architecture in Yemen. It has commissioned by Mustafa Pasha al-Nashaar, the first Ottoman governor of Yemen, in 962-963AH/1554 AD. The Madrasa is built on the south side of Zabid to spread the Hanafite and Shafite Sunni doctrines, replacing and eliminating the Zaydi Shiite doctrine. It contains a mausoleum dome for Mustafa Pasha Al-Nashaar and his family. The Madrasa's apparent Ottoman style is displayed through a main domed section and a multiple-domed portico. In this paper, the researcher provides a short biography of Mustafa Pasha Al-Nashaar, a descriptive and analytical study of The Madrasa and its distinctive architectural and artistic features. The paper sheds some new insights on the history of The Madrasa regarding its historical importance and distinctive architectural style as an excellent example of the Ottoman style in Yemen. The paper also aims to raise concerns about its exposure to demolition threats and ruin due to Yemen's current war and conflict.

KEYWORDS:

Madrasa; Mausoleum; Yemeni medieval architecture; Ottoman architecture; Mustafa Pasha Al-Nashaar; Zabid; Yemen; Al-Bayshiah.

INTRODUCTION

Madrasa of Mustafa Pasha Al-Nashaar is considered one of the most prominent buildings of Ottoman architecture in Yemen. It has commissioned by Mustafa Pasha al-Nashaar, the first Ottoman governor of Yemen, in 962-963 AH/1554 AD. Ottoman presence in Yemen is divided into two periods; the first period is from 945 AH until 1045 AH, and the second from 1289 AH until 1336 AH.

Ottoman governors ruling Yemen are motivated to set up various types of charitable buildings which perpetuate their memory in Yemen, especially in the first period of the Ottoman presence in Yemen (945-1045A.H/1538-1635A.D). Therefore, they build various charitable and religious buildings, including Mosques, Madrasas, and shrines [1]. The Ottomans were especially interested in building Mosques and madrasas because their religious and educative roles counter the Shi'a doctrine. Moreover, they execute particular architectural forms, decoration's beauty, and building material diversity.

Governor Mustafa Pasha Al-Nashaar was one of the officers of the Ottoman Sultan Selim I campaign to

Yemen. He was closed to the governor of Egypt, Da'oud Pasha (945- 956AH/1538-2549 AD), who nominated him as the first Ottoman high governor of Yemen [3][4] in 947 AH/1540 AD. He died in 967 AH/1559 AD in Taiz and was buried in this Madrasa in Zabid [3]. Mustafa Pasha Al-Nashaar was a successful and popular Ottoman governor in Yemen. He is nominated Al Basha (or Pasha) [2]. He carried out many architectural works, including the renovation and repairs of Al Ashair Mosque in Zabid, as well as the construction of its pulpit dating back to 949 AH/1542 AD [5]. Mustapha Pasha also built a madrasa near Bab Al-Sabha in the western part of the old city of Sana'a, which was sadly destroyed [6].

Mustafa Pasha Madrasa of Zabid built the first Ottoman governor of Yemen in 962-963A.H/1554A.D. It was located in the smallest area in the quarter of Al Muganbad of Zabid, particularly on the eastern side of Qabali Bab Al-Shubarq outside the wall of Zabid city, approximately half a kilometer outside of Zabid city. It was also known as A.L. pasha Mosque or Al-Bayshiah [7]. Its characteristics were excellent and remarkable, as well as having the leading site with exceptional visibility (Figure 2).



Figure 1: Site of The Madrasa of Mustafa Pasha in Zabid. Source: Google earth

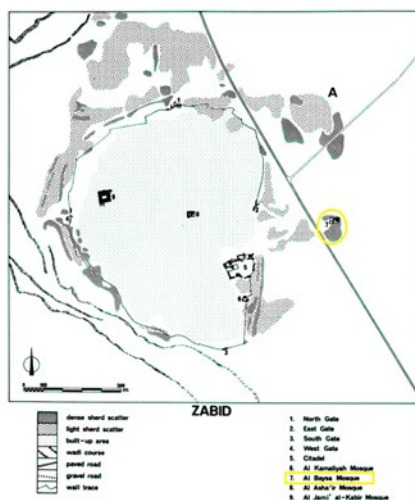


Figure 2: Plan of Zabid indicating The Madrasa of Mustafa Pasha [8].

Located in the north of Yemen, The city of Zabid emerged as a prominent scientific and cultural town with mosques, madrasas, and other cultural buildings. The city has the highest religious buildings after the capital city Sana'a in Yemen, with eighty-six standing archeological monuments. In addition, it accommodated one of the oldest mosques in Yemen called Ash'ari Mosque 8A.H/14A.D. The city then served as the administrative capital of the Tehama region and the center of Sunni religious learning in the region contributed to the rise in religious monuments, especially madrasas. The Madrasa was introduced in Yemen by the Ayyubids in 6 AH century/12 AD century and essentially replaced foundations that involved only mosques. According to written records, the first madrasa in Zabid was an Iwan structure, but it did not become a generally accepted form in Yemen. Instead, Yemen developed a madrasa type that differed from other countries. Its plan made no allowance for accommodations for teachers and students. It was a structure only with a place for prayer and teaching; large foundations might have a library, a Khangah, and

a Quranic school [12][13] (Figure. 3). In March 1998, UNESCO listed it as a world-historic city [14].

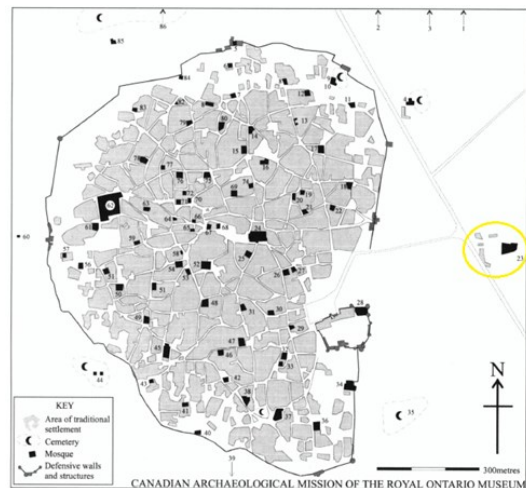


Figure 3: The map of Zabid indicated the religious buildings [8].

NAMES AND FUNCTION OF THE MADRASA

The Madrasa was sometimes referred to as Al-Basha Mosque or Al-Bayshiah, corresponding to the Al-Basha (or Pasha) title of the ruler Mustafa Al-Nashaär. It was owned by Waqf as a school teaching the Quran and Shafi'i and Hanafite Sunni theology, Islamic science, and jurisprudence [15][16]. The Madrasa was equipped with a Mosque for daily prayers and a mausoleum (or tomb or Qubba) located in the west of the sanctuary as a burial place for Mustafa Pasha's Family; himself, his wife, and sons [17]. After the growth of the city and its huge expansion, The Madrasa was upgraded to Friday Mosque.

A document from the Waqf, saved at Awqaf Office at Zabid, defined the primary function of The Madrasa and listed various endowments that Mustafa Pasha gifted to The Madrasa. It included five hundred parcels of the finest land in the valley of Zabid. The Waqf document determined the requirement that their income was disposed of as follows:

- To repair The Madrasa and its annexes and the surrounding land of it.
- To pay food needs of ten orphan students of the Qur'an in addition to the monthly salary.
- A teacher of the Hanafite jurisprudence in the morning, and students studied until they graduated, changed to others.
- A teacher of jurisprudence Shafi'i in the afternoon and students studied until they graduated, changed to others [18].

The Madrasa fell in disrepair and neglect during later Ottoman rule until 1345A.H/1926A.D, when the head of the endowments, Muḥammad Ali Abdullah al-Ahdal, returned the endowment land from tenants and repaired the Mosque. After his death, most of Madrasa's endowments were looted and robbed. Again, sadly it had also fallen into neglect until now.

This research aims to document this madrasa's exposure to threats of demolition and ruin due to Yemen's current war and conflict, shed light on its distinctive architectural and artistic style, and analyze its architectural and decorative elements. Also, it aims to study the historical and cultural dimensions of this Madrasa and to know the Names and the different Functions of the Madrasa.

The importance of this study lies in its distinctive architectural style, as it is an architectural complex that performs more than one functional purpose. It reflects The Madrasa's shape built on the Ottoman style, the *Waqf* role knowledge, and its importance in the building function continuity. It sheds light on The Madrasa's civilized role and the knowing teaching system inside it.

METHODS

The research relied on several methods to achieve its objectives;

- The historical approach exposed the historical references that have dealt with the Islamic madrasas in Yemen and Zabid in particular.
- The descriptive approach discovered the architectural and artistic features of the Madrasa.
- The comparative and analytical approach compared the style of Madrasa and the Madrasas in other places in Yemen.

The researcher relied on several previous literatures, perhaps the most important of them; Al-Hadrami, 'Abd al-Rahmān 'Abd Allāh, Zabid masāğiduhā wa-madārisuhā al-'ilmīyat fī al-tarīkh [Mosques of Zabid and its Scientific Schools in History], (Damascus: The French Institute for Arab Studies, 2000).

DISCUSSION

THE DESCRIPTIVE STUDY OF MADRASA

The Madrasa occupies a site of a large magnitude within the building complex. Mustafa Pasha wanted to commemorate his memory in Yemen and was buried in the mausoleum attached to this Madrasa.



Figure 4: Archival photo of The Madrasa of Mustafa pasha in Zabid [7].



Figure 5: General view of The Madrasa of Mustafa pasha in Zabid from the southern and eastern façade (Author's photo).

The external facades of the Mosque are simple; they express the simplicity of the architecture. The main building material of The Madrasa is red brick, which is covered by a layer of stucco and *Alqaḍāḍ*. *Al-Qaḍāḍ* is a famous Yemeni technique. It is a mixture of lime, which Yemenis called "*al-naūrh*," and special stucco. They use it to cover the walls of bathrooms, domes, houses, and water reservoirs because it is characterized by its strength, durability, and ability to prevent water leakage [19]. Therefore, the school is characterized by its bright white color (Figure 4-5). The exterior of the building is covered with stucco decoration and a decorative frieze of two horizontal rows of serrated Muqarnas, which decorate the top of the walls. Some Persian arched windows covered with *mashrabiya* are pierced around the building and protected by stucco works (Figure 7). Additionally, abutment walls support Madrasa's sanctuary's eastern and northern walls (Figure 6).



Figure 6: Abutment walls that supported walls of The Madrasa of Mustafa pasha in Zabid (Author's photo 2014).



Figure 7: Shapes of three-pointed arched windows of The Madrasa of Mustafa pasha in Zabid from the northern façade (Author's photo 2014).

The main entrance is a monumental domed cube in the eastern façade, 5 m long and 6 m high. This entrance leads to the portico, which takes to the sanctuary. It is, however, converted into a hall for a Hanafite sheik (Figure 8). The second main entrance is located at the end of the northern façade; it is a simple pointed arch with a beautiful lobbed arch decorated by intricate geometric ornaments (Figure 9).

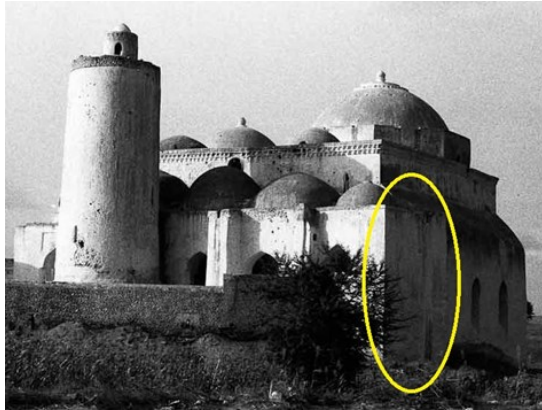


Figure 8: Previous Position of the main entrance in the eastern façade of Madrasa of Mustafa pasha in Zabid [7].



Figure 9: The current main entrance in the northern façade of The Madrasa of Mustafa pasha in Zabid. (Author's photo 2014).

The Madrasa was built in the Ottoman style, consisting of two parts; the first is the sanctuary, and the second is the courtyard (*Al-Sahn*) (Figure 10).

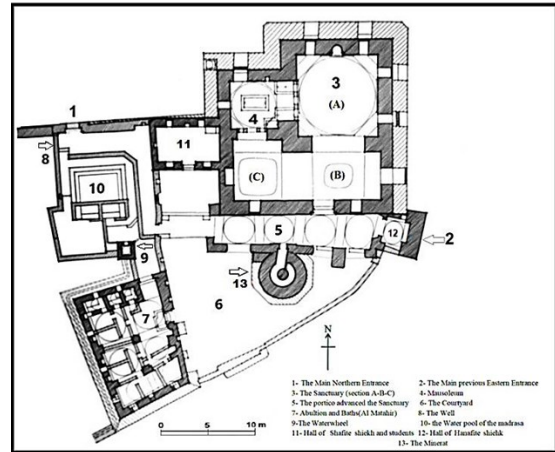


Figure 10: Plan of The Madrasa of Mustafa Pasha in Zabid. Source, the Canadian archeological mission of the Royal Ontario Museum Modified by the author.

THE FIRST PART: THE SANCTUARY

The sanctuary consists of a central square fronted by two smaller square areas covered by two domes, as indicated in the plan (Figure 10). The central space (square) is about 7.60 m long and covered by a large central dome that sits on an octagonal drum; this dome is based on a transition zone as it squinches in two levels (Figure 11). This sanctuary section is straightforward; it is covered with stucco decorations and friezes of stalactites. The Qiblah wall has two large windows, where there is a simple semicircular Mihrab topped with a decorative lobbed arch between the windows (Figure 12). The Mihrab niche is flanked by two simple marble columns characterized by some sophisticated decoration consisting of floral, animals, and unread inscription bands (Figure 13).



Figure 11. Section (a) of the sanctuary of The Madrasa of Mustafa Pasha in Zabid. (Researcher's photo 2014).



Figure 12. Mihrab of The Madrasa of Mustafa Pasha in Zabid



Figure 13. One of the decorative columns.

Section (b) is located southeast of section (a). It consists of a rectangular area; its length from east to west is about 7 m, and its width from north to south is about 4.5 m. This area has an entrance to the sanctuary and is located on the south wall. This section opens in the sanctuary (section (a)) through a large pointed arch entrance. Section (b) is covered by a small dome based directly on the walls and has no transition zones. (Figure 14)

Section (c) is located west of section (b). It also consists of a rectangular area; its length from east to west is about 4.4 m, and its width from north to south is about 5.8 m. This area opens into the sanctuary (section a) on the eastern side by a pointed arch entrance. This section also opens into the northern side by another pointed entrance and leads to Mustafa pasha's mausoleum. Section (c) is also covered by a small dome based directly on the walls and has no transition zones.

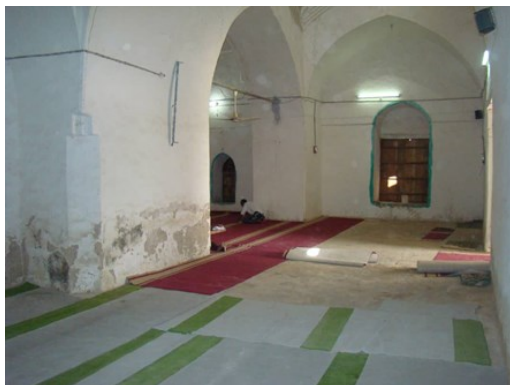


Figure 14: View of section (B) from section (C) of the sanctuary of The Madrasa of Mustafa Pasha in Zabid (Author's photo 2014).

The Mustafa Pasha's mausoleum is located next to the central area (section (a)) of the sanctuary in the North Westside. It consists of a semi-rectangular area, about 6.5 m long on the northern side, about 5.9 m wide on the eastern side, and about 4.5 m wide on the western side. The mausoleum opens into section (a) by a pointed arch but was recently blocked. The mausoleum is covered with a semicircular dome with transitional Turkish triangles covered with Muqarnas (Figure. 15, 16).



Figure 15. The dome covered the mausoleum of Mustafa Pasha in Zabid (Author's photo 2014).



Figure 16. Triangle pendentives of Mustafa Pasha's mausoleum dome in Zabid (Author's photo 2014).

The mausoleum accommodates the stone tomb of Mustafa Pasha; at the center, three other graves are found to the west of Mustafa Pasha Tomb, belonging to his wife, his son, and his servant (Figure 19). The mausoleum can also be reached from an opening in section (C), located in the south. (Figure 18)



Figure 17: Entrance of the mausoleum from the sanctuary (section A) from the west.



Figure 18: Entrance of the mausoleum from section (C) south.



Figure 19: The stone tomb of Mustafa Pasha Zabid and his family.

The portico advanced sanctuary is located on the southern side of the sanctuary. It is a rectangular area; its length is about 17 m, and its width is about 2.5m. It consists of only one *riwaq*, consisting of a four-bay covered by simple brick domes based on triangles stalactites extending from west to the east (Figure 20, 21). At the end of this portico in the east, there is a door that leads to a Hanafite hall which was the main monumental southern entrance, as we said before. This portico opens in the *Sahn* of The Madrasa by a four-pointed arch; these arches are based on simple rectangular piers. There is a simple decorative flat *Mihrab* on the southern side of this portico overlooking the *Sahn*; it has been used for Qiblah direction for prayers in the *Sahn*. (Figure 22)

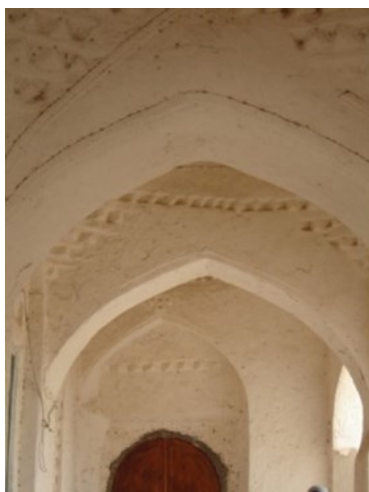


Figure 20: Domed portico in southern façade of The Madrasa of Mustafa Pasha in Zabid, and the door leads to Hanafite hall in the east (Author's photo 2014).



Figure 21: transition zones of Domes of the portico (triangles stalactites) (Author's photo 2014).



Figure 22: the flat *Mihrab* on the southern side of this portico overlooking the *Sahn* (Author's photo 2014).

Minaret of the Madrasa rises on the north side of the courtyard, approximately in the middle of the portico fronting the sanctuary. The Minaret is about 25m high and characterized by its distinctive cylindrical style of Tehama Minarets. It was built with red bricks covered with stucco and *Alqaqād*. It consists of an octagon base surmounted by a huge cylindrical shaft; its diameter is about 4.5 m, rising to 8.5 m. (Figure 23). There are some small windows resembling medieval arrow slits (Figure 24). The Minaret ends with a domed cylindrical pavilion decorated with a frieze of serrated *Muqarnas* or stalactites. (Figure 25)

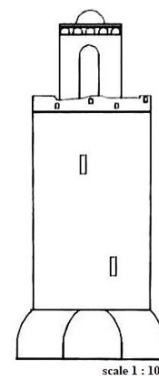


Figure 23: Plan of the Minaret of The Madrasa of Mustafa Pasha-scale 1:100.



Figure 24: Cylindrical shaft of Minaret of The Madrasa of Mustafa Pasha (Author's photo 2014).



Figure 26: The first student's cell entrance on the east side (Author's photo 2014).



Figure 25: Cylindrical pavilion of the Minaret topped by a small dome (Author's photo 2014)



Figure 27: The second student's cell entrance on the west side (Author's photo 2014)

The top pavilion may not be original because it does not fit the Minaret's magnitude and size. The original one might have been destroyed by the war, which could have converted the Minaret into a military tower, as evidenced by the existence of *arrow slits*.

SECOND PART: THE COURTYARD (AL- SAHN)

The courtyard is located on the southern side of The Madrasa with an irregular shape reaching 19.8 m on its longest side (east to west) and 19.5 m on its north-south side and a width of 13 m. The courtyard gives access to student cells, ablution facilities, and the baths (*almaṭāhīr*) of The Madrasa. Also, there is a large pool of water, three small watering pools, and dripping water from The Madrasa and garden.

Students' cells; Student accommodation is provided in two separate areas. *The first area* (2.8m x 2.3m) is a domed hall on the east side of the portico fronting the sanctuary of The Madrasa. As mentioned above, this area is initially the main entrance of the school but later is converted into a student's hall for Hanafite doctrine (Figure 26). The second cell is a larger vaulted hall, 5.9m x 3.3m, located on the west side of the sanctuary and reserved for Hanafite students. (Figure 27)

The ablution area or *almaṭāhīr* is an irregular rectangular area; the longest side is about 12.5m, and the shortest side is about 11.2m, with a width of 8.5m in the north and 7m in the south. *Almaṭāhīr* is a famous Yemeni term. It is considered one of the most important service spaces attached to religious buildings. They are dedicated to ablution [20]. Its area is located on the southeast side of the Sahn, comprising eight bathrooms and the ablution fountains. The domes covering the bathrooms and the ablution area are raised on robust circular piers of bricks and pointed arches (Figures 28, 29, 30). The entrance of this *almaṭāhīr* is a vaulted space located on the east side of the northern wall.



Figure 28: Plan of *almaṭāhīr* of Madrasa of Mustafa Pasha.



Figure 29: View of almatāhīr of Madrasa of Mustafa Pasha and the Waterwheel (Author's photo 2014).



Figure 30: View of almatāhīr of Madrasa of Mustafa Pasha from the interior (Author's photo 2014).

Like most religious buildings in Yemen, the water supply of the Madrasa depends on a well [21]. The well's location is on the west side. It supplies almatāhīr and Madrasa's water pool through two channels; from southeast to almatāhīr and northeast to Madrasa's water pool. (Figure 31) This water pool is located south of the entrance of The Madrasa; it is a rectangular area of about 15 m² and its depth is about 3m (Figure 32).

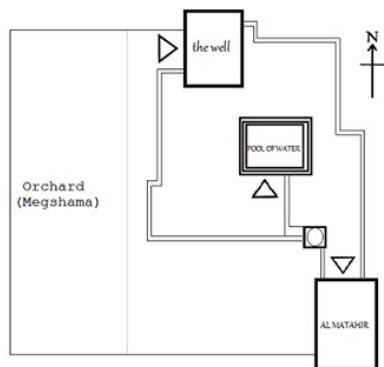


Figure 31. Illustration of Water distribution from the well through canals in madrasa of Mustafa pasha (Author).



Figure 32. The pool of water in the courtyard of The Madrasa of Mustafa pasha (Author's photo 2014).

The Madrasa is also supplied the water from a *Sabil*. It is located southeast of the water pool. The *Sabil* is a square area; its length is about 1.6 m. A shallow dome covers it. It has opened on its northern side, a place for taking water, but unfortunately, this water wheel is now closed and unused (Figure 33, 34).



Figure 33. Well of The Madrasa of Mustafa Pasha in Zabid (Author's photo 2014)

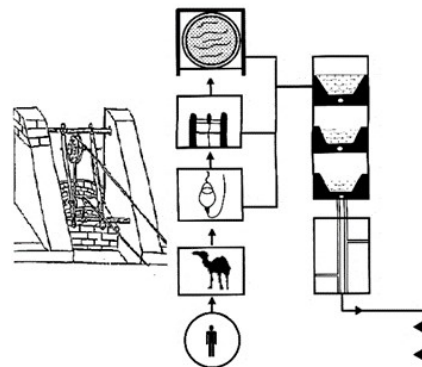


Figure 34. Illustration of dripping water of The Madrasa of Mustafa Pasha in Zabid.

Orchard garden (*Almiqshamh*) [22] of The Madrasa; the garden is an endowment owned by the Waqf, located on the western side of The Madrasa. This orchard is surrounded by a mud-brick wall and irrigated from the used water of the ablution (*Almatāhīr*), one of Yemen's oldest sustainable water solutions [20] (Figure 35).



Figure 35. Orchard (al-miqshamh) of The Madrasa of Mustafa Pasha in Zabid (Author's photo 2014).

The Madrasa has witnessed many renovations through the ages. First, the main eastern entrance is converted to a student cell for Hanafite doctrine (Figure 36). Second, the Minaret's pavilion has fallen and is renewed by adding a new simple pavilion. Third, both domes which covered sections (B) and (C) of The Madrasa's sanctuary have fallen and have been renewed by two simple domes that do not fit in size and shape of the original domes and the overall shape of The Madrasa. One of the most prominent of these additions is adding abutment walls supporting the Madrasa's north and east façade. In addition, essential parts have also been added to the *almaṭāḥīr*. Finally, the whole façades of the Madrasa are painted more than once. In this case, the exterior surface of all madrasa's domes is painted green. (Figure 37)

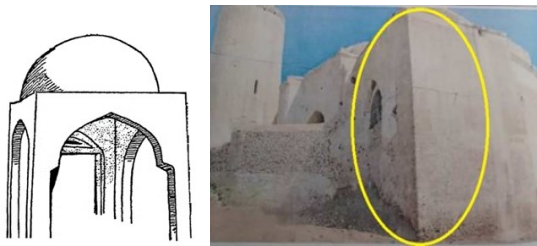


Figure 36: Illustration of the main eastern entrance, blocked and converted to a student cell for Hanafite doctrine (Author's photo 2014).



Figure 37. The general view of The Madrasa of Mustafa pasha from the east side indicates the green color painted on all domes of The Madrasa (Author's photo 2014)

THE ANALYTICAL STUDY OF THE MADRASA

The Madrasa of Mustafa pasha is characterized by various architectural elements, and majestic shapes, giving it a unique optical dimension. As the Waqf document indicates, the madrasa's primary function is teaching; it is used as a school to teach Sunni sects and fight the Shiite sect. It is dedicated to teaching Sunni doctrine to both Shafi'i and Hanafite sects. It is known that the Ottomans are Hanafite. They are keen on establishing madrassas in different cities of Yemen; they are used to spread the Hanafite Sunni and eliminate the Zaydi Shiite [3]. Zabīd is considerably the home to the Sunnis, and its interest in science and culture characterized it through the historical ages. Hence, it includes many Islamic Madrasas, which

achieve several roles on more than one side (religious- doctrinal- political- educational). In this case, Rasūlīd dynasty has been considered the golden age of establishing madrasas in Zabīd.

TEACHING SYSTEM INSIDE MADRASA OF MUSTAFA PASHA

From Waqf of The Madrasa, we can conclude the teaching system; it is conducted after praying inside the sanctuary of the central dome (section A). Adult children, who have reached the Long Books, are studying there. Students study Hanafite jurisprudence until they get the degree of scientists and are changed by others, and they stay in the west. They are assigned a teacher of Hanafite jurisprudence in the morning. Also, other students are studying Shafi'i jurisprudence until they reach the degree of scholars and are replaced by others. Then, they stay in the east and are assigned a teacher of Hanafite jurisprudence in the afternoon. Perhaps students are accommodated in the inner sanctuary on winter days and in the Sahn on summer days to sleep; this is confirmed by the existence of wall cabinets in the inner walls to preserve students' belongings [5]. The *me-tama* (Kuttab) is an important functional part of what the Madrasa is doing rather than an architectural element involved in the school's general layout, so it does not need a space with special conditions. The number of students in this *me-tama* is little more than ten children orphans, so it has no specific place, and they are sitting in the portico fronting the sanctuary [23].

THE FACTORS AFFECTING THE ARCHITECTURE AND FORM OF THE MADRASA

The impacts of climatic conditions are reflected in the layout of Madrasa. It is closed from the outside and opens from the inside. Thus, students can live quietly and study in complete freedom. It also gives them access to natural light and air in all school and courtyard sections. The Madrasa is also generally influenced by neighboring Madāris and Ottoman Madāris architecture. The Madāris, such as Al-Kamāliyah and Al-Iskandariyah, located near Mustafa Pasha Madrassa in the quarter of al-Muganbad of Zabīd Adjacent to the city wall [3], have similar building magnitude shape, and domes. The Al-Kamāliyah Madrasa, which is attributed to Mamluk governor Kamal al-Rumi (1521-1523A.D), and Al-Iskandariyah Madrasa [23], attributed to Mamluk governor Iskandar Mawz (939-940AH/1533A.D), both these commanders rule the Tehama during an interregnum between the Mamluk and Ottoman invasions of Yemen. Each of these two Madrasas is a predecessor to Mustafa Pasha Madrassa, having a similar spatial configuration and architectural features; a central area of sanctuary covered by a high central dome and is surrounded by lower side domes (Figure 42, 43, 44). The origin of this style is found in the so-called Bursa Style or the Domed Mosque style.

BURSA STYLE OR DOMED MOSQUE STYLE

From the discussion above, it appears clearly that the architecture of The Madrasa of Mustafa pasha follows the Ottoman style known as Domed Mosque – or Bursa Style [24]. This system consists of a central space section (A) covered by a main central huge dome used as the main sanctuary or prayer hall. It contains the Qiblah wall, the Mihrab, and prayer rows. The sanctuary is connected with the courtyard (or Sahn) through a Rlwaq, consisting of one arcade covered by four small shallow domes [13]. This plan appears in the layout of other religious buildings in Yemen, like Al-Bakiriyya Madrasa in Sana'a (ottoman dynasty) 1005A.H/1579A.D and Talha mosque in Sana'a (ottoman dynasty) 1029A.H/1619A.D [25] (Figure 38, 39).

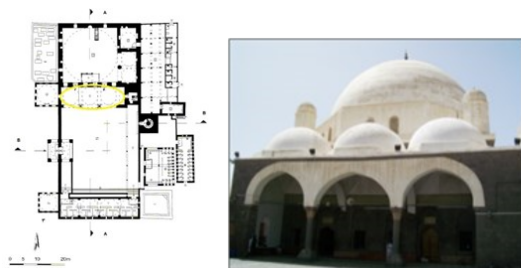


Figure 38. Plan and portico of al-Bakiriyya madrasa in Sana'a [25]

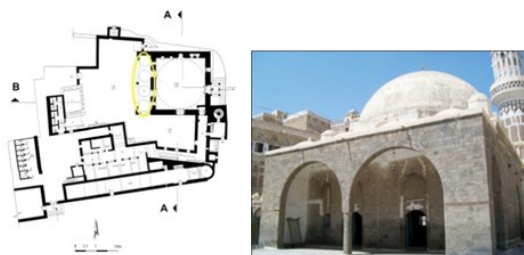


Figure 39: Plan and portico of Talha mosque in Sana'a [25]

This layout and other architectural features found in Mustafa Pasha are found in the other Madāris in and outside Zabīd, sometimes with hardly any changes. For example, it can be seen in Al-Kamālīyah Madrasa, which was attributed to Mamluk governor Kamal al-Rumi (1521-1523A.D), and Al-Iskandariyah Madrasa [23][26], attributed to Mamluk governor Iskandar Mawz (939-940AH/1533A.D). Both these commanders rule the Tehama during an interregnum between the Mamluk and Ottoman invasions of Yemen. Each of these two Madrasas consists of a central sanctuary area covered by a high central dome and is surrounded by lower side domes (Figures 42, 43, 44).

In the other Madāris, a few changes are introduced. Those are multiplying the number of domes of the sanctuary while keeping the plan nearly the same as found in the sanctuary of Madrasa al-Mu'tabiyya in Taizz (Rasūlid dynasty) [27], and the 'Amiriya Madrasa in Rada` (Tahirid dynasty) [28] is covered by six adjacent domes (Figure 40, 41).

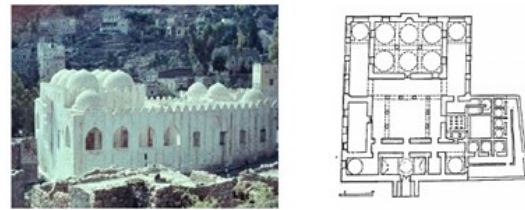


Figure 40. Plan and general view of sanctuary of the school of al-Mu'tabiyya in Taizz [29].



Figure 41. Plan and general view of sanctuary of the 'Amiriya Madrasa in Rada [30].

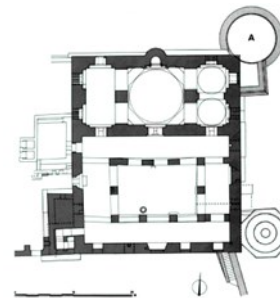


Figure 42. Plan of the school of Al-Iskandaryah, zabīd, with Minaret [8].



Figure 43: General view of the school of Al-Iskandaryah, zabīd, with Minaret [31].

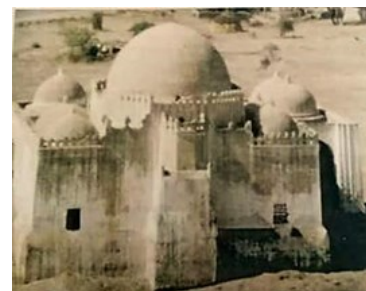


Figure 44: General archival view of the school of al-Kamālīyah, zabīd, with the Minaret.

ARCHITECTURAL ELEMENTS

The Madrasa is characterized by its simplicity in its architectural elements. It utilizes Yemeni materials buildings in the building; it uses stones in building foundations of walls, red bricks in building walls, and different elements like domes and Minaret. Also, stucco is used to firmly cover all the walls and elements of the Madrasa. It is known that stucco is characteristic of many other important civil and religious buildings in Zabīd. Also, the architect uses *Alqaā*, "the Yemeni traditional famous building material," which is used in covering the exterior surface of domes and the interior walls of *almaqābir* [32].

The mausoleum is considered an essential architectural component of Yemeni madrasas. It includes the tomb of the founder and his family. There is no specific location of The Madrasa to establish this mausoleum, and it varies from one madrasa to another as the shape and plan for every madrasa [23]. For example, in Madrasa Mustafa pasha, the mausoleum of Mustafa pasha is located beside the sanctuary adjacent to section (A) on the west side.

The Minaret is considered a notable architectural monument of The Madrasa. The model of this Minaret is like the style of the Minarets of Hadramout. This model is unique in its great height. It consists of an octagon base and cylindrical shaft, with one balcony based on stalactites. The last part is the pavilion which takes the shape of a small stalactite dome. The notable examples of these Minarets in Zabīd are; the Minaret of the Great Mosque, Zabīd, and the Minaret of al-Iskandariyah madrasa (Figure 45, 46). Minaret of Mustafa pasha is similar to these two examples. This style of Zabīd Minarets is similar to the Ottoman Minarets in their Towering height and cylindrical shaft. However, the Ottoman Minarets differ in the shape of these pointed tops, which take the form of the pencil.



Figure 45. Minaret of the Great Mosque, zabīd [14].



Figure 46. Minaret of the school of Al-Iskandariyah [14].

Domes are considered one of the distinctive features of the architecture of Yemeni madrasas. Using these domes resulted from climatic and jurisprudential factors in Yemen, which came on the whim of the Ottomans, which characterized their architectural style frequently using domes. These domes are numerous in their shapes, size, and location in the Yemeni madrasas. They often cover the sanctuary in most madrasas; the largest one covers the central area of the sanctuary. The transition areas of these domes have also varied between the triangles pendentives according to the distinctive Yemeni style, the squinches, and rows of stalactites. (Figure 47)



Figure 47. Different shapes of transition zones of the domes of Madrasa of Mustafa Pasha in Zabid (Triangles stalactites, squinches) (Author's photo 2014).

Madrasa of Mustafa Pasha become distinctive from others with its various domes; it has twelve domes. The largest dome is a covering section (A) of the sanctuary; a semicircular dome. It has a large prominent drum outstanding from outside The Madrasa and takes an octagonal shape. It is similar to the drum of the Great Mosque of Zabīd and the dome of Al-Iskandariyah madrasa. (Figure 48, 49)

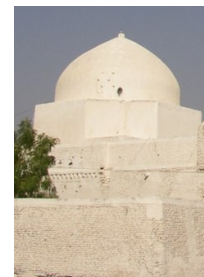


Figure 48. Octogan drum of the dome of the Great Mosque, zabīd [14]



Figure 49: Octogon drum of dome school of Al-Iskandariyah [14]

Alma^ʿāhīr is considered the most crucial utility of religious buildings in Yemen. The Yemeni architects take care of the location of Al Ma^ʿāhīr, which is far from the sanctuary. So, it is located in common in most madrasas in the southwest corner of the courtyard. The reason for choosing this location indicates the architectural experience of Yemeni architects and careful observation of the wind direction, mostly northwest and southwest. Therefore, Alma^ʿāhīr was often built in Yemeni mosques and madrasas. So, putting Al Ma^ʿāhīr in these places avoid religious buildings emitting unpleasant odors and carry them in other direction away from these buildings [21]. It illustrates the doctrinal dimension and its effect location of Alma^ʿāhīr based on the famous jurisprudence rule (*lā arr wa-lā irār*) (No harm, no foul) [33][34]. In the Madrasa of Mustafa pasha, Alma^ʿāhīr is located on the southwest side. In addition, the reason for choosing that location is the proximity to the well that supplies water to the Madrasa. Furthermore, places to shower have been added to these Ma^ʿāhīr on the south and north side to fit with The Madrasa function and student residence.

The Madrasa is simple in decoration compared to other madrasas in the Rasūlid and Tahirid dynasties in Yemen. The decoration is limited to bands of rows of Muqarnas decorated at the end of the exterior facades and lobed decorative arches and blind niches that decorated interior walls. Most of the distinctive decorations of The Madrasa center in the decoration of the two marble columns that flanked the Mihrab niche. Their decoration consists of floral motifs and geometric decoration consisting of blind niches similar to the shapes of Mihrab and tablet forms in addition to curved lines. Also, some unread inscriptions; perhaps their content is Quranic verses and the name of Allah. Most of these decorations were executed in the Yemeni style (Figure 50).



Figure 50. Different decorations of two columns are located on either side of the Mihrab of The Madrasa of Mustafa pasha (Author's photo 2014).

The exciting thing about the decoration of these two columns is the presence of modified bird decorations on the fifth level. These birds are similar to ducks and come out of their beak-like a floral branch. These birds' drawings are distinctive and interesting because they were not widely decorating religious architecture in Yemen. The explanation for its use in religious contests may be that these columns are brought from ancient buildings or perhaps because of the Ottomans' love of decoration with animals and birds. They frequently use them in both architectural ornaments and applied arts (Figure 51).



Figure 51: Bird's decorations of two columns on either side of the Mihrab of The Madrasa of Mustafa pasha (Author's photo 2014).

CONCLUSION

The paper highlights the local and regional importance of Mustafa Pasha Madrassa as a model that perpetuates the Ottoman presence in Zabid and Yemen in general. Greatly influenced by two early madrasas, al-Kamāliyah and al-Iskandariyah Madrasa was built between the Mamluk period and the beginning of the Ottoman presence in Yemen. Therefore, the Mustafa Pasha Madrassa helps spread the Ottoman style and features in Yemen. The study reaches many results;

1. The presence of madrasa in Yemen was considerably extended during the ottoman presence as many madrasas, and teaching complexes were built. Otherwise, the Waqf is the chief propagator and manager of Madrasa in medieval Yemen.
2. The form and layout of the Madrasa originate from the Ottoman style known as (the Bursa style). This style becomes popular in Yemen during and after the Ottoman presence. It can be seen as a vast single-domed sanctuary and later as a multi-domed sanctuary. The local Yemeni style is influential on some of the architectural and decorative elements. Yemeni architectural and artistic elements frequently appear in the Madrasa using common Yemeni building

Materials (Alqaḍāḍ– Habsh stone – Stucco decorations) and almaṭāhīr. The Yemeni's predominance style comes from several reasons; the depth of Yemen's cultural and civilized heritage in general and the city of Zabid in particular, characterized by a unique architectural character.

3. The study shows the factors affecting Madrasa's layout, including the location and available space, which help to distribute the elements of construction, utility, and ventilation in excellent shape. Also, the Madrasa's architect takes care of the influence of doctrinal and environmental aspects in the layout of the Madrasa. The idea of neighboring spatial also influences it.

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