

An artistic study of Sidi Belghit's dwirya at the Knadessa Ksar in Bechar - southwest of Algeria

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Abstract

This research study aims at highlighting the artistic and aesthetic value of the dwellings (Dwiryat) of Ksar Al-Knadessa and preserving its unique architectural identity, the significant deterioration that threatens its survival, in addition to the lack of studies that touched this unique aesthetic architectural style. Therefore, it is necessary to carry out an artistic research of these dwellings in order to protect and preserve them, and highlight their structural and technical elements and components.

Keywords: Dwiryat (dwellings), architectural style, dwellings, identity, preserving.

INTRODUCTION

The Algerian saharian ksours are considered as an architectural and urban cultural heritage, and their structures differed according to the regions and environments in which they were built, that led scholars and researchers classify them into different styles from a geographical standpoint and the resulting building materials and techniques, and from an aesthetic and decorative styles standpoint. Among these regions, is the Saoura region in the south, specifically in the state of Bechar in southwestern Algeria, which is characterized by saharian ksours that express the cultural level of its builders, especially the Kenadessa Ksar, the subject of this study.

It is known that the ksar consists of several architectural units in a distinct urban pattern. The residential unit in its system constitutes an effective axis in the study of architectural style, as the study of the dwelling is branched and varied from the structural aspect to the functional aspect and the extent of the distinction of its artistic frameworks, which we will try to address through a sample dwelling in Kenadessa Ksar.

The Kenadessa ksar is a witness to the antiquity of the Saharan ksours, its historical richness and urban beauty, its unique architectural style and decorative details that reflect the intellectual and social sophistication reached by its inhabitants.

The architectural structure of the Ksar includes a group of units; the most important of them are two mosques and **Zawiya Kandousia Zianiya*** around which lead to its various neighbourhoods, that is different in the layout of their dwellings according to the standard of living of each social class, where some of them are distinguished by a special structural configuration. This is evident through the decorations of various shapes and colours that cover the majority of its internal walls and some of its roofs.

Hence, our research paper aims at studying a sample of these dwellings, to highlight the artistic and aesthetic value of the various decorative components contained in these dwellings, based on the documentary field study.

1. The concept of Saharan ksar

'Ksar (pl. Ksour) in Arabic is the house (Housing complex). Literally, it means short. It was called so because the sanctuary of woman is short. The ksar is bigger than the houses. It is generally used to designate a Castle or a fortress, but also to refer to some fortified Saharan constructions with specific urban style restricted to some given areas generally adjacent to oases (Le Grand Dictionnaire Encyclopédique, La Rousse, 1984, p. 7905). The concept of ksar in Algeria, **AGHRAM** in the local dialect.

The word is pronounced "**Gsar**". It is a phonic alteration of the Arabic root **qasr** which designates what is short or limited. That is to say, a limited space to which only a certain category of social groups has access. It is a confined and reserved space limited to the use of some people (MOUSAOUI, 1994, p. 370).

From the historical point of view, the origins of the town planning and the architecture of the Saharan ksour can be divided into two classes, according to the date of their construction: those built before the advent of Islam to the region, of which the structure has changed after Islam, and those built in latest periods (LABTAR & BELGUERNIN, 2021).

2. The traditional dwelling in the Saharan ksour

Researchers diverge about the most accurate appellation of the Saharan **Dwelling**. In their literature we find: dwelling; home; residence and house. The latter is mostly used in Arabic instead of dwelling. It is used to describe a housing unit inside the ksar as well as the dwellings of the Sahara. Allah says: "**and your Lord inspired to the bees: "Take for yourself among the mountains, houses, and among the trees and [in] that which they construct"** (Surat Al-Nahl verse 68)

In the Quran the term 'Home' is wider than 'House': "**And Allah has made for you from your home's a place of rest and made for you from the hides of the animals tents which you find light on your day of travel and your day of encampment; and from their wool, fur and hair is furnishing and enjoyment for a time"** (Surat Al-Nahl verse 80).

Another interchangeable word with 'House' is: **ad-dār**. In singular form the word designates the living space. But in addition to the meaning of "house" or "built area", the word dār means "territo-

* **Zawiya Kandousia Zianiya**: was founded by Sheikh Amhamad Ben Abdul Rahman Ben M'hammad Ben Abi Zayan Al Kandousi (1651-1732).

ry": **Dār al-`ahd**, “territory of the pact”, **dār al-harb**, “territory of war”, **dār al-imān** “territory of faith”, **dār al-islām**, “territory of Islam”, and many other denominations, which clearly show that before designating a house, the word *dār* designates a delimited and appropriate space, over which the undisputed authority of a leader or group is exercised. It is therefore a space over which power is exercised, the authority of which is recognized. While inhabiting it refers to habitat. *As-sakan* in Arabic, from which derives the term *sakīna* "serenity". *Sukūn* is the opposite of movement. *Sakana* means "he lost his restlessness (*harakātu*)", or "calmed down after taking action". The main function, therefore, of the house is to provide rest and serenity, to remove the being from the hustle and bustle and noise surrounding it (DJERADI, 2012-2013, pp. 36-37).

The House in general refers to a civilized dwelling of stone, brick, wood, fabric, leather, wool, or animal hair. The Arab houses took several names that differed according to the material of their construction and their structural elements and facilities.

As for the source of house planning, there are different opinions. Some researchers refer to the Greeks, the Romans, or to other ancient civilizations, but with Islam, the house and housing developed and became very special in terms of living style, structure, and decoration.

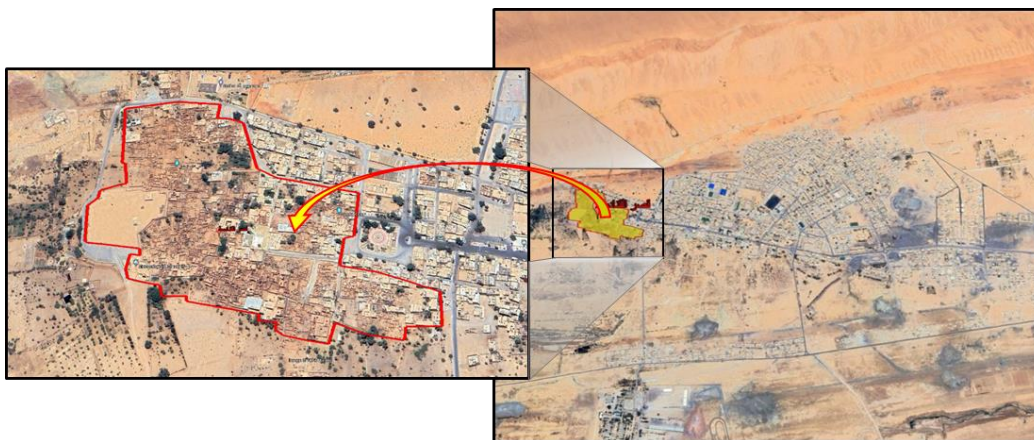
The Dwelling in the Saharan ksour consists of a group of facilities, the most important of which are; the rooms, storerooms, **kunif** (Water Closet), and the roof. The house may be constituted of two or more floors, depending on the specificity of each region. As for its organization, it is subject to the principle of **IHTISSAB** applied by **Al muḥtasib** (A sort of urban police) (LABTAR & BELGUERNIN, 2021).

3. The Kenadessa Ksar

3.1 The Geographical location

The city of Kenadessa is located about 20 km west of the state of Bechar in the south-west of the Algerian sahara, bordered to the north by Boukais, Lahmar and Moughal, to the South by Taghit and Al-Abadla, and to the West by Merija. The Ksar is located in the far west of the city.

Figure N° 1. (An aerial photo of the Kenadessa Ksar)



From: Google Earth (2024)

3.2 A Brief History

Al-kenadessa was known in ancient times as Al-Awina. It was mentioned in the authentic letter of Abu Salem Abdullah Ben Muhammad al-Ayashi 1627-1679 to his student Abu al-Abbas Ahmed Ben Said in 1657, advising him and reminding him of the pilgrimage route, as he said to him:

“if you are determined to go out, buy your dawab (animals) feed from there for eight nights or nine as a precaution to Fijij, there is nothing except the village of Al-Awina, after five stages of registration of Sajelmasa. There are Bechar villages nearby, and there are not many people who need it, so get ready for it from there” (al-Ayashi, 2013, p. 48).

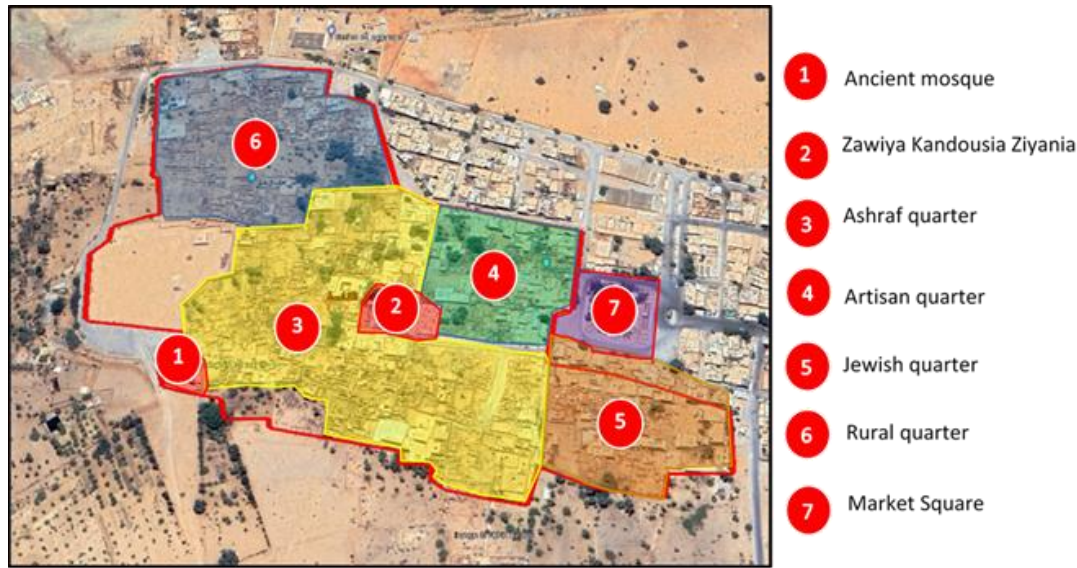
As for the modern Kenadessa, according to sources and references and what is common and frequent among the inhabitants of the region, its origin dates back to the decay of the Almoravid; by Almohads in 1130-1269. In addition to the arrival of some of their families to the Kenadessa (Aqab, 2007, p. 24). There is another current dating the history of the Ksar by reference to its origin was with the arrival of the grandfather, **Masoud Ben Mubarak*** as it was mentioned in one of the manuscripts: “Sidi Masoud emigrated from his country, Marrakesh, where he lived, so he left his country with his slave named Asaada Al-Saleh until he reached the country of Bechar. He went down to the Zagour Ksar, and Masoud settled in the ksar after being welcomed by its people.” When they learned of his kindness and the honor of his lineage, they married him a good woman, of whom he gave birth to a son named Othman. He was forced to emigrate due to special circumstances, heading towards the Kenadessa, so he took some rest there with his tribe until he heard a caller calling “Ammar Ammar” and he said to them, “Here we will stay, so he created the Kenadessa.” He built a modest mosque and all those who were with him gathered and stayed there (Kadi, 2023).

4. General planning of the Ksar

It adopts a planning system similar to the layout of the Islamic city in terms of the distribution of public facilities, where we find the distribution of the dwellings of the Ashraf class around the religious center, represented mainly in the Zawia Kandousia Zianiya and the mosque. On their left, the Kasbah and the ancient mosque. On their right, we find the dwellings of artisans and next to them the Market Square, south of which there are Jewish dwellings. Finally, on the north side of the Ksar we find the dwellings of the ordinary class or as they are called the rural (Aqab, 2007, p. 46).

* **Masoud Ben Mubarak** is one of the grandfathers of Sheikh M'hammed Ben Abi Zayan Al Kandousi.

Figure N° 2. (Boundaries and naming of Ksar Al-Kenadessa neighbourhoods)



From: Google Earth (2024), modified by researchers.

Referring to the design of the various ksar dwellings in terms of size, architectural and artistic elements, there is a significant difference and disparity due to the different social level of the ksar residents can be divided into two parts: Al-Ashraf Dwellings (**Al-Dwiriya**)*, which belong to the descendants of Sheikh Mohammed ben Bouziyan, and public housing for the rest of the ksar residents.

To highlight the architectural and artistic value that characterizes the dwiriya of the Kenadessa ksar, we will conduct an artistic study of Sidi Belghit's dwiriya, one of the Sons of Sidi Boumediene, who belongs to one of the three major families descended from Sheikh Mohammed ben Bouziyan (BARKANI, 2011, p. 142).

5. Dwiriya Sidi Belghit

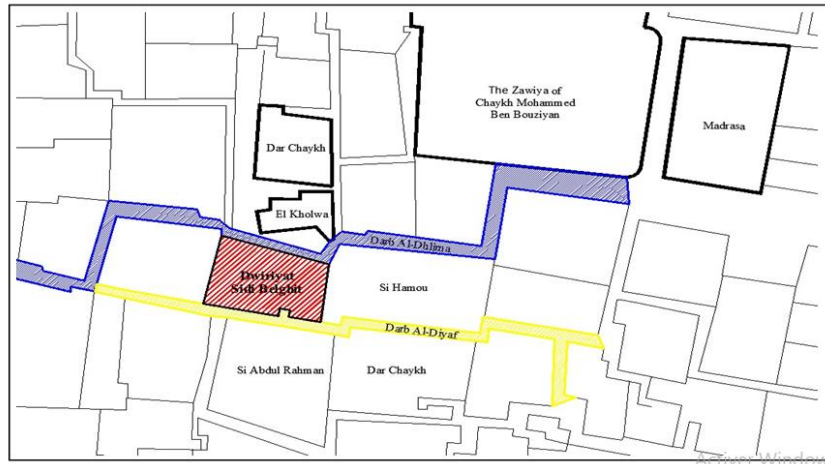
5.1 Extension and area

It is located in the south-western side of the Zawiya, in the north it is separated from Sheikh Mohammed Ben Bouziyan's retreat by Darb Al-Dhlima, and in the South by Darb Al-Diyaf from the Dwiriya of Si Abdul Rahman.

It occupies an area of 170 m² in an irregular rectangular, accessed through a single entrance from the south, with an internal orientation and a shape consistent with the urban structure of the area.

* The term "**al dwiriya**" used in the area means the reception room or guest room, where the Marabout receives his visitors, spends his prayers and meditations. It is originally a diminutive of the term "Dar" dwelling.

Figure N° 3. (The location of dwiriyat Sidi Belghit in the ksar.)

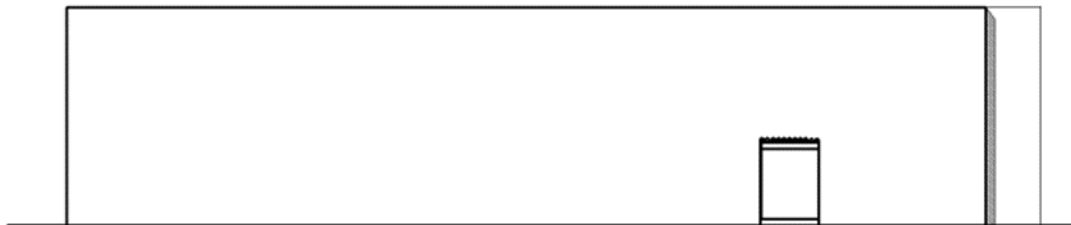


Source: PDAU of Kenadessa, modified by researchers.

5.2 Frontages

The only frontage of the dwelling is located on the southern side of them, which includes the main and only entrance, with an extension of about 17 m on the Diyaf Derb. It is 1.20 m wide, while the northern side has a deaf frontage.

Figure N° 4. (The main frontage of the Sidi Belghit's dwiriya.)



Source: The work of researchers.

5.3 Overall design

The dwiriya is designed in two levels:

- The first level represents the ground floor. It is centred by a patio surrounded by corridors on all four sides, a door opens on the eastern hallway to a rectangular room with an area of 11 m². There are stairs next to it or staircases leading to the upper floor. On the Western hallway, there is a door that leads to the main room, which is basically a room to receive guests in the shape of an inverted letter (T), its Western Wall is mediated by a door leading to two square opposite rooms

- The second level represents the upper floor, of which there are only remnants of a wall on the western side.

The general design of the dwelling is notable for the absence of a porch and direct access to the patio from the eastern hallway, with a small wall next to the entrance to break the direct view towards the patio.

Figure N° 5. (The ground floor is represented in the center of the patio.)



Source: Photographed by researchers.



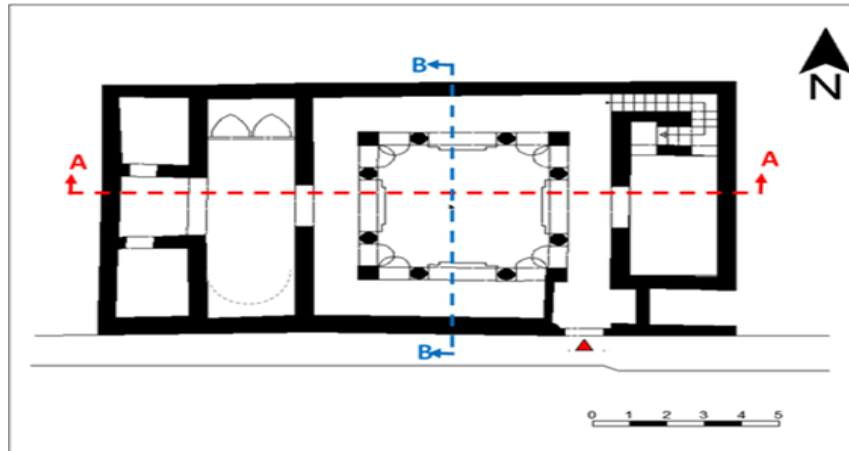
Figure N° 6. (Represents the first floor.)

Source: Photographed by researchers.

5.4 Components of the dwiriya

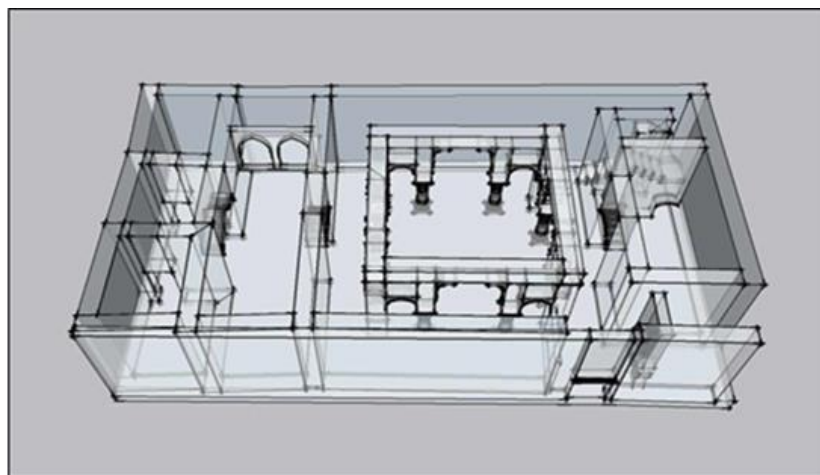
The remaining ground level of the dwiriya consists of two rooms directly overlooking to the center of the dwelling (the patio), which represents its outlet and the way to enter the light. Due to the lack of windows in the facades, these rooms take a rectangular shape as their length exceeds their width, and does not exceed 2.40 m. They are accessed through high doors. The dwiriya patio is surrounded by four arcades to protect the doors overlooking it. These arcades are decorated with various arches. These arches are based on eight columns and four supports.

Figure N° 7. (The ground floor plan of the Sidi Belghit's dwiriya.)



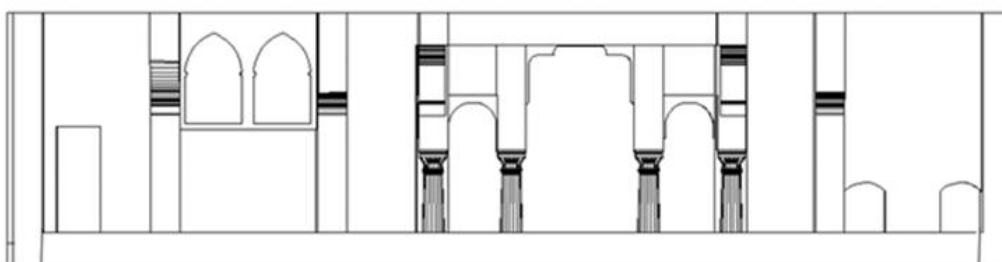
Source: The work of researchers.

Figure N° 8. (A three-dimensional model of Sidi Belghit's dwiriya.)



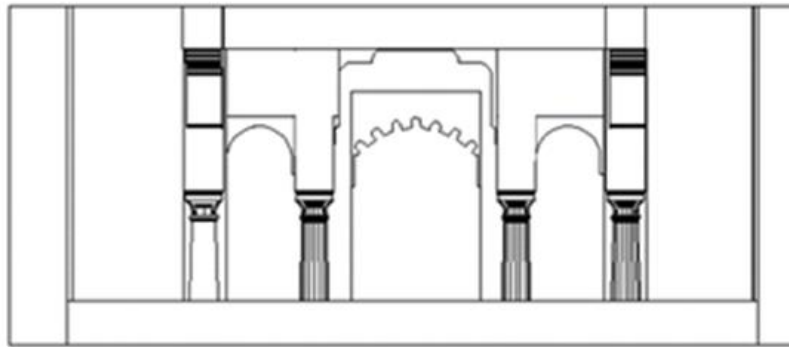
Source: The work of researchers.

Figure N° 9. (Section (A-A) of Sidi Belghit's dwiriya.)



Source: The work of researchers.

Figure N° 10. (Section (B-B) of Sidi Belghit's dwiriya.)



Source: The work of researchers.

6. Technical and architectural characteristics of the Sidi Belghit's dwiriya

6.1 Materials used in construction

Local materials prevailing in the region were used, easy to access and exploit, as the main material in the construction of this dwiriya is bricks, along with stones and palm trunks because of their characteristics and convenient features in line with the nature of the Sahara environment climate. They are inexpensive. As for the decoration, plaster material was used.

6.2 Construction techniques

The field inspection of the teacher allowed us to get acquainted with the various technologies that were used in the construction of this dwelling, and what helped us was the stripping of some of its parts from paneling, consisting mainly of bricks and stucco.

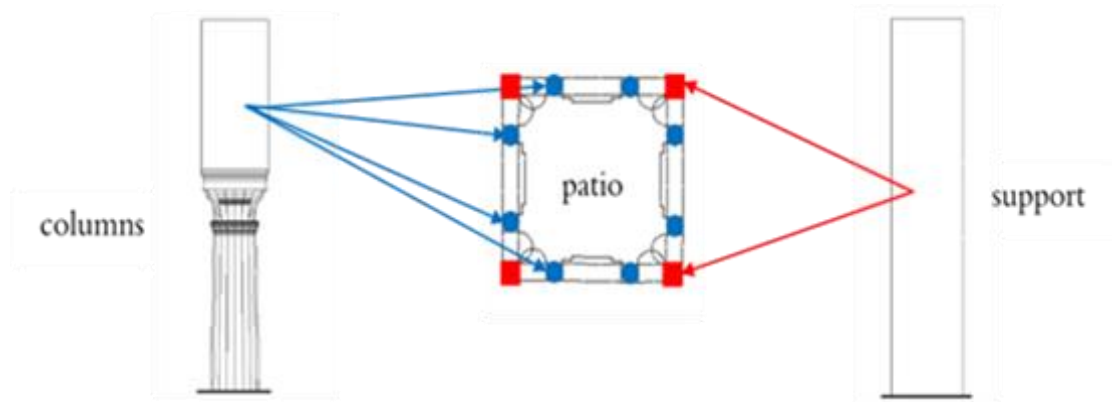
6.2.1 Foundations, walls and cladding

The stone was generally used in foundations as well as in wall constructions. Drilling is carried out until reaching the soil suitable for construction. The foundations are made of stone and as soon as they are level with the ground, the walls are built there directly. Their thickness is 50 cm, being load-bearing walls, then the cladding process is carried out and the gaps are filled with adobe to protect them from climatic factors.

6.2.2 Supports

It was used in the Sidi Belghit's dwiriya as a means of raising the ceiling of the arcades surrounding the patio, where there are four (04) main supports with a square base, and eight (08) columns, the lower half of which has a round base and the upper half is Square, all completed with medium stone.

Figure N° 11. (Types of pillars and columns located in the Sidi Belghit's dwiriya.)

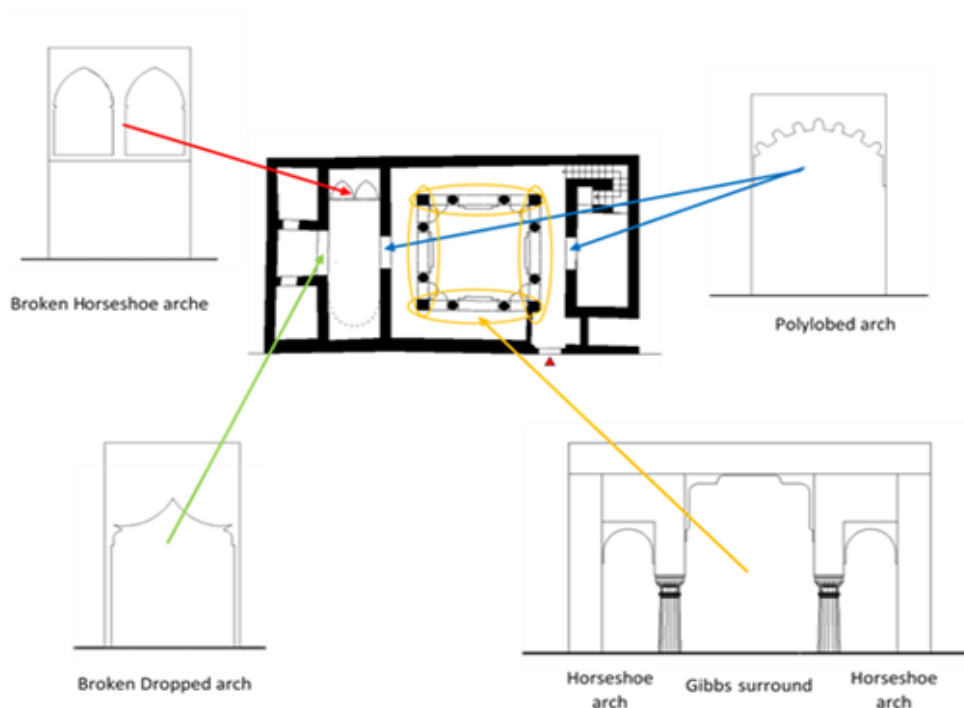


Source: The work of researchers.

6.2.3 The arches

It is one of the structural elements that were used to strengthen and distribute the weights of the ceiling on the columns and walls, in addition to its artistic role; we notice a variety of types of arches used in the Sidi Belghit's dwiriya. Where we find the polylobed arches at the entrances to the rooms, the horseshoe arches and the gibbs surround on the four sides of the patio, the broken horseshoe arches bypassing inside the main room as well as the broken dropped arch.

Figure N° 12. (Types of arches located in the Sidi Belghit's dwiriya.)



Source: The work of researchers.

6.2.4 Roofing

The roof is consisted from several standing layers above the load-bearing walls, supports and arches. It is stretched on wooden beams of palm trunks that do not exceeding three (03) meters in length, after which thinner trunks are placed opposite the beams and in a monolithic manner to preserve the mortar layer spread on those sticks and prevent it from leaking.

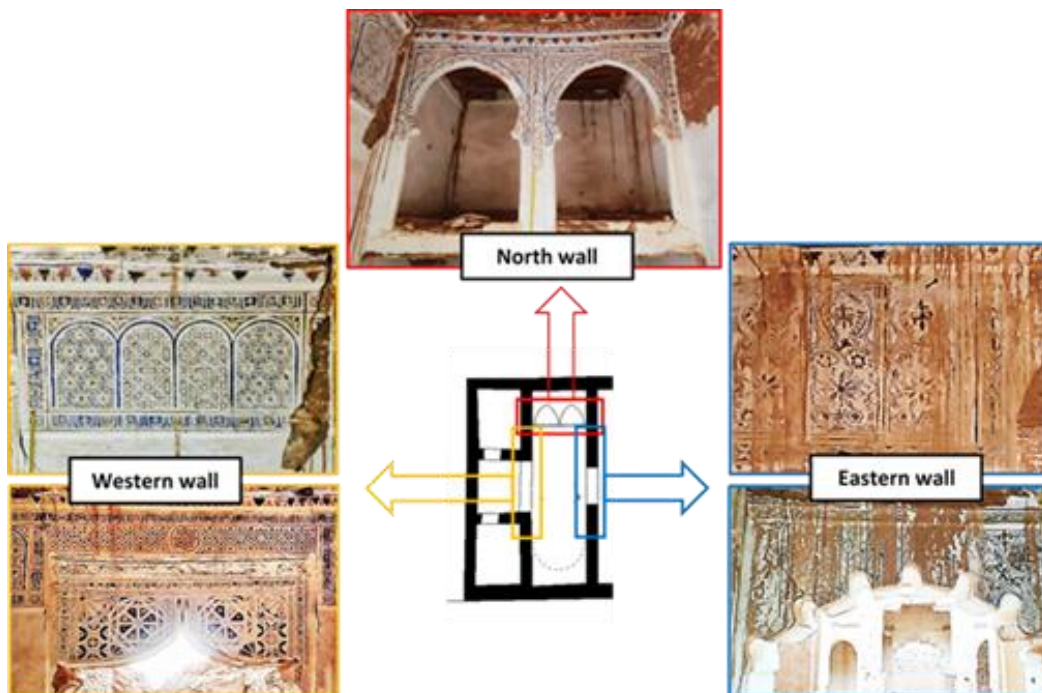
7. Technical characteristics of Sidi Belghit's dwiriya

What distinguished the dwiriya from the rest of the dwellings of the Kenadessa Ksar and other Algerian Saharan Ksours is its uniqueness with its Islamic decorations. Through the dwiriya of Sidi Belghit, we will highlight this richness and decorative diversity. Although the sample of our study is simple compared to other dwiriya, it includes three decorative types (writing, geometric and floral).

7.1. Decorative placements

The main room (guest reception room) is located on the western side of the dwiriya. It takes a rectangular shape with a length of 8.70 m and a width of 2.40 m. It was divided into two equal longitudinal parts so that the first part as a whole is a hall, and the second part includes two equal halls separated by a hallway which is an extension of the first Hall and thus forms the letter T. The parts of the remaining two halls were demolished so we will only touch on the first hall from a technical point of view.

Figure N° 13. (Represent the types of plaster decorations found in the main room.)



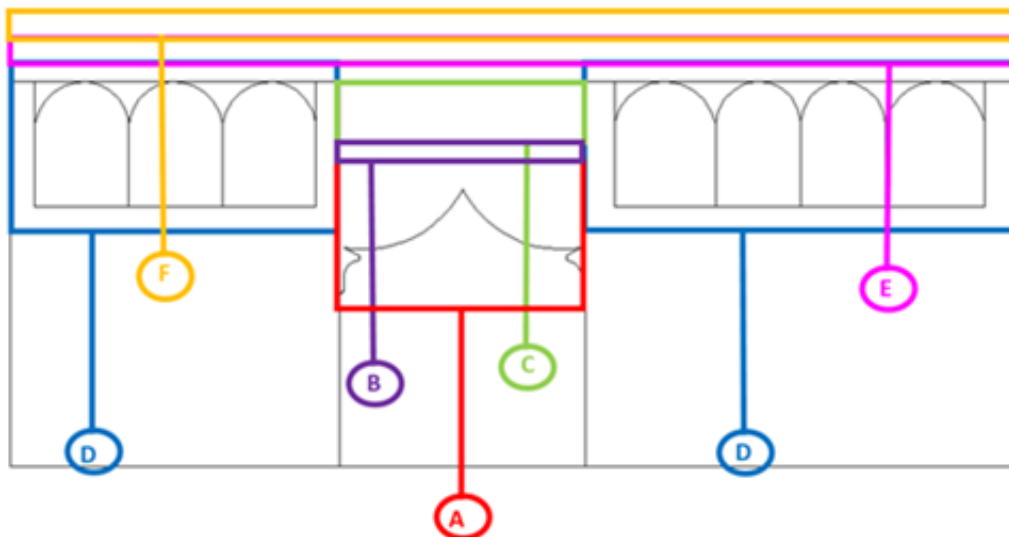
Source: The work of researchers.

The room is accessed from the Sahn hall through an entrance in the middle of the eastern wall of the room opened with a polylobed arch. To find ourselves inside the first Hall, it takes a rectangular shape topped by a ceiling of palm trunks. The northern wall of the hall is pierced by a Sada with two broken horseshoe arches covered with decorations. While in the opposite wall demolished only its features remain on the wall, but to the West we find the Western Wall with a broken dropped arch leading to the rest of the room. The walls of the hall are interspersed with stucco decorations with floral, geometric and writing themes that will be described separately.

7.1.1 Decoration of the Western Wall

A rectangular wall opposite the entrance to the room consists of various decorative positions surrounding the door. We divide into, the decoration of the door and its frame, a thin geometric Ribbon, a thick geometric Ribbon on top of the door, a panel of lamenting deaf arches to the right of the door, a panel of lamenting deaf arches to the left of the door, clerical tape, geometric tape, plant decoration tape.

Figure N° 14. (The Western Wall of the main room.)



Source: The work of researchers.

A. Decoration of the entrance arch and its frame:

These are decorations that cover parts of the intrados, the **Bounaykat**[□] of the arch and a frame of three thin ribbons.

- **Decoration of the intrados:**

It is located to the right and left of the entrance, polygonting from the stem of the arch in an arched shape, consisting of decorations consisting of a circle centered polygon on a blue and white

[□] **Bounayka:** is the triangular space confined between the arch and the surrounding frame, on which many decorative elements are often engraved.

polygon polygon surrounded by four semicircles in the form of fans with blue lobes on a white floor. This decoration was surrounded by a frame in blue, topped with a ribbon with a rolled ornament.

Figure N° 15. (Stucco decorations located in the soles of the arches.)

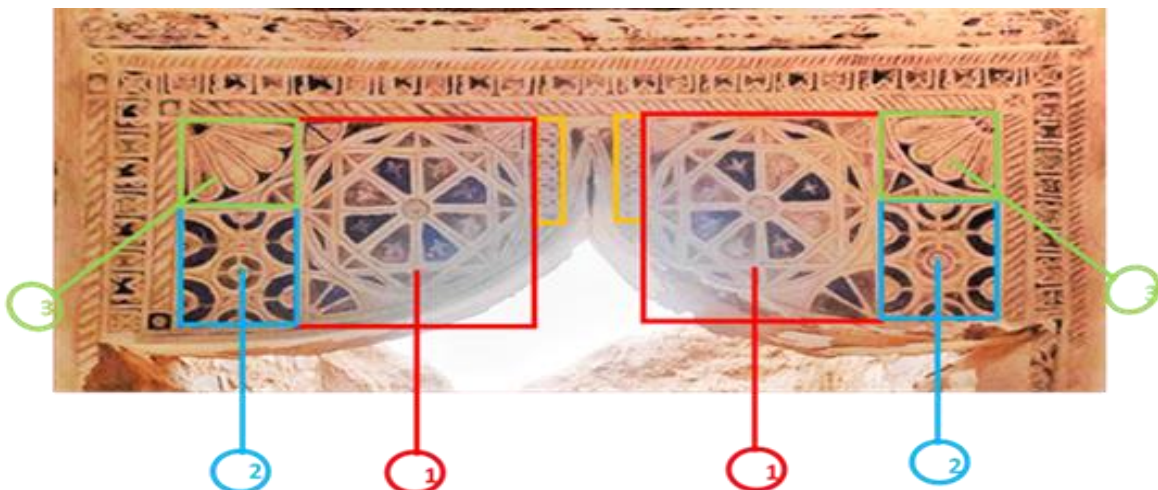


Source: Photographed by researchers.

- **Bounaykat decoration:**

It is a symmetrical stucco decoration with both structures that is based on a geometric decoration with three different decorative positions:

Figure N° 16. (determination of the locations of the parts of the stucco decorations located in the structures of the arches.)



Source: The work of researchers.

The first part: the largest is a large polygon with eight heads. The decorations were originated from a square and then a circle to form the polygon. Its voids were filled in the middle with a white Three-Lobed flower on a floor that alternated between blue and Brown. The corners of the Square in the upper part are interspersed with two-lobed white half-Mahara, and in the lower right part a three-lobed half-Mahara. They were absent on the left side for structural necessity.

The second part: is a rectangle with a brown circle in the middle and surrounded by 6 Blue semicircles in alternation and repetition.

The third part: it is in the upper corner is a square. The decorations are represented by a half of a four-lobed Mahara in white. Its spaces are filled with blue, and it is also offset by a part of a circle of three lobes, two in Brown, interspersed with a lobe in blue.

In addition to the two ribbons that form the keystone, they include geometric ornaments consisting of overlapping white circles forming rings.

- **Decoration of the door arch frame ribbons:**

As mentioned above, they are thin ribbons, two of which have symmetrical decorations, consisting of a white wrapped ribbon interspersed with Square Jamat at the corners. They are centered on a white four-lobed flower on a blue floor.

In the middle of these two ribbons is a written Ribbon in Kufic script in white on a blue ground that includes a repetition of the phrase "El Afia, El Bakia". This ribbon is interspersed with Square Jamat at the four corners with a white four-lobed flower in the middle on a blue ground.

Figure N° 17. (Determine the location of the decoration of the door holding frame bars.)

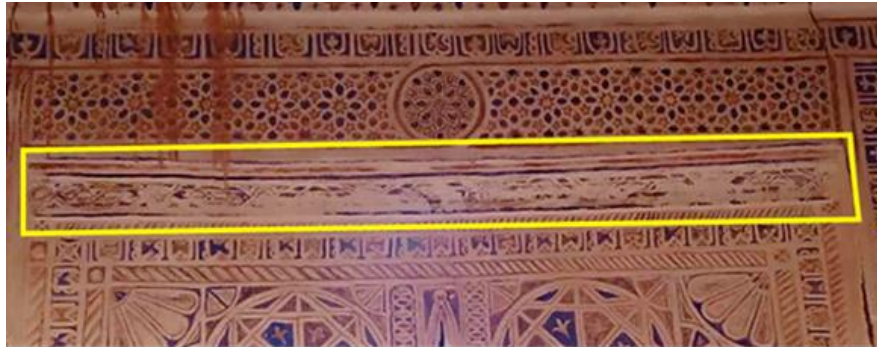


Source: The work of researchers.

B. Decoration of a thin geometric ribbon:

It is a ribbon on top of the above-mentioned ribbons, consisting of geometric guilloche that have mostly been blurred, white on a blue floor surrounded by a blue frame.

Figure N° 18. (Determine the location of the decoration of a thin geometric ribbon.)

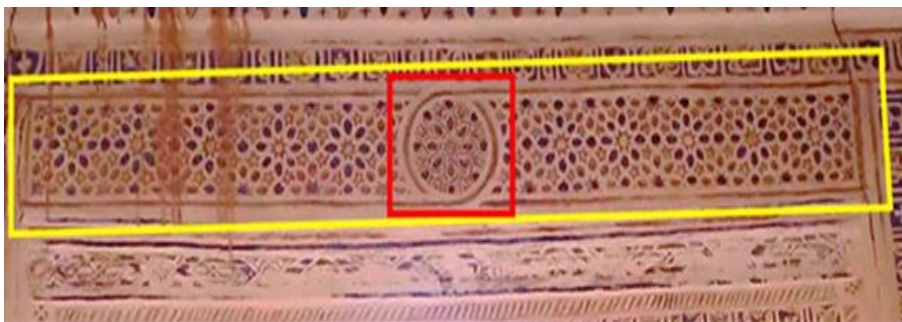


Source: The work of researchers.

C. A thick geometric Ribbon at the top of the door:

It is a rectangular ribbon with geometric stucco decorations consisting of 10 eight-pointed polygon, executed in such a way that only the small formed parts of the polygon appear like mosaics, in brown and blue, surrounded by a round-shaped Jama. It also consists of an eight-pointed polygon in brown and blue surrounded by a brown circle.

Figure N° 19. (Determine the location of the decoration of the thick geometric ribbon.)



Source: The work of researchers.

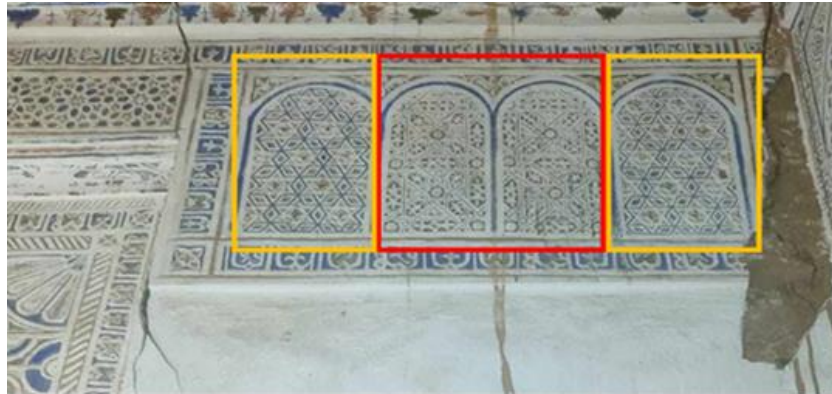
D. The panel of Blind arches:

It is a decorative rectangular panel surrounded with a writing decoration.

• **The panel of Blind arches on the right of the door:**

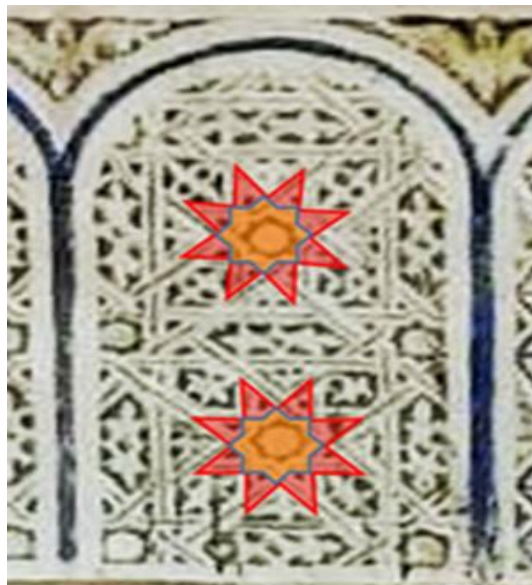
there are four of them with semicircular arches that include geometric and floral motifs. The two middle arches have the same decoration, which are eight-pointed polygones executed from squares and ribbons formed at the meeting of other eight polygones and interspersed with some six-lobed flowers. These decorations were executed on white stucco material on a blue floor and surrounded by a frame in blue.

Figure N° 20. (The deaf arches on the right of the door.)



Source: The work of researchers.

Figure N° 21. (The middle arches.)



Source: The work of researchers.

The two extreme arches are also symmetrical and include different decorations consisting of a six-pointed polygon that is repeated over the entire area. The adhesion of all the polygon vertices, rhombuses are formed in the form of crossed ribbons. Each polygon is surrounded by a three-lobed flower, which is also surrounded by a blue arch frame.

Figure N° 22. (The extreme arches.)



Source: The work of researchers.

The designs of the arches also included floral motifs consisting of palmette.

Figure N° 23. (Palmette.)



Source: The work of researchers.

- **The panel of Blind arches on the left of the door:**

It is a rectangular frame that consists of only three arches for structural necessity. It includes decorations similar to the previous one so that the decorations of the middle contract are unique from the decorations of the two extreme arches.

- **The writing tape:**

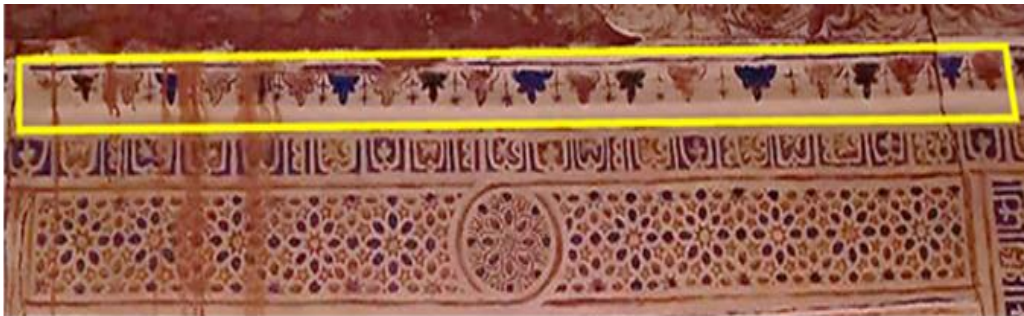
It is a thin writing tape that surrounds the entire panel arches in a rectangular shape, but on the upper side it is a writing tape that extends from the right of the wall to the left of it. It is interspersed with inscriptions in leafy Kufic script repeating the phrases "El Afia, El Bakia" executed in

white on a blue floor, interspersed with square-shaped Jamat at the corners containing four-lobed flowers.

E. Floral decoration ribbon (01):

It is a ribbon on top of the previous ribbon (written), the texture of a floral ornament is three-lobed flowers resembling grape leaves placed upside down so that their base is placed at the top, their colours alternate between Brown and blue on a white floor and separated by other very thin flowers longitudinally branching from lobes. This ribbon is topped with a final ribbon with floral motifs.

Figure N° 24. (Floral decoration ribbon.)



Source: The work of researchers.

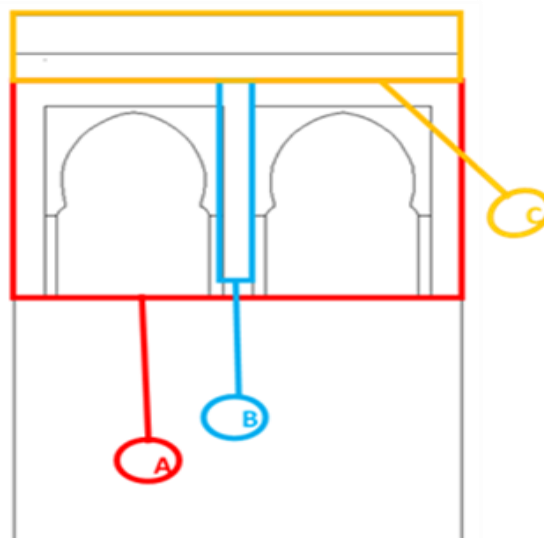
F. Floral decoration ribbon (02):

It is a rectangular ribbon on which floral motifs are executed using the coloring technique. They are brown flowers wrapped around green stems.

7.1.2 Decoration of the northern wall

It is the wall located on the right after entering the room. The wall is pierced by a rectangular Sada, which opened onto the hall with two twin broken horseshoe arches, each resting on two cylindrical columns, covered with ornaments surrounded by a writing ornament, topped with two ribbons with floral motifs.

Figure N° 25. (The northern wall of the main room.)



Source: The work of researchers.

A. Decoration of the two arches:

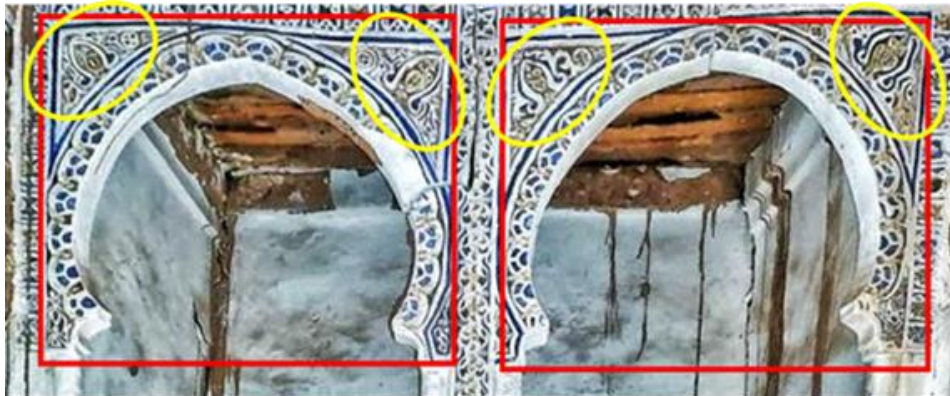
• **Two-arch Ribbon Decoration:**

It is a ribbon that takes the form of the arches surrounded by a thin frame in blue, interspersed with decorations of double semicircles intersecting among themselves in white and blue on a green ground.

• **The decoration of the Bounaykat of the two arches:**

It is an identical and symmetrical decoration in both of the Bounaykat. Each Bounayka takes the shape of a triangle surrounded by a blue ribbon centered by two symmetrical double Palmette, each one in white on a green floor.

Figure N° 26. (Arches decoration of the northern wall of the main room.)



Source: The work of researchers.

• **Written ribbon:**

It is a ribbon that surrounds the twin arches in three directions, interspersed with writing in leafy Kufic script in which the phrases "El Afia, El Bakia" are repeated, interspersed with five square Jamats centered by a four-lobed flower.

B. The ribbon separating the two arches:

The two arches are separated by a ribbon interspersed with floral motifs of palmette that wrap in a circular pattern in a repeat executed in white on a blue ground.

Figure N° 27. (The ribbon separating the two arches.)



Source: The work of researchers.

C. Two ribbons of plant decoration:

The first of them includes floral decorations in the form of grape leaves, in an inverted form alternating between brown and blue on a white floor and separated by stems with thin lobes.

The second is brown flowers. That have green leaves and stems branch in a repeat executed by the coloring technique.

Figure N° 28. (Two ribbons of floral ornament on top of the wall.)

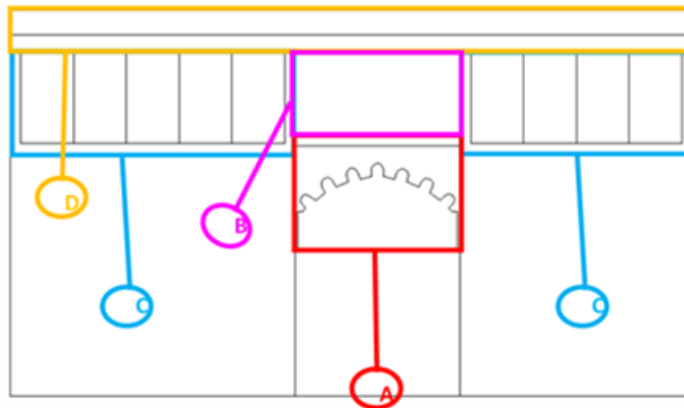


Source: The work of researchers.

7.1.3. Decoration of the eastern wall

It is the wall located next to the patio, in the middle of which the entrance to the room opened with a lobular arch, interspersed with stucco decorations centered on the upper part of it. Most of its features have been obliterated and only some parts remain, represented by the decoration of the arch and its frame topped with a ribbon of plant motifs, and also embodied on the right and left of the entrance panels of plant motifs surrounded by a geometric braid frame. Above all this, there are two ribbons of plant motifs permeated the entire sides of the Hall.

Figure N° 29. (The eastern wall of the main room.)



Source: The work of researchers.

A. Decoration of the arch and its frame:

- **Decoration of archs:** the contours of the right side appear only as a result of the damage caused to it. It is a circle centered on a polygon of eight heads, centered on a small star that is also octagonal. The circle is surrounded by stems interspersed with leaves and palm fans that wrap between them. The decoration was executed by the technique of Coloring using white and blue color.

As for the frame, it is thin, extending over the top of the Bounayka, the texture of which is a geometric guilloche.

Figure N° 30. (The decoration of the arches and its Bounaykat above the doorway.)



Source: The work of researchers.

B. Floral decoration ribbon:

It is a thick ribbon above the entrance and its frame, most of its features have been blurred and only a small part of it remains, an eight-lobed flower and some stems, executed by coloring technique.

Figure N° 31. (À ribbon of floral ornament on the top held the doorway.)



Source: The work of researchers.

C. Plant decorative panels to the right and left of the entrance:

To the right and left of the entrance, there are vertically rectangular panels with symmetrical motifs based on floral themes represented by flowers, stems and leaves twisted so that they form a decorative arch at the top, these decorations were executed by coloring technique on a white floor and surrounded by a frame in white. The number of paintings to the right of the entrance is four, and to the left of it is five. These paintings were surrounded by a ribbon of geometric guilloche on three sides, while from the upper side there was a ribbon of floral decoration.

Figure N° 32. (Floral ornament panels on both sides of the entrance.)



Source: The work of researchers.

D. Two ribbons of plant decoration:

- **Floral decoration ribbon (01):** it is a ribbon extending over the top of the wall similar to the ribbon extending over the rest of the walls, consisting of grape leaves placed upside down alternating between blue and brown on a white floor and separated by stems and leaves.
- **Floral decoration ribbon (02):** It is an embossed Ribbon, few features of which show decorations similar to the decorations of the same ribbon on the rest of the walls, which are brown flowers wrapped around stems and leaves in green on a white floor executed by coloring technique.

7.2. Materials and techniques of decoration execution:

Through our field inspection we noticed that the initial material in the completion of various decorations was plaster. As for the technique with which it was implemented, it was through manual shaping, since we noticed a heterogeneity in the decorative forms.

As for the method of execution, there are two methods: the first depends on the preparation of the surface to be decorated with a flat layer of plaster to then sculpt the previously prepared decorative theme, and the second is painting with colors on the surface prepared with a flat layer of plaster.

Results:

This study came to the following conclusions:

- The artistic and aesthetic value of Sidi Belghit's dwiriya is shown through the decorative diversity of the guest room and structural elements such as the columns of the patio and various contracts.
- The patio (Sahn) was used for ventilation and lighting in the absence of openings or Windows.
- The absence of a porch and direct access to the patio from the eastern portico, with a small wall next to the entrance to break the direct view towards the patio.
- Dependence on local raw materials in the construction of a dwelling.
- Limit the decoration to the main room only (guest room).
- Diversification in the use of decorations, as we find the three types (Botanical, geometric and biblical), where the geometric decoration prevailed over the rest of the decorations and relied heavily on the eight-pointed star, while the biblical decoration was limited to the words "El Afia, El Bakia".
- The absence of biblical decoration in the eastern wall of the room, unlike other walls opposite the entrance to the room.
- The use of two techniques in the execution of decorations, where we note that the decorations of the eastern wall of the room were painted, while the decorations of the rest of the walls were executed in a sculptural way, with coloring in both cases.
- The absence of accuracy and heterogeneity in the execution of decorations.
- These decorations cannot be dated, but as they relate to the techniques and colors used in them, they can be attributed to the Ottoman period.
- The neglect and migration of this dwelling led to the damage and loss of a large part of the architectural components of the dwiriya and its decorations.

Recommendations:

- The need to protect this dwiriya and the rest of the dwiriyat of the Ksar through documentation and restoration.
- Preserving this heritage and its artistic originality and passing it on to future generations.

CONCLUSION

This aesthetic study, has dealt with the various structural and artistic elements to highlight the aesthetic and architectural value of Sidi Belghit's dwiriya, which is considered modest compared to the rest of the ksar dwiriyat, but it reflects the intellectual and cultural sophistication that distinguished the Kenadessa ksar from the rest of the sahara ksours and its historical importance.

Therefore, it is necessary to preserve this cultural heritage by documenting it first to protect it from extinction and the scientific contribution to enable researchers in this field to pursue their research, and restore it secondly to deliver it to future generations and make it an economic income resource through exploiting it to promote tourism development.

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