


RESEARCH ARTICLE		The Ottoman Influence on the Architecture of Mosques and Zaouias in Algeria	
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Abstract			
The integration of Algeria into the Ottoman Empire marked a turning point in its political, cultural, and religious development. Ottoman architectural traditions, particularly in the design and construction of mosques and Zaouias, became deeply embedded in the urban fabric of Algerian cities. This architectural evolution was largely directed by the Deys, who commissioned various religious structures reflecting distinct Ottoman stylistic features adapted to local contexts. The religious architecture introduced by the Ottomans in Algeria remains a testament to this artistic synthesis, shaped by a combination of religious, environmental, and political conditions. This study explores the architectural legacy of the Ottoman period in Algeria, with a focus on mosques and Zaouias as key expressions of spiritual and artistic identity.			
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1.1.1 1. Introduction

Algeria possesses a rich cultural and historical legacy, due in part to its strategic geographical position, which has made it a crossroads of civilizations and a center of political and cultural influence. One of the most significant epochs in Algerian history was its incorporation into the Ottoman Empire, following liberation from Spanish colonial domination under the leadership of Khayr al-Din Barbarossa.

Upon becoming an Ottoman Regency, Algeria underwent extensive administrative, political, and economic reorganization. The Ottoman presence fostered deep connections with the imperial center, facilitating the flow of cultural, religious, and artistic influences into Algeria. In particular, the construction of religious institutions such as mosques and Zaouias flourished under the auspices of the Deys, contributing to the creation of a distinctive Ottoman architectural heritage.

The mosques and Zaouias constructed during this period continue to serve as prominent cultural landmarks. Examples include the Great Mosque of Algiers, the Saleh Bey Mosque in Annaba, the Ali Bitchin Mosque, the Ketchaoua Mosque, the Sidi Safir Mosque, the Dey Mosque in Algiers, the Ain El-Bey Mosque in Mascara, and the Pasha Mosque in Oran. These structures demonstrate a unique blend of Ottoman aesthetics with regional styles.

In addition to mosques, Zaouias played a central role during the Ottoman period as religious, educational, social, and even defensive institutions. Unlike earlier traditions where religious buildings were typically commissioned by local communities, the Ottoman authorities actively supported and financed the construction of Zaouias, recognizing their influence on religious and socio-cultural life.

1.1.2 2. Ottoman Architectural Styles Introduced to Algeria

Before Ottoman rule, Algeria had experienced fragmentation and internal strife following the decline of the Ziyamid dynasty. This fragmentation enabled Spanish incursions into strategic cities, including Al-Marsa al-Kabir (1505), Oran (1509), and Mostaganem (1511), thereby weakening Algerian sovereignty (Amora, 2002).

With the arrival of the Ottomans, a new architectural era began, shaped by two principal channels of influence (Ghattas, 2000):

1.1.2.1 2.1 Direct Influence

Ottoman architectural elements reached Algeria through direct routes from Istanbul and other major Ottoman cities. These influences were facilitated by diplomatic, commercial, and scholarly exchanges. Algerian craftsmen and architects who traveled to the imperial capital were exposed to new architectural designs, which they brought back and adapted locally. Additionally, artisans and builders from the broader Ottoman Empire—Turks and Ottoman-affiliated Europeans—migrated to Algeria, enriching local artistic traditions. This influx intensified in the 18th century (12th century Hijri), contributing to a synthesis of Ottoman and Algerian architectural practices.

1.1.2.2 2.2 Indirect Influence

Another avenue of transmission involved Algerian architects and artisans who traveled to the Levant (including Egypt, Syria, and the Arabian Peninsula) on pilgrimage or for educational purposes. Their exposure to Ottoman-influenced architecture in cities like Cairo and Alexandria resulted in the incorporation of new stylistic and structural elements upon their return to Algeria. This indirect diffusion of Ottoman architectural norms gradually reinforced the Empire's cultural influence (Julien, 1978).

Regardless of the route, Ottoman and local Algerian styles often intermingled, producing hybrid forms. In many cases, Ottoman and indigenous motifs were integrated so seamlessly that the distinction between them is difficult to discern (Raymond, 1986).

1.1.3 3. Evolution of Ottoman Architectural Patterns in Algeria

Ottoman architecture in Algeria evolved over time, shaped by various prototypes and adapted to local needs. Notable stylistic inspirations include:

- **First Phase:** The early architectural models were influenced by the *Taş* and *Serçali* mosques of Konya, gradually evolving toward the layout of the Iznik Mosque and the Mosque of Sulciman Pasha (1443). These influences were evident in the floor plans, domes, and decorative motifs of early Ottoman-style mosques in Algeria.

Future sections of this study will further explore:

- The typological classification of Ottoman mosques in Algeria.
- The architectural characteristics of Ottoman Zaouias.
- Case studies of specific religious monuments from the Ottoman era.
- The socio-cultural functions of these religious structures within Algerian society.

1.1.4 3.2 Second Ottoman Architectural Style: The Central-Dome Innovation

The second major architectural style introduced during the Ottoman period was first developed in the city of Bursa, particularly in the construction of its Grand Mosque (*Ulu Cami*) in 802 AH / 1399 CE, commissioned by Sultan Bayezid I. This style combined traditional Islamic mosque planning with innovative roofing techniques, most notably the introduction of domes as central architectural features. The design of the Bursa Grand Mosque marked a departure from the hypostyle layout by incorporating large domes to cover wide interior spaces. This architectural model later influenced subsequent mosque constructions, such as the Suleiman Mohammed Mosque in Demotica, which features a central dome surrounded by cylindrical vaults (Göknıl-Vogt, 1965, p. 91).

Traditional Islamic mosque layouts, characterized by numerous columns and supports, often limited the usable prayer space, restricted congregational movement, and obstructed the view of the *imam* during sermons. Ottoman architects responded to these challenges by reducing the internal support structures and utilizing a central dome supported by massive piers, often complemented by smaller peripheral domes. This innovation allowed for a more expansive, open, and unified prayer hall.

In adapting this style to regional conditions, Ottoman architects also considered climatic factors, incorporating a greater number of windows and ventilation openings in both domes and walls. These elements were designed to optimize lighting and air circulation, showcasing the adaptability and engineering sophistication of Ottoman builders. The size, placement, and segmentation of the domes were carefully calculated to create harmonious and symmetrical interior aesthetics (Raymond, 1986, p. 37).

This central-dome style, initially developed in Anatolia, was introduced into Algeria during the 16th century. It had a profound impact on mosque construction in major Algerian cities such as Algiers, Constantine, Oran, Annaba, and Mascara. In these cities, the architectural emphasis on central domes enabled the coverage of wide spaces, while surrounding secondary domes enhanced the visual and structural balance of the design (Dokali, 1974, p. 37).

1.1.5 4. Ottoman Influence on Mosque Planning in Algeria

A study of the architectural plans and structural systems of Ottoman-era mosques in Algeria reveals the prevalence of two principal planning styles, which coexisted and shaped religious architecture during this period:

1.1.5.1 4.1 The Local (Traditional) Style

The first is the local architectural style, rooted in pre-Ottoman Islamic traditions. In this style, the prayer hall is supported by numerous columns or piers, typically with a flat roof. The structure may or may not include an open courtyard (*sahn*) (Ben Bella, 2007, p. 143). These mosques are usually medium or small in size and may exhibit regular or irregular layouts depending on their location and function. This style is widespread across both large urban centers and smaller towns and is particularly common in residential districts or on their peripheries.

Such mosques often serve unofficial religious functions, mainly catering to the five daily prayers rather than Friday congregational prayers. Architecturally, they tend to be modest, featuring minimal decorative elements or none at all. Representative examples of this style in Algeria include the Al-Kasbah Al-Barani Mosque, the Sidi Muhammad Bouqabreen Mosque, and the Sidi Lakhdar Mosque in Constantine. In Oran, the Sidi El Hawari Mosque stands as a notable example (Marçais, 1954, p. 427). (See Figures 01-03).

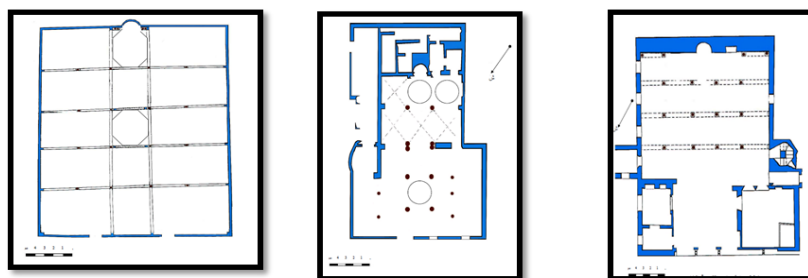


Figure 01: Sidi Lakhdar Mosque, on the authority of Ben Bella Khaira, 2008.

Figure 02: Sidi Muhammad Bouqabreen Mosque, on the authority of Ben Bella Khaira, 2008.

Figure 03: Al-Kasbah Al-Barani Mosque, on the authority of Ben Bella Khaira, 2008.

2- The new model:

The types of imported Ottoman architectural styles were numerous and their planning forms varied according to their influences and the reality that Algeria shaped in its local way, and its most prominent element is the “dome” (Ben Bella, Kh. 2007: 143). By reviewing the plans of these mosques and comparing them to the Ottoman mosques in Turkey, we came to discover their nature and identify the manifestations of the Ottoman influence in them (Marçais, G. 1954: 428), which are as follows:

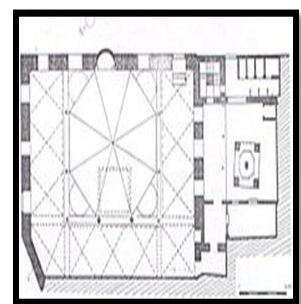
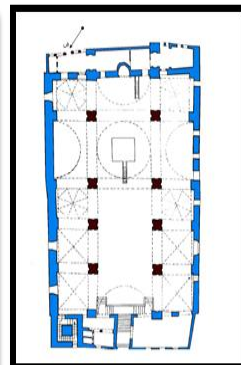
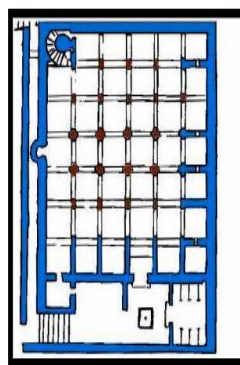


Figure 04: Al-Jadeed Mosque, About: Maarouf Belhaj, 2012.

Figure 05: Al-Safir Mosque, From: Ben Bella Khaira 2008.

Figure 06: The original Great Mosque in Mascara, from: Ben Bella Khaira, 2008.

1.1.6 4.2 Typological Variations of Ottoman Mosques in Algeria

Ottoman architectural influence on Algerian mosque design is reflected in several typologies. These include variations in spatial layout, dome systems, and structural supports. The most prominent mosque configurations introduced during the Ottoman period are summarized as follows:

- **Square-plan mosques** with a central dome supported on an octagonal base, surrounded by a portico on all four sides. Each section of the portico is divided into square compartments, each covered by a small dome. A representative example is the Ain al-Bayda Mosque in Mascara (1160 AH / 1747 CE), which features five domes.
- **Square mosques with corner pendentives**, where the central dome rests on curved supports embedded at the corners of the prayer hall. A notable example is the Safir Mosque (941 AH / 1534-1535 CE).
- **Cross-plan mosques**, where one axis of the cross is extended. The central space is square and surmounted by a large central dome, surrounded by smaller domes. The extended axis is covered by a series of cylindrical vaults, while the lateral arms are roofed with transverse barrel vaults. The New Mosque in Algiers is an example of this configuration, reflecting a Byzantine layout adapted by Ottoman architects. Similar structures were seen in Prussia and later in Algerian cities. However, in Algeria, Ottoman influence remained largely confined to the

interior prayer space, without incorporating external courtyards or sanctuaries common in other regions (Mabrouk, 2009, p. 144). (See Figures 04, 05, 06).

1.1.7 5. The Ottoman Minaret: Imported Forms and Local Adaptations

Among the most prominent architectural elements introduced from Turkey were the **minarets**, whose design and decorative styles evolved into two distinct categories: the **local square-plan minaret** and the **Ottoman imported cylindrical and octagonal forms**.

1.1.7.1 5.1 Local Square Minarets

These minarets typically consist of a vertically ascending square shaft with three clearly defined tiers. The base is a tall square tower surmounted by a smaller platform (*gossaq*), capped with a small dome. The tower is topped by a decorative belt and merlons. A narrow gallery encircles the base of the *gossaq*, enabling the *muezzin* to perform the call to prayer in all four directions. Internally, a staircase spirals around a central core. This form traces its lineage to early North African minarets, such as:

- The Kairouan Mosque minaret
- The Mosque of Sfax
- The minaret of Beni Hammad Citadel
- Almohad-era minarets (e.g., Koutoubia Mosque)
- Zayyanid minarets (e.g., Tlemcen Mosque) (Bourouiba, 1986, p. 273)

1.1.7.2 5.2 Ottoman-Inspired Minarets

This category includes three principal subtypes:

- **Octagonal minarets**, generally composed of two levels. The lower section ends with projecting eaves that form a circular balcony for the *muezzin*. In some examples, like the Pasha Mosque in Oran, the minaret comprises two stacked octagonal towers capped with a dome or pediment, possibly to increase height (Bourouiba, 1986, p. 129).
- **Cylindrical minarets**, with a circular shaft rising from a base separated by a prominent cornice resembling a handrail. These elegant and slender minarets often terminate in a pen-like, conical spire topped with a crescent. The Salih Bey Mosque in Annaba represents this type. Internally, a wooden or brick staircase spirals upward around a solid core. Narrow windows are inserted into the shaft and dome to provide light and ventilation.
- **Decorated minarets**, combining rectangular massing on the exterior with shell-like forms on the interior. The facades are often adorned with ceramic mosaics or tiled panels in geometric patterns, placed within recessed niches. Examples include:
 - The Army Mosque minaret in the Kasbah of Algiers
 - The Pasha Mosque minaret in Oran
 - The minaret of the Sidi Abd al-Rahman al-Murabbaa Mosque in Algiers (Azouk, 1991, p. 148)

1.1.8 6. Central-Dome Typology in Ottoman-Algerian Mosques

From the early 17th century (1032 AH / 1622 CE), a distinctive Ottoman architectural model known as the “**central-dome mosque**” or “**centralized plan mosque**” became increasingly dominant in Algeria. This style features a large central dome covering most of the prayer hall, often supported by smaller domes, semi-domes, or barrel vaults. Originating in the 10th century AH (16th century CE), this style became emblematic of Ottoman imperial architecture (Maarouf, 2018, p. 166).

Notable examples of this architectural form include:

- The New Mosque in Algiers
- Salih Bey Mosque in Annaba
- Ali Bitchin Mosque

- Ketchaoua Mosque
- Safir Mosque
- Al-Dey Mosque in Algiers
- Ain al-Bayda Mosque in Mascara
- Al-Pasha Mosque in Oran

These mosques commonly feature a central dome supported at eight points—two on each side of the square—typically using two columns and two piers. The surrounding arcades or corridors vary among structures, leading to four main subtypes (Maarouf, 2018, p. 174):

1.1.8.1 *Type I: Central Dome with Full Portico Surround*

In the Ain al-Bayda Mosque and the Dey Mosque in Algiers, the central dome is supported by pairs of double columns. A portico surrounds the square hall on all sides and is covered by small octagonal domes. In Ain al-Bayda, the domes occupy the center of each side; in Al-Dey Mosque, they are placed at the corners and in front of the *mihrab*. The remaining bays are covered by barrel vaults. The configuration resembles that of the Şerefeddin Mosque (1636 CE) in Konya. (See Figures 07, 08).

1.1.8.2 *Type II: Central Dome with Additional Northern Portico*

In the Ketchaoua and Ali Bitchin Mosques, the central dome is octagonal, supported by pendentives placed on paired columns. The square is enclosed on all sides by porticoes, with an additional northern portico. This design is similar to the Kilic Ali Pasha Mosque in Istanbul, though the Algerian versions use ribbed panels rather than semi-domes. (See Figures 09, 10).

1.1.8.3 *Type III: Three-Sided Vaulted Portico*

In the Safir Mosque in Algiers, the central dome is supported by corner arches resting on two columns on the north, east, and west, and directly on the *qibla* wall to the south. The central square is surrounded on three sides by a portico with intersecting vaults, a design reminiscent of the Şadırvan Mosque in Izmir. (See Figures 11, 12).

1.1.8.4 *Type IV: Double Portico with Alternating Vaults and Domes*

The Pasha Mosque in Oran features an octagonal central dome supported by curved arches on piers. It is surrounded by two layers of porticoes: the inner one with intersecting vaults and the outer one alternating between ribbed domes and vaults. This complex columnar arrangement recalls Ottoman Beylik mosques in Anatolia, particularly the Great Mosque in Van.

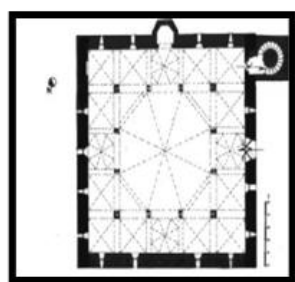


Figure 07: Horizontal plan of Ain al-Bayda Mosque in Mascara, from: Maarouf Belhaj, 2018.

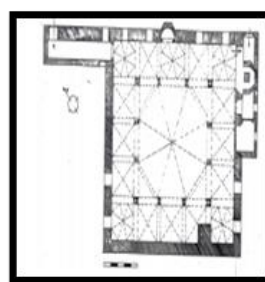


Figure 08: Horizontal plan of the Dey Mosque in Algiers, from: Maarouf Belhaj, 2018.

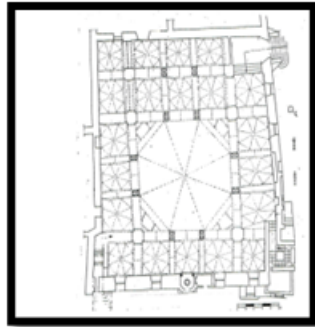


Figure 09: Horizontal plan of the Ali Betchin Mosque, from: Maarouf Belhaj, 2018.

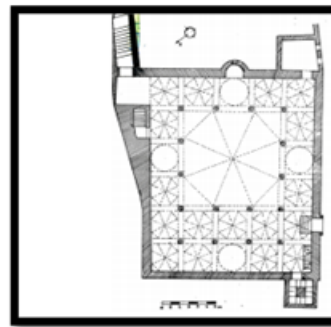


Figure 10: Horizontal plan of the Ketchawa Mosque, from: Maarouf Belhaj, 2018.

1.1.9 4. Ottoman Influence on the Planning of Zaouias in Algeria

The layout of Zaouias in Algeria during the Ottoman period generally conformed to architectural traditions found in other Ottoman provinces such as Egypt, Libya, and Tunisia. A common characteristic of these structures is the absence of minarets, as seen in examples like the Zaouia of Hansala, the Zaouia of Ben Abd al-Rahman Bash Muhammad al-Ghurab, and the Zaouia of Sidi Khalifa. Architecturally, these buildings are marked by their simplicity—low ceilings and walls, minimal decoration, and limited windows (Abou Al-Qasim, 2008, p. 229). In terms of typology, Zaouias during this period can be generally classified into three categories: the mosque or khanqah type, the Zaouia-madrassa, and the Zaouia-dome. However, the differences between these types are subtle. The architectural planning of these Zaouias was heavily influenced by the design principles of mosques, madrasas, or shrines, and often incorporated additional elements such as Sufi retreat quarters. Many Algerian Zaouias fell into the first category, serving simultaneously as mosques and spiritual centers. Notable examples include the Zaouia of Sidi bin Abdel Moumen, which functioned concurrently as a mosque; the Zaouia of Ibn Badis, also known as the Sidi Qamoush Mosque; and the Zaouias of Sidi Ali al-Tilmisani, Sidi Muhammad al-Ghurab, and Sidi Khalifa. These sites are mentioned in Saleh Bey's waqf (endowment) records as fulfilling both religious and Sufi functions (Dahdouh, 2017, p. 22).

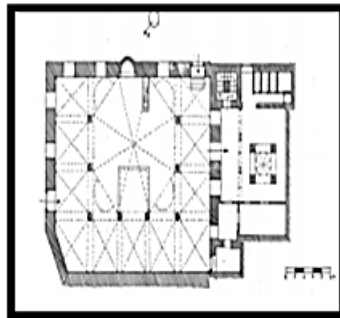


Figure 11: Horizontal plan of Safar Mosque, from: Maarouf Belhaj, 2018.

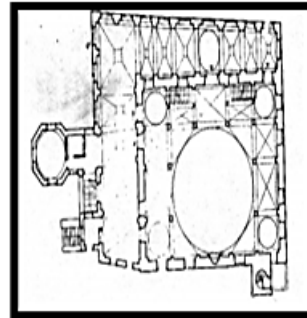


Figure 12: Horizontal plan of Buyukli Mahmut Mosque in Izmir, from: Maarouf Belhaj, 2018.

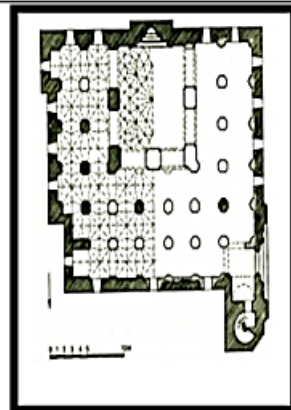


Figure 13: Horizontal plan of the Great Mosque in Fan, from: Maarouf Belhaj, 2018.

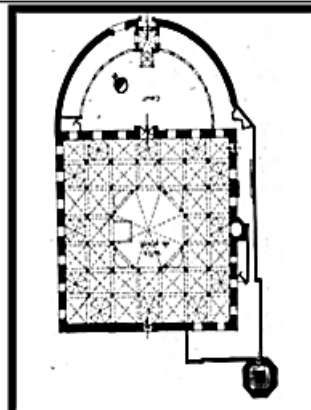


Figure 14: Horizontal plan of the Pasha Mosque in Oran, from: Maarouf Belhai. 2018.

The architectural layout of the Zaouia of Sidi Abdel Moumen is particularly illustrative of Ottoman-era planning. It features a central courtyard surrounded by a portico that wraps around residential quarters. The prayer hall is situated on the southern side to maximize natural light, while the upper floor contains a large hall oriented toward the courtyard. Additional multi-functional rooms are located on the northern and eastern sides. A prominent dome caps the structure, covering part of the corridor opposite the mihrab (Dahdouh, 2017, p. 23) (see Figure 15).

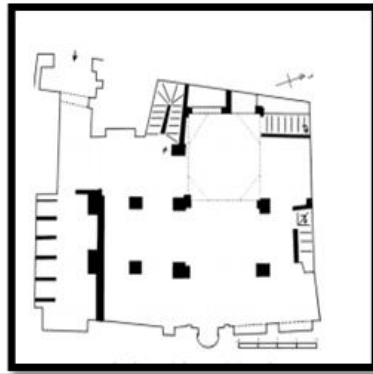


Figure 15: Sidi Abdel Moumen Zaouia, By: Abdelkader Dahdouh, 2010.

We noticed that most of the Zaouias in Algeria share the phenomenon of the presence of shrines in them, and the phenomenon of attaching shrines to Zaouias has been known to historical periods prior to the Ottoman era, as we find examples of it in Cairo dating back to the Ayyubid and Mamluk era until the Ottoman era, Among them are the Bektashi tekke, which has forty graves, the tekke of Sheikh Sinan Pasha, and the Zaouia of Hassan al-Rumi, As for the Zaouia of Ibn Abd al-Rahman Bash Tarzi, various documents and texts agree that it was a Zaouia without mentioning it as a school or a mosque, but the presence of the shrine inside its prayer house and next to the mihrab, which is only about 3 meters away from it, with nothing isolated from it except a wooden fence that does not exceed its height. About 1.50 m, it can be classified into the third type, which is related to the Zaouia dome, Although there are shrines in the Zaouia of Sidi Abdel Moumin, we do not find them in the prayer house or in the courtyard. The layout of this Zaouia was undoubtedly affected by its dual function, as it is in line with the teachings of the Islamic religion, which does not permit prayer in shrines. The phenomenon of dual function between the Zaouias has been known. Mosques or schools are in many models, and from periods prior to the Ottoman era, as we find them in Egypt during the Mamluk era (Rezk, M. 1998: 70). (see Figure 16).

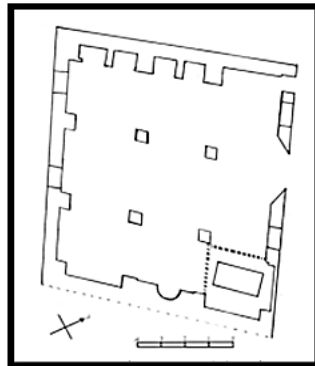


Figure 16: Bash Tarzi Zaouia in Constantine, from: Abdelkader Dahdouh, 2010.

1.1.10 Integration of Shrines within Algerian Zaouias: Historical and Architectural Perspectives

It has been observed that a majority of *Zaouias* in Algeria exhibit the notable phenomenon of incorporating **shrines** within their premises. This architectural and religious feature predates the Ottoman era, with historical precedents traceable to Cairo during the Ayyubid and Mamluk periods, continuing into the Ottoman period. Notable examples include the *Bektashi tekke*, which contains forty graves, the *tekke* of Sheikh Sinan Pasha, and the *Zaouia* of Hassan al-Rumi.

Of particular interest is the *Zaouia* of Ibn 'Abd al-Rahman Bash Tarzi. Historical documents and textual sources unanimously refer to this institution as a *Zaouia*, without explicitly designating it as a *madrasa* or *mosque*. However, the presence of a shrine within the prayer hall, situated approximately 3 meters from the *mihrab* and separated solely by a

wooden partition measuring no more than 1.5 meters in height, suggests its classification within the third typological category—namely, the *Zaouia* dome type.

In contrast, although the *Zaouia* of Sidi Abdel Mounin contains shrines, these are absent from the main prayer area and courtyard. The spatial organization of this *Zaouia* was clearly influenced by its dual functionality and adherence to Islamic legal doctrine, which prohibits performing prayers within structures that contain tombs. The phenomenon of dual religious functionality—wherein *Zaouias* served simultaneously as mosques or madrasas—has long been recognized, with origins extending back to the Mamluk period in Egypt (Rezk, 1998, p. 70) (see Figure 16).

1.1.11 Architectural Composition of Ottoman Zaouias

Ottoman-era *Zaouias* in Algeria generally comprised a number of functional components, including a courtyard, cells for seclusion (*khalwa*), a prayer hall, a male reception hall, the sheikh's chamber, the shrine, ablution facilities, a kitchen, a dining area, and storerooms. Some complex *Zaouias* also featured additional structures such as stables and avenues. Nonetheless, the presence of these elements varied across different institutions (Rezk, 1998, p. 24).

Despite terminological distinctions between *Zaouias*, *khawaniq*, and *takayas*, the architectural differences among them remain marginal. This architectural continuity is evident in comparisons between *Zaouias* in Morocco and those in the Eastern Islamic world, as their layouts conform to the broader principles of Islamic architecture and artistic expression.

1.1.12 Conclusion

The diverse environmental and cultural contexts of Muslim societies significantly influenced the evolution of Islamic architecture, particularly in the domain of religious structures. Yet, a unifying spiritual and artistic ethos remains discernible throughout the Islamic world, reflecting the transcendental unity of Islamic values.

The Ottoman conquest of Algeria, which marked the end of Spanish occupation, led to the appointment of Khayr al-Din Barbarossa as *Beylerbey* and inaugurated a new era of political, economic, and cultural integration. Following Algeria's incorporation into the Ottoman Empire, the regional leadership pursued systematic reforms in governance, trade, and religious life. These developments catalyzed the diffusion of Ottoman artistic and architectural models, particularly in urban centers, resulting in the construction of religious facilities that embodied both imported Ottoman features and indigenous Algerian elements.

The fusion of diverse religious doctrines and environmental conditions enabled the Ottomans in Algeria to produce an enduring architectural heritage that continues to preserve its spiritual, aesthetic, and cultural legacy.

During the Ottoman era, Algerian mosques played a central role across religious, educational, architectural, and artistic domains. Through the influence of *ulama* and *sheikhs*, these institutions sustained a dynamic intellectual and spiritual life. Architectural analysis of mosques from this period reveals two predominant styles: a local architectural tradition and an imported Ottoman model. For example, the Ain al-Bayda Mosque in Mascara stands as the sole exemplar of the imported style in Algeria, characterized by a central dome flanked by smaller surrounding domes—a typology that directly reflects classical Ottoman mosque design.

In this period, *Zaouias* emerged as crucial multi-functional institutions, contributing to Algeria's military, religious, educational, and social landscapes. Their architectural and organizational development reached unprecedented levels, bolstered by the support of Ottoman authorities who recognized their socio-political and cultural significance. Numerous *Zaouias* were constructed during this time, many of which remain operational today. However, the deterioration or loss of original architectural elements has rendered archaeological study and historical reconstruction of their foundational layouts increasingly challenging.

Our investigation reveals that Ottoman-era *Zaouias* in Algeria followed three primary architectural typologies: (1) the *Zaouia Mosque* or *Khanqah*, (2) the *Zaouia Madrasa*, and (3) the *Zaouia Dome*. Despite differences in function and layout, these types do not exhibit radical architectural distinctions. Instead, they reflect a continuum of Islamic architectural practice, shaped by both local traditions and transregional influences.

1.1.13 Acknowledgement

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1.1.14 Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

References

1. Abou Al-Qasim, S. (2008). *The cultural history of Algeria*. Lebanon: Dar Al-Gharb Al-Islami.
2. Amora, A. (2002). *Al-Moujaz fi Tarikh Al-Jazair* (1st ed.). Algeria: Dar Al-Rihana for Publishing and Distribution.
3. Azouk, A. K. (1998). *The development of minarets in the Central Maghreb from the beginning of the Beni Hammad state until the end of the Ottoman era* (Master's thesis).
4. Ben Bella, K. (2007). *Religious establishments in Algeria during the Ottoman era* (Doctoral dissertation, Institute of Antiquities, University of Algiers).
5. Bourouiba, R. (1986). *Algeria's contributions to Arab-Islamic religious architecture*. Algiers: O.P.U.
6. Dahdouh, A. (2017). *Zaouias in Algeria during the Ottoman era*. Egypt: Studies in the Antiquities of the Arab World.
7. Dokali, R. (1974). *Les mosquées of the Turkish period in Alger*. Alger: S.N.E.D.
8. Ghattas, A. (2000). *Crafts and artisans in Algiers* (Doctoral dissertation, Department of History, University of Algiers).
9. Goknil-Vogt, U. (1965). *In architecture universelle*. Fribourg: Office du Livre.
10. Julien, A. C. (1978). *History of North Africa*. Tunis: Tunisian Publishing House.
11. Maarouf, B. (2018). Artistic communication between Turkey and Algeria in the modern era: Mosques with a central dome in Algeria, a case study. *Manbar Archaeological Heritage Magazine*, (7).
12. Mabrouk, M. (2009). *The Ottoman mosques in Oran and Camp*. Algeria: National Office of University Publications.
13. Marçais, G. (1954). *L'architecture musulmane d'Occident*. Paris: Arts et Métiers Graphiques.
14. Raymond, A. (1986). *Arab capitals: Their architecture and urbanism in the Ottoman period*. Syria: Dar Al-Muglad.
15. Rezk, M. A. (1998). *Sufi Khanqawat*. Cairo, Egypt: Madbouly Library.
16. Belakehal, A., Tabet Aoul, K., & Farhi, A. (2016). Daylight as a design strategy in the Ottoman mosques of Tunisia and Algeria. *International Journal of Architectural Heritage*, 10(6), 688–703. <https://doi.org/10.1080/15583058.2015.1020458>
17. Attar, A., Saraoui, S., Mohdeb, R., Zineddine, S., & Khadraoui, M. A. (2024). Ottoman architecture in Algeria: Current state and prospects for contemporary functional adaptation. *Civil Engineering and Architecture*, 12(2), 1069–1090. <https://doi.org/10.13189/cea.2024.120230>
18. Seghieri, S. (2024). Algeria's Sufism and their role in spreading the Sufi orders in Morocco during the Ottoman era. *IMAGO Interculturalité et Didactique*, 23(2), 363–379.
19. Ladjal, T., & Bensaid, B. (2014). A cultural analysis of Ottoman Algeria (1516–1830): The North South Mediterranean progress gap. *ICR Journal*, 5(4), 567–585. <https://doi.org/10.52282/icr.v5i4.375>