

ABDULAZIZ KHAN'S ARCHITECTURAL WORKS IN BUKHARA IN THE 11th A.H / 17th A.D CENTURY AN ARCHITECTURAL ARCHAEOLOGICAL STUDY

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Abstract

Abdulaziz Khan (1062-1092 A.H / 1651 – 1681 A.D) was a cultured man and fond of devotional poetry. Resources reported his love for the teachings of Islam, as shown in his role as an important patron in Bukhara in the second half of the 11th A.H./17th A.D. century. He supported the Sheikhs in their cause for the revival of Sunnah as he had considerable interest in this aspect and spent a lot of money on the construction of mosques, Madrasas, and other houses of worship more than other establishments. The present study aims to identify the architectural and artistic characteristics of the works of Abdulaziz Khan. The planning of the Khan's architectural collection followed the dominant pattern in Bukhara. In other words, Abdulaziz Khan was one of the prominent figures that helped develop the Islamic culture, as shown in the architectural and artistic aspects of his buildings. Moreover, the study stresses the various civilizational and cultural manifestations of this heritage. It highlights prominent figures that played a key role in Bukhara and Central Asia.

Keywords: Bukhara, Mosque, Madrasa, Iwan, Mihrab, Minaret, Entrance

ملخص

يعتبر عبد العزيز خان (1062-1092 هـ / 1651-1681 م) رجلاً مثقفاً اشتهر بولعه بالشعر التعبدى، فقد أثبتت المصادر حبه لتعاليم الإسلام والذي لوحظ من خلال دوره كراعي هام في بخارى أثناء النصف الثاني من القرن (11 هـ / 17 م) وكان عبد العزيز خان يظاهر الشيوخ في دعوتهم إلى إحياء السنة، ويهتم بذلك اهتماماً كبيراً حتى أنفق أموالاً كثيرة في تعمير المساجد والمدارس وغيرها من دور العبادة أكثر مما أنفق في تعمير المنشآت الأخرى، حيث تهدف الدراسة إلى معرفة الخصائص المعمارية والفنية لأعمال عبد العزيز خان، وقد جاءت تخطيطات المجموعة المعمارية على نفس الطرز السائدة في مدينة بخارى، حيث يعد عبد العزيز خان من أبرز الشخصيات التي أسهمت في بناء الحضارة الإسلامية، ويتضح ذلك من خلال منشآته في النواحي المعمارية والفنية، كما تفيد الدراسة في إلقاء الضوء على المظاهر الحضارية والثقافية المختلفة والتي أسهمت في تكوين هذا التراث والكشف عن شخصيات بارزة لعبت دوراً هاماً ليس في مدينة بخارى فقط بل في آسيا الوسطى.

الكلمات الدالة :- بخارى – مسجد – مدرسة – إيوان – محراب – منذنة – مدخل

1. Introduction

Abdulaziz Khan established several buildings in Bukhara in the 11th A.H./17th A.D. century, including mosques, Madrasas, and other houses of worship. He also played a considerable role in the region at the time. The present study aims to define the architectural and artistic characteristics of his works.

2. The Mosque of Madry (mother of) Abdulaziz Khan, fig. (1)

2.1. Location	No. 92, Aktyabrskaya St. as a part of the collection of Geopari Kalan Madrasa, the Mosque of Madry Khan, and a large khoznaw (water basin) in Eastern Bukhara [1].
2.2. Founder	He is Abdulaziz ibn Abdullah Khan who ruled the Khanate (1062-1092 AH/ 1651-1681 AD). The mosque was named after his mother because Emir Abdulaziz Khan established it as a charity (reward) for his late mother [2].
2.3. Date of Establishment	The mosque was established in the reign of Abdulaziz Khan in the 11 th A.H./17 th A.D. century, but no specific date is found.



Figure (1) The main façade of the Mosque of Madry (mother of) Abdulaziz Khan
(Photographed by the researcher)

2.4. General Planning, fig. (2)

The mosque consists of a rectangular area of 50 meters from the east to the west and 30 meters from the north to the south [2]. It comprises two sections. Section One is the closed prayer house called "Winter Small Mosque", fig. (3). It is a rectangular area divided into three *rewaqs* (arcades) by a row of supports with parallel arches perpendicular to the Qibla wall. It is covered with nine domes on the triangles of the sphere. In the west wall, there is the Winter *Mihrab* (semicircular prayer niche), fig. (4). Section Two "Summer Small Mosque" is on the west side of the Winter Small Mosque. It takes the form of a middle open *Sahn* (nave), fig. (5) overlooked by the Qibla Iwan from the west. It is arched with a pointed arch with the Summer *Mihrab* in front, fig. (6). From the southeast and northwest sides, three arched entrances with pointed arches surround the nave. The largest entrance is in the middle. The northeast side overlooks the nave through three solid entrances with a pointed arch and window openings on the Winter Small Mosque, fig. (7). In the northwest and northeast sides, an arcade of one row of wooden columns of conical bases, fig. (8) surrounds the mosque from outside. That is, the Winter and Summer Small Mosques are accessed through the entrance block in the middle of the northwest side.[3]

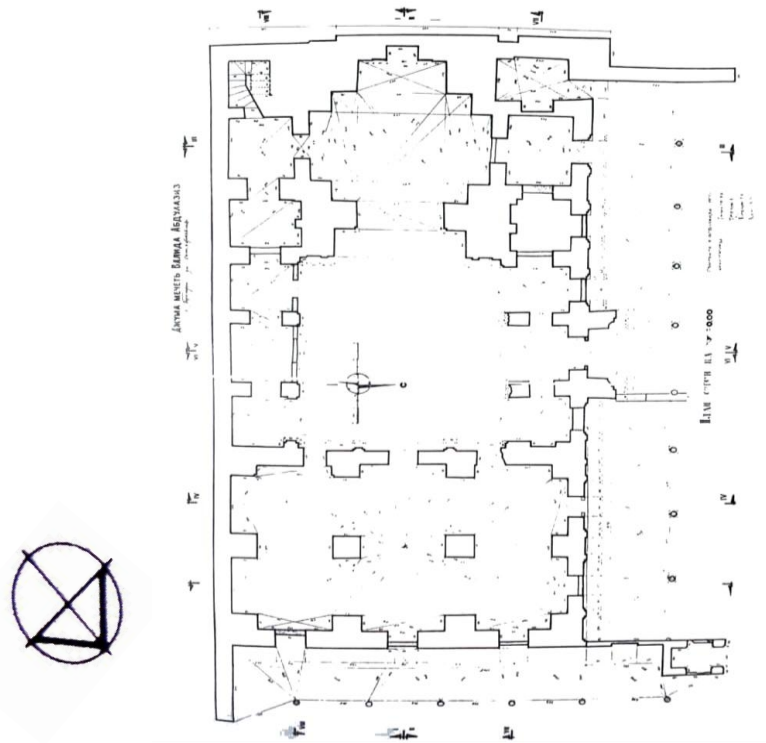


Figure (2) Horizontal projection of the Mosque of Madry (mother of) Abdulaziz Khan in Bukhara



Figure (3) Winter Small Mosque of the Mosque of Madry (mother of) Abdulaziz Khan
(Photographed by the researcher)



Figure (4) Winter Mihrab of the Mosque of Madry (mother of) Abdulaziz Khan
(Photographed by the researcher)



Figure (5) The Summer Small Mosque of the Mosque of Madry (mother of) Abdulaziz Khan
(Photographed by the researcher)



Figure (6) The summer mihrab of the Mosque of Madry (mother of) Abdulaziz Khan
(Photographed by the researcher)



Figure (7) An iwan of the summer mihrab of the Mosque of Madry (mother of) Abdulaziz Khan
(Photographed by the researcher)



Figure (8) The Summer Small Mosque in the north of the Mosque of Madry (mother of) Abdulaziz Khan (Photographed by the researcher)

The mosque has nine shallow domes above the arcades in the Winter Small Mosque. When observed from outside, the domes are of the Samarkand type with a decoration-free cylindrical drum. The helmet of the dome is covered with blue decorative tiles ending with a post with distensions. From inside, the upper four corners of the dome contain the transition area that consists of four Turkish triangles; a Turkish triangle on each side. Furthermore, the arcades surrounding the nave of the Summer Small Mosque are shallow domes whose transition areas consist of four Turkish triangles; a Turkish triangle on each side [4].

The mosque has two semicircular niches. One of them is winter in the middle of the southern side of the mosque. It is built of baked bricks and covered with a layer of painted plaster with a

rectangular projection. It is a hollow niche arched with a pointed arch and is not based on columns. The hollow of the niche is divided into a two-level body and a drum. The first level of the body begins (from down) rectangular and decoration-free. It is smaller than the second level that has a solid *baika* (arcature) of six-pointed a bit deep arches. The area of the arches is painted pale blue, whereas the edge of the arch is dark green. The drum of the niche consists of three rows of deep triangles that might be rows of stalactites, which were restored wrongly. The summer niche of baked bricks is in the middle of the southwest side of the mosque that does not stand out of the wall. It is covered with two types of decorative and plaster tiles and has a rectangular projection. It is a hollow niche pointed with a pointed arch and is not based on columns. The hollow of the semicircular niche consists of a two-level body and a drum [5].

2.5. Minaret

The minaret is small in the northeast angle of the mosque. It is eight-meter high accessed through a four-step staircase leading to the ground of the mosque, then the arched entrance of the minaret with a pointed arch, the path to a circular staircase, and the Jawsaq covered with a shallow dome above the minaret. The minaret was built of small yellow baked bricks [2].

3. Madrasa of Abdulaziz Khan

3.1. Location	No. 83, Komonarov St., Borkhskaya district, East of BayoKalanvi Square facing AlghBey Madrasa in Bukhara [6].
3.2. Founder	He is Abdulaziz ibn Abdullah Khan who ruled the Khanate (1062-1092 A.H/ 1651-1681 A.D).
3.3.Date of Establishme nt:	(1062-1063 A.H./1651-1652 A.D)[7].

3.4. Architectural Description

The Madrasa has four free façades occupied by a set of windows on the student residence from inside except for the eastern façade- the main façade and entrance. The sides of the Madrasa from outside are supported by a group of towers with a projection of three-quarters of a circle. The main eastern façade is divided into seven entrances arched with pointed arches, with the main entrance in the middle that is the highest and widest. The main entrance is distinguished with pointed arches leading to the stone of the entrance that has a pentagon projection. It has a door opening with a pointed arch leading to the nave, passing by the durkaa and entrance iwan. The side entrances are solid. Three entrances on the left and right are arched, with the middle leading to the Winter and Summer Small Mosques via a room with a horizontal octagonal projection. The rest of the student residences are spaces with a rectangular projection, fig. (9-10-11) [8].



Figure (9) The main façade of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)



Figure (10) The main entrance in the main façade of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)



Figure (11) A minor (western) façade of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)

3.5.General Planning, fig. (12)

This Madrasa follows the Iwan style. It is big and measures (60×48 meters). It comprises an open middle nave with a rectangular horizontal projection having chamfered angles. Four iwans encircle the nave. They are the main iwan in the southeast side known as the Summer Small Mosque with a mihrab on the southwest side, fig. (13-14) and the opposite iwan (entrance iwan) on the north west side. On both sides of the entrance iwan, there are two long corridors. Each corridor opens at a wide square room of four iwans and topped by a dome. One of them represents the Winter Small Mosque on the west side, the other is the teaching room in the north angle, whereas the two side iwans are in the southwest and northeast sides. The residence rooms of the students are on two floors overlooking the nave through arched entrances with pointed arches [9].

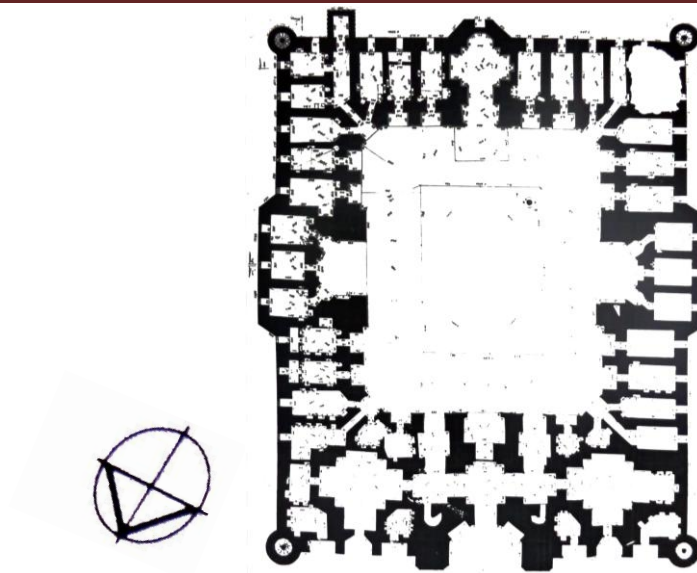


Figure (12) Horizontal projection of the Madrasa of Abdulaziz Khan in Bukhara



Figure (13) The nave and north iwan of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)



Figure (14) The east Iwan of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)

The Madrasa has a group of main domes, the most important of which is the dome of the mosque on a transition area. The four upper corners of the dome square have a transition area in the form of a hollow niche with a pointed arch and four rows of stalactites. The middle parts of the transition areas contain an entrance with a pointed arch with a window having a pointed arch in the front. The dome of the main iwan in the Summer Small Mosque contains a transition area

in the form of a hollow niche whose upper part contains three rows of stalactites. The middle parts of the transition areas are a hollow niche with a pointed arch whose upper part has thirteen rows of stalactites, ending with a radiant drum whose sides end with a row of small niches [4].

The Madrasa has two mihrabs. The Winter Mihrab is in the middle of the western iwan in the Winter Small Mosque. It consists of a middle durqah surrounded by four iwans. The largest iwan is the western (qibla iwan) of baked bricks that contain the entrance of the winter mihrab, fig. (15-16). It is a hollow niche with a pointed arch that is not based on columns. The hollow of the mihrab has two parts: A two-level body and a drum. The first level is rectangular and decoration-free, whereas the second is two composite niches. Each niche is two overlapping arches, resulting in prism and star shapes with lost decorations. The remaining decorations show that there were floral motifs. The drum of the mihrab is shallower than the second level of the mihrab. The summer mihrab is unobtrusive in the middle of the southwest side of the main iwan in the Summer Small Mosque. It is built of stone and covered with marble. It has a rectangular projection. Furthermore, it is a hollow niche with a pointed arch of bill-like legs [7].



Figure (15) The summer mihrab of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)



Figure (16) The winter mihrab of the Madrasa of Abdulaziz Khan
(Photographed by the researcher)

4. Analytical study

4.1. Planning

The city of Bukhara in the era of Abd al-Aziz Khan included many mosques in the 11th A.H / 17th A.D century. The mosque of Abd al-Aziz Khan, the subject of study, is one of these comprehensive mosques ,as it belongs to the dominant style in the planning of mosques in Central Asia. It is a mosque consisting of a closed prayer hall (the winter mosque) and the outer

porticos (the summer mosque), as this style is characterized as a product of a combination between the summer style and the winter style for mosques, where the system of the open court and porticos proved invalid in the snow season ,and the system of closed mosques proved unsuitable in the summer, Therefore, it spread in most of the cities of Central Asia, including the city of Bukhara, and then used the style that consists of a closed prayer hall that is used in winter ,covered either with a dome or a flat roof, and outer riwaqes (porticos) with mihrabs used for prayer in the summer, as it opens with its full width to the outside. These riwaqes differed from one mosque to another, whether they were located in only one side of the mosque, or two or three sides, as well as the number of riwaqes in them. This type of planning was common in (10th A.H / 16th A.D century), and became the main one in all cities of Central Asia such as Kokaltash mosque (976-977 A.H / 1568–1569 A.D), Baland Mosque (10th A.H / 16th A.D century), Bahaa al-Din Naqshband mosque (10th A.H / 16th A.D century),^[10] Khawaja Zain Aldin Mosque (the 10th A.H/ 16th A.H. century) fig. (17) and Palay Hod Mosque in Bukhara (the 12th A.H/ 18th A.D century) fig. (18). ^[11]

The plan of the madrasa consists of a court and four Iwans came from the plan that spread in Central Asia before the period under study, for example the madrasa of Ulg Bek (820-823 A.H / 1417 – 1420 A.D) in Bukhara, and the madrasa of Ulg Bek (820 – 823 A.H / 1417 – 1420 A.D) in Samarkand, Mir Arab Madrasa (942 – 946 A.H / 1535 – 1539 A.D) fig. (19), Abdullah Khan Madrasa (997 – 990 A.H / 1588 – 1590 A.D) fig. (20), ^[12] Madri Khan Madrasa (951 – 954 A.H / 1544 – 1547 A.D) in Bukhara, the planning of Abd Al-Aziz Khan – our study – consists of a court and four iwans, an ideal model for serving students ^[13].

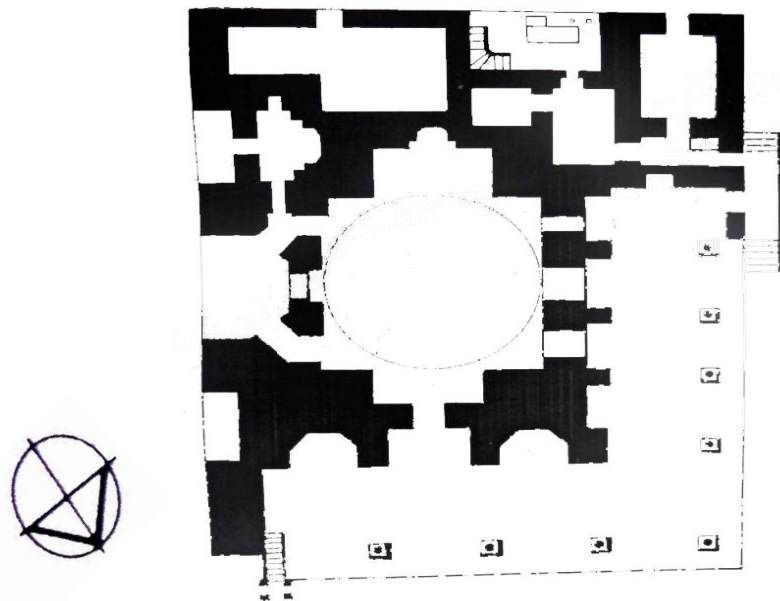


Figure (17) Khawaja Zain Aldin Mosque (the 10th A.H / 16th A.D. century)

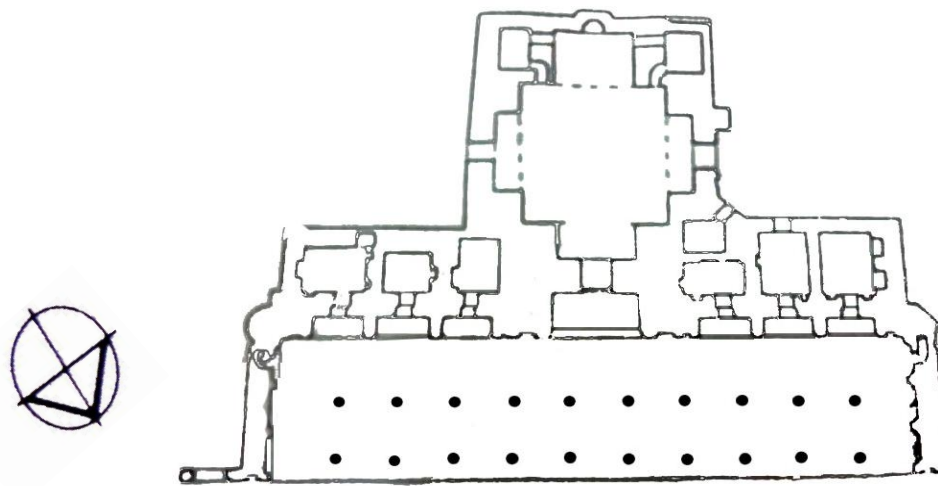


Figure (18) Palay Hod Mosque in Bukhara (the 12th A.H / 18th A.D century)

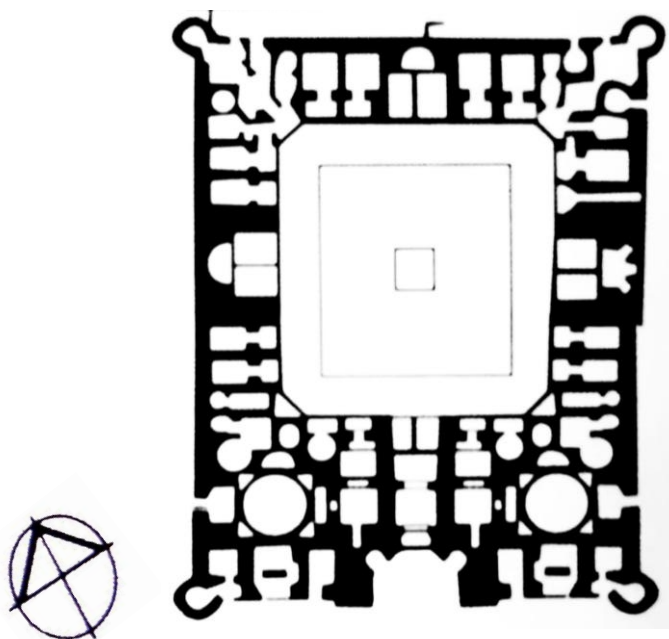


Figure (19) Mir Arab Madrasa (10th A.H / 16th A.D century)

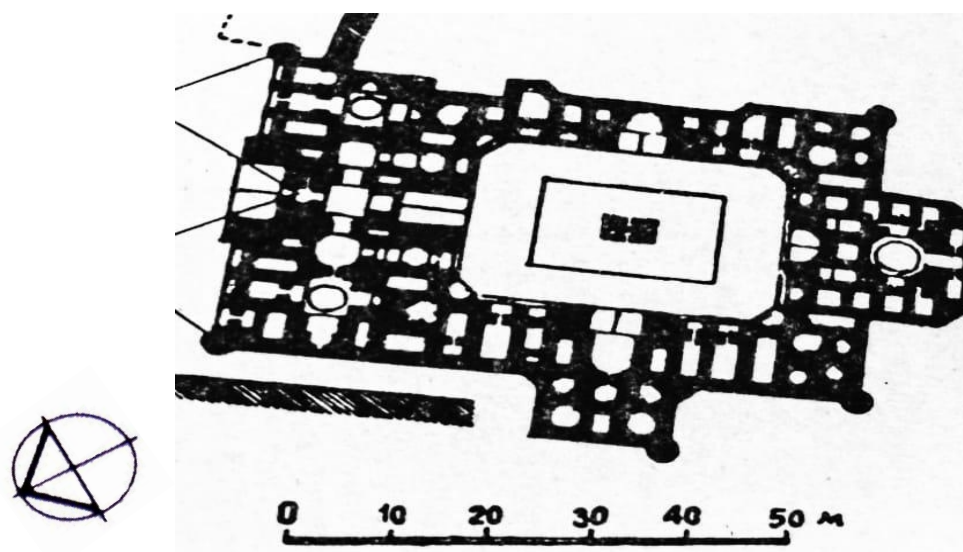


Figure (20) Abdullah Khan Madrasa (10th A.H / 16th A.D century)

5. Architectural Units and Elements

The buildings of Abdulaziz Khan in the 11th A.H / 17th A.D century in Bukhara contain an important set of architectural and decorative units and elements that reflect the environmental factor and the relevance to serving the monument to fit the environment, such as the nave. The nave is an open area with a rectangular projection surrounded by units from all sides. The angles were chamfered and utilized by the architect in making the residential areas of the students (Khujary). The nave of the Madrasa of Abdulaziz Khan followed the dominant pattern in the naves of Central Asian Madrasa characterized by grandeur and breadth. Its examples include the Mir Arab Madrasa (942 – 946 A.H / 1535 – 1539 A.D) , Madri Khan Madrasa (951-954 A.H / 1544 – 1547 A.D) , Kokaltas Madrasa (976 – 977 A.H / 1568 – 1569 A.D) , Abdullah Khan Madrasa (990 – 997 A.H / 1588-1590 A.D),Chokshan Madrasa(1007 A.H / 1598 A.D) [13].

5.1. Iwan

The iwan in the buildings of Abdulaziz Khan, including the Mosque and the Madrasa, opens on the nave directly through an arched entrance with a pointed arch. The chest of the iwans includes three rooms that open to the iwan through three door openings with pointed arches represented in the students residences, as we find the two side iwans in the Madrasa of Abul Aziz Khan (1062-1063 A.H / 1651 – 1652 A.D) in Bukhara. This architectural form could be found in many buildings of the era before the studied one, such as the Madrasa of the 10th A.H./16th A.D century, e.g., the Madrasa of Mer Arab (942-946 AH / 1535-1539 AD), the Madrasa of Madry Khan (951-954 AH / 1544-1547 AD), the Madrasa of Kulkatsh (976-977 AH / 1568-1569 AD), and the Madrasa of Abdullah Khan (997-990 A.H/ 1588-1590 A.H) in Bukhara[14].

5.2. Khujary

The studied buildings include a set of student rooms (Khujary) on both sides of the four iwans of the Madrasa of Abdulaziz Khan and the four sides resulting from the chamfered angles of the nave. These rooms are on two floors opening on the nave through arched entrances with a pointed arch on a rectangular area. The front area has an inarched rectangular area topped by an arched rectangular window. However, a small area is inarched but covered by hollow plaster. The second floor opens on a corridor overlooking the nave with a handrail. The rooms of the second floor are linked through corridors extending on the second floor with rectangular openings in the walls of the arched entrances. These rectangular doors lead to a small corridor opening on the inner part of the room. Most of the students' rooms have a rectangular projection. These include, for example the Mir Arab Madrasa (942 – 946 A.H / 1535 – 1539 A.D), Madri Khan Madrasa (951 – 954 A.H / 1544 – 1547 A.D), Kokaltas Madrasa (976 – 977 A.H / 1568 – 1569 A.D) , Abdullah Khan Madrasa (990 – 997 A.H / 1588 -1590 A.D), Nader Diwan Beki Madrasa (1022-1023 A.H / 1622-1623 A.D) [13].

5.3. Entrances

The entrance is one of the most important elements of connection and movement. It is an important architectural unit in the Islamic architecture of Central Asia that links the inside and outside of the building. It also links all units and annexes on both sides of the entrance block, including the Mosque, teaching rooms, or burial dome. The buildings of Abdulaziz Khan has one entrance, namely the main entrance on the main street. It is on the same axis as the qibla iwan. These entrances are characterized by grandeur and breadth.

5.4. Mihrab

The mihrab represents the most important and integral element in Islamic architecture that utilized a different approach and style from the other countries. The Islamic buildings, including the Mosque and the Madrasa in Central Asia, were characterized by two mihrabs. The collection of Abdulaziz Khan is a good example. Both Mosque and Madrasa contain two mihrabs: Summer

and Winter, indicating the important role of the architectural elements in the building in winter and summer[15]..

6. Decorative Elements

Several decorative elements, whether floral, geometric, or writing inscriptions decorate the studied architectural buildings. For instance, the floral elements include branches with buds and pointed floors and multi-petal small flowers. The floral branches in the complex of Abd Al-Aziz Khan have many uses, and they came as a ground for the decorative floral formations in a spiral manner and linked to each other, for example : the ceramic assembly on both sides of the ceramic mihrab in Kalan Mosque (6 A.H / 12 A.D), Baland Mosque (10 A.H / 16 A.D) , the arches of the ceramic mihrab in Kalan Mosque (6 A.H / 12 A.D) and Baland Mosque (10 A.H / 16 A.D).The geometric figures include rectangles, squares, composite figures, and polygons. Star shapes are among the decorative motifs that the artist used in decorating niches , some of which were executed with ceramic mosaics and others fresco, as spread widely in the decoration of ceramic niches as frames defining the decorative designs and the interior of the arches of stalactites in the inside of the stucco of the mihrab caps . The star shapes varied as we find five and six heads stars executed by using fresco style as we see in the inside of the stucco arches , that was the winter mihrab in the Madrasa of Char bakr , the mihrab of Koklatash Madrasa (976 – 977 A.H / 1568 – 1569 A.D), the mihrab in the winter mosque of Madry (mother of) Abdulaziz Khan [5]. Furthermore, writing inscriptions complete the floral motifs and geometric figures that match the text and the building function [16]. These inscriptions were created in rectangular strips surrounding the external sides of the summer mihrab in the Mosque of Madry (mother of) Abdulaziz Khan and the block of the main entrance of the Madrasa of Abdulaziz Khan.

7. Discussion

Studying the architectural works of Abdulaziz Khan in the 11th A.H./ 17th A.D. century showed that they followed the same planning of Islamic architecture in Central Asia, including the Mosque and the Madrasa. The Mosque followed the planning that fit the environment in summer and winter to include the Summer and Winter Small Mosques with all architectural units and elements, such as coverings or mihrabs. Moreover, the Madrasa of Abdulaziz Khan is an example of the fourth dominant style of Madrasa planning in Central Asia that included four iwans around the nave, and the naves are surrounded by a group of student rooms on two floors. While the nave and main iwans are used in summer, the Winter Small Mosque on the right is used in winter, stressing the matching of the building to its main function.

8. Results

- 1- The study showed that the remaining Mosque of Madry (mother of) Abdulaziz Khan is an important example of mosques in Bukhara. The planning of the Mosque followed the third dominant pattern in the mosques of Central Asia; a closed prayer house and external sheds.
- 2- The study demonstrated that the aforementioned style of closed prayer houses and external sheds dominated Bukhara, in particular, and Central Asia, in general, in the 11th A.H./17th A.D. century.
- 3- The Madrasa of Abdulaziz Khan includes four iwans, following the traditional dominant pattern in the structure of Madrasa in Bukhara and Central Asia at the time. It also follows the Madrasa style of two floors.
- 4- The buildings of Abdulaziz Khan understudy in Bukhara, including the Mosque and the Madrasa, contain two mihrabs to be used in winter and summer.

- 5- The sides of the buildings of Bukhara are supported externally by huge towers in which a group of loopholes is opened in the top part.

9. Conclusion

The study stresses the various civilizational and cultural manifestations of this heritage. It highlights prominent figures that played a key role in Bukhara and Central Asia, Therefore we have a right to say that this period was the peak and completing stage of the cultural Renaissance which started in Central Asia in the 10th century, Further studies should be conducted to investigate this important region.

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