

Shrines of Bukhara in the (8th A.H / 14th A.D) Century in the Light of Selected Models: A Comparative Architectural Archaeological Study

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Abstract: Central Asia has various funeral architectural patterns, including independent mausoleums (Khor khāneh), mausoleums with a burying room and a visiting room (Khor khāneh-Ziarat Khāneh), and mausoleums of (Khor Khāneh- Ziarat Khāneh with a mosque or Khanqah). All these schemes suggest the innovations and architectural traditions of Bukhara and demonstrate the excellence of architects and the artists in adjusting these architectural constructions to the environment of Central Asia. They also prove the variety of architectural and decorative units. Many researchers addressed the architecture of mausoleums in Central Asia, especially in Samarkand, Khiva, and Kokand. However, no detailed study has covered the building schemes of mausoleums in Bukhara in the (8th A.H/14th A.D) century. Therefore, I address selected models of mausoleums in this period using two models: the mausoleum of Boyan Qoli Khan (760A.H/ 1358 A.D) and The mausoleum of Sayf al-Din al-Bakharzi (761 A.H / 1359 A.D). The paper aims to identify the design patterns and the architectural and decorative elements of funeral architecture. It compares these elements with other cities of Uzbekistan currently and in the past. It identifies the most important factors that affected the architectural schemes and the suitability of the environment for the controlling factors of the building. It links the architectural facilities and the political, scientific, and artistic state in Bukhara. Furthermore, it identifies the architectural features by studying architectural systems, determines the most important architectural elements of the complex understudy, and defines and connects the artistic techniques and decorative elements with the artistic state of the time. It explores and analyzes inscriptions on mausoleums to conclude new information.

I selected the two shrines understudy because of their complete architectural and decorative units and items and architectural treatments that have demonstrated the Muslim architect's mastery of the treatment and adjustment with the surrounding factors, especially the environmental, religious, and functional ones of the buildings. In the present study, I adopted the comparative analytical descriptive approach.

Keywords: Bukhara, Mausoleum, Façade, Entrance, Plants Decorations.

أضرحة مدينة بخارى خلال القرن (٨هـ / ١٤م) في ضوء نماذج مختارة
دراسة أثرية معمارية مقارنة

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الملخص: تميزت منطقة آسيا الوسطى بتنوع مخططات العمائر الجنائزية عن مثيلتها في بلاد المشرق الإسلامي ما بين أضرحة مستقلة بذاتها (گور خانه) وأضرحة تكوينها المعماري يتكون من حجرة دفن وحجرة الزيارة (گور خانه - زيارة خانه)، وأضرحة تتكون من (گور خانه - زيارة خانه ملحقاً بمسجد أو خانقاه)، كل تلك المخططات يعد انعكاساً للابتكارات والتقاليد المعمارية لمدينة بخارى ويشهد ببراعة وتفوق المعماريين والفنانين، وأنهم على درجة عالية من المهارة في تطويع المنشآت المعمارية مع طبيعة البيئة في منطقة آسيا الوسطى، كذلك مدى التنوع في الوحدات المعمارية والزخرفية، فقد تناول العديد من الباحثين عمارة الأضرحة في آسيا الوسطى خاصة في سمرقند وخيوه وخوقند، لكن لم تكن هناك دراسة مفصلة لمخططات عمارة الأضرحة في بخارى خلال الفترة (٨هـ / ١٤م)، لذلك سوف ألقى الضوء على نماذج مختارة للأضرحة في تلك الفترة من خلال نموذجين هما ضريح بويان قولي خان (٧٦٠ هـ / ١٣٥٨م)، ضريح سيف الدين البوخرزي (٧٦١ هـ / ١٣٥٩م).

تهدف الدراسة إلى معرفة طرز التخطيط والعناصر المعمارية والزخرفية للعمارة الجنائزية، ومقارنتها وربطها مع المدن الأخرى في الفترة المعاصرة والسابقة في المدن الأخرى من جمهورية أوزبكستان، محاولة معرفة أهم العوامل التي أثرت على مخططات العمائر بأنواعها، وملائمة ظروف البيئة للعوامل التي تتحكم في بنائها، كذلك الربط بين المنشآت المعمارية والحالة السياسية والعلمية والفنية بمدينة بخارى، والتعرف على السمات المعمارية من خلال دراسة الأساليب المعمارية ومعرفة أهم العناصر المعمارية للمجموعة موضوع الدراسة والوقوف على الأساليب الفنية والعناصر الزخرفية وربطها بالحالة الفنية الموجودة في تلك الفترة مع دراسة النقوش الكتابية المسجلة على الأضرحة وتحليلها والوصول من خلالها إلى معلومات جديدة.

وقع اختياري على هذين الضريحين للدراسة وذلك بما يمتازان به من اكتمال وحدتهما وعناصرهما المعمارية والزخرفية، بالإضافة إلى ما تضمهما من معالجات معمارية عكست براعة المعمار المسلم في بخارى في التعامل والتكيف مع العوامل المحيطة به لاسيما العوامل البيئية والدينية والوظيفية الخاصة بالمنشأتين موضوع الدراسة، وقد اتبعت في دراستي المنهج العلمي الوصفي التحليلي المقارن.

الكلمات الدالة: بخارى، ضريح، واجهة، مدخل، رخارف نباتية.

1.INTRODUCTION:

With the introduction of Islam in Central Asia, the Sufi doctrine began to spread and increase among the public because of its appealing qualities, as well as tolerance, lenience, and mercy. Sufi morals give high credit to the spirit to disseminate safety and satisfaction. Therefore, Sultans and rulers turn to the Sheikhs of orders to be disciples. These Sufis held a high position and had a considerable ruling authority. Every ruler and emir endeavored to be close to these Sufi to have authority and paid attention to establishing mosques, Takyas, and Madrassas¹. Sheikh Sayf al-Din al-Bakharzi was one of the most important Sufi scholars in Central Asia, especially Bukhara². He was one of the great men of religion and established the Sufi Kubrawiya order in Bukhara. He was born in Bakharz, traveled to Bagdad at the age of 11, followed Ibn al-Jawzi, and accompanied Najm al-Din Kubra. In his childhood, he performed Hajj (pilgrimage). Then, he revisited Bagdad and traveled to Khwarazm³. He delivered lessons of Waaz (preaching) and Tafseer (interpretation of the meanings of the Holy Qur'an) in Bukhara. Thus, the Mughal called him Elk Sheikh, i.e., the great Sheikh. Thanks to his efforts, Berkeibn Toshiy ibn Genghis Khan converted to Islam. He was a disciple from Khwarazm and died in (659A.H/1260 A.D)⁴. He was the owner of the mausoleum of Sayf al-Din al-Bakharzi, established in Bukhara in Uzbekistan in the 8th A.H/14th A.D century. He also made Sheikh BoyanQoli Khanibn Sor Ghaiibn Chagatai (747-760A.H/1346-1358A.D) convert to Islam. It is known that Emir Ghazan administrated the state matters on behalf of the Chagatai

¹ Hoda Darwish, "The role of Sufism in disseminating Islam in Central Asia and Caucasus. Ain for Humanities and Social Studies and Research", Vol.1(2004): 97-106.

² Imad EddinAbo Elfeda, *Calendar of Countries*, (Paris: Sultania Press,1840), 488.

- ShahabuddinAl-Hamawi, *Dictionary of Countries* (part2), (Egypt: Alsaada Press, 1906), 187.(in Arabic)

- Ibn IshaqIstakhri, *Paths and Kingdoms* (ed. M. Jaber), (The United Arab Kingdom: Turathuna, 1961), 149.

- Mohammed Elhomiry, *The Book of the Fragrant Garden* (1st ed.), (Lebanon: Lebanon Press, 1975). (in Arabic)

- Ahmed Elsadaty, *History and Culture of Islamic States in Asia: Indian subcontinent, Bangladesh, Iran, Transoxiana (Great Bukhara/ Turkistan), Afghanistan, and Turkey*, (Cairo: Culture for Print and Publishing, 1979), 165. (in Arabic)

- Arminius vámbéry, *History of Bukhara since Time Immemorial (trans. A. Elsadaty) (2nd ed.)*, (Egypt: GEBO, 1987), 25,37.(in Arabic)

- Abu Bakr Elnarshakhy, *History of Bukhara (286-348 A.H/899-959 A.D) (ed. A. Badawy& N. Altarazy) (3rd ed.)* (Cairo: Dar Almaaref, 1993), 39, 41, 42. (in Arabic)

-Alemeev, R., *Bukhere in legends and facts of history*, (Bukhara: 2001).

-Pater Elbasaty, *Encyclopedia (Vol. I)*,(Beirut: Dar Al- maaref, n.d.)(in Arabic)

³ Al-Hamawi, *Dictionary of Countries*, 395.

-Fitaly Nomkein, *Khiva, Cultural Foundation*, (Abu Dhabi: 1945), 9.(in Arabic)

- Amjad Brokhazka, *Architecture of Islamic Civilization, Organization of Islamic Capitals and Cities, Khwarazm*, (1991).

⁴ Shams AldinAl-Dhahabi, *The Lives of Noble Figures* (Vol. 23) (11th ed.), (Beirut: Resala, 1996). (in Arabic)

-Hoda Salah Elden, "Structure of Sayf al-Din al-Bakharzi in Bukhara". A Paper submitted to the Fifth

International Conference "Monuments and Heritage in a Changing World" (29-31 October 2017),

Faculty of Archaeology, (Egypt: Cairo University, 2017), 411:430.(in Arabic)

Khanate and Boyan Qoli Khan was the first to convert to Islam in the Chagatai Khanate¹ and established the mausoleum of Boyan Qoli Khan in Bukhara in Uzbekistan in (760 A.H/ 1358 A.D)².

The Kubrawiya order is attributed to Sheikh Najm al-Din Kubra AlKhivi related to Khiva (540-606 A.H) (1145-1211A.D), whose tomb is in Orgotshy to the west of Khwarazm as Mongols killed him³ when they seized Khwarazm. This order had an important role in disseminating Islam in Khwarazm and among Turkmenia tribes. It used to recite the Azkar (rites) before the Russian conquest but later used the rites of the Naqshbandi order secretly. It spreads in Khwarazm currently to the north of Uzbekistan⁴.

Four tribes led this Sufi order affiliated to Al Albayat (the House of the Prophet)⁵.

2.MAUSOLEUM OF BOYAN QOLI KHAN (760 A.H/ 1358 A.D):

2.1. Architectural pattern (Figure1):

The mausoleum⁶ consists of a square area (Khāneh visit room) whose side is 11 meters long. The four sides have four niches as the base of the helmet of the dome with a semi-circular section with a high lantern for lighting and ventilation in the middle because the drum does not have windows. The main façade is eastern, which includes the entrance of the mausoleum. It consists of three parts. The middle part is wider and higher (two meters than the other two parts), an architectural feature of Islamic entrances in Central Asia. The entrance has an arched opening with a pointed arch above a rectangular opening closed by two decorative wooden shutters with engraved modified floral motifs. The other two side parts are two meters wide⁷. The two spandrels of the main entrance's block are decorated with a floral decorative structure in white and blue carried out in the Terracotta style⁸ of a composite lobbed leaf decorated from top and bottom with a tri fold leaf. The remaining space of the spandrel is decorated with cynical floral rolls. The structure is framed by rectangular ceramic tiles in gradient colors of dark and light blue followed by white, then a decorative frame in the Terracotta style. The remaining area of the main entrance's block was completely covered with decorative tiles of geometric shapes (polygons). The arch space is decorated with a frame of decorative tiles with an inscription in Thuluth on a background of modified floral motifs that reads

¹ Salah Elden, "Structure of Sayf al-Din al-Bakharzi in Bukhara": 411-430.

² Uzbek cultural ministry, *The monuments of Islam*, (Tashkent: 2002), 225.

³ Fouad Elsayad, *Mongols in History*, (Beirut: Dar Alnahda Alarabia, 1980). (in Arabic)

- Ali Elsalaby, *Mughal from Rise to Decline*, (Cairo: New Andalos, 2009). (in Arabic)

-Abu Bakr Al-Hamadani, *Collective History (History of Mughal)(Vol. 2) (Part 2)*, (Cairo: Dar Alkotob Alarabia, 2017). (in Arabic)

⁴ Mahmoud Abo Elela, *Social and Economic Impacts of Gihon and Sihon Rivers in Central Asia*. A paper submitted to the International Conference "Muslims in Central Asia and the Caucasus: Past, Present, and Future", (Cairo: Al-Azhar University, 1992), 34. (in Arabic)

-Mohammed Ahmed, *Islamic Republics in the Soviet Union: Past and Present(1st ed.)*, (Cairo: Alnahda Almasria, 1992), 210. (in Arabic)

-Nasrallah Altarazy, *Islamic Republics in the Commonwealth of Independent States: Past and Present. A paper presented to the Conference of Muslims in Central Asia and Caucasus*, (Egypt: Al-Azhar University, 1992), 16.

-FabreZhumabaev, *The folk history of Uzbekistan*, (Tashkent: 1992), 36- 43.

⁵ Rasha Abdel-Ghani, "Sufi Structures in Bukhara from the 10th H./16th G. to the 13th H./19th G. Century: An Architectural Archeological Study (Thesis), (Egypt: Cairo University", 2019), 71.(in Arabic)

⁶ I managed to visit Bukhara and examine the shrines understudy. Furthermore, I conducted a field study on, photographed, described, and studied the shrines.

⁷ Ragab, *Islamic Monuments and Culture*, 221.

⁸ Suad Maher, *Turkish Ceramic, The Central Institution for University and Scholastic Books*, (Egypt: 1977), 38.

-Noha Gamil, "Ceramic Tales and Mosaics in the Architectures of Bukhara throughout Two Centuries (10/11A.H -16/17 A.D): An Artistic Archaeological Study (Thesis), (Egypt: Cairo University, 2011), 94.(in Arabic)

- Obeid, "Structures of Ceramic Tombs in Central Asia", Vol. 10.

(.....) أَلَّا تَخَافُوا وَلَا تَحْزَنُوا وَأَبْشِرُوا بِالْجَنَّةِ الَّتِي كُنْتُمْ تُوعَدُونَ نَحْنُ أَوْلِيَاؤُكُمْ فِي الْحَيَاةِ الدُّنْيَا وَفِي الْآخِرَةِ وَلَكُمْ فِيهَا مَا تَشْتَوِي
بِأَنْفُسِكُمْ وَلَكُمْ فِيهَا مَا تَدْعُونَ نَزَّلْنَا مِنْ غُفُورٍ رَحِيمٍ وَمَنْ أَحْسَنُ قَوْلًا مِمَّنْ دَعَا إِلَى اللَّهِ وَعَمِلَ صَالِحًا وَقَالَ إِنَّنِي مِنَ الْمُسْلِمِينَ.....¹
Both northern and southern façades are similar. Every façade is divided into three flat rectangular openings covered with ceramic tiles with no entrances (plates 1,2,3, and 4).

The middle of the dome and the transition areas are decorated with decorative tiles². The corner niches are decorated with two decorative structures. While one structure includes a solid entrance decorated with modified floral motifs repeated on the top of corner niche, the other consists of geometric shapes whose space is decorated with modified leaves and half palmettes decorating the coaches of the arches framed by modified cynical floral rolls from which different leaves and half palmettes emerge. The artist repeated this decoration on the drum of the dome. The middle is decorated with geometric shapes decorated with modified floral motifs. On the western side of the mausoleum, a small entrance leads to a small room with a rectangle marble coffin in the middle³ of Sheikh Boyan Qoli Khan, The centrality of the shrines was internal because the main door of the Khanqah was on the same axis as the entrance to the shrine, reflecting the Sufi concept of the sheik and the disciple, i.e., direct observance of the sheik's tomb (Plates 5,6,7, and 8).

3. MAUSOLEUM OF SAYF AL-DIN AL-BAKHARZI (761 A.H / 1359 A.D):

3.1. Architectural pattern (Figure 2):

The mausoleum consists of a square area whose side is 12.75 meters long. It so Only entrance is in the middle of the eastern side (Plates 9 and 10). It opens to a hall (main hall of Sufi Khanqah) equal to the space of mausoleum covered with a dome based on hollow corner niches arched with a pointed arch. The upper part has four layers of stalactites followed by the drum of the dome of 16 sides, in which eight have window openings with pointed arches covered with hollow plaster, and the other eight are similar alternately. Between each window and similar, there is a fallen tail with four courses of stalactites (Plates 11, 12, 13, and 14). The domes decorated with raise delevations from outside to support the helmet with mud brick, ending from the top with a round lantern⁴. It was an environmental translation for lighting and ventilation. Initially, it reflected the environment

¹ Holy Quran, *Surat Fussilat*: 30-3.

² Maher, *Turkish Ceramic*, 36.

-Dominique Celevenot, *Ornament and Decoration in Architecture*, (London: Thames and Hudson, 2000), 99.

- Christina Summer&Guy Petherbridge, *Textiles and Ceramics of Central Asia*, (USA: Power house Publishing, 2004), 92,93.

- Rehab Alsaedy, "*Architectural Ornaments and Ceramic Calcites on Religious Architectures in Esfahan in the Eras of Shah Abbas I of Persia (996-1038 A.H/1052-1077 A.D) and shah Abbas II (1052-1077 A.H/1642-1666 A.D* (Thesis), (Egypt: Cairo University", 2005), 797. (in Arabic)

- Gamil, "*Ceramic Tales and Mosaics in the Architectures of Bukhara*", 87:93.

- Mustafa Gaber, "*Bukhara Madrasa of Islamic Paintings in the 10th A.H. (16th A.D) Century* (Thesis), (Egypt: Cairo University, 2005), 469. (in Arabic)

³ Shebl Obeid, "*Structures of Ceramic Tombs in Central Asia from the (8th A.H/14th A.D) to the (13th A.H/19th A.D) Century: An Artistic Archaeological Study*, Journal of the Faculty of Archaeology", Vol. 10, (2004): 108 -180. (in Arabic)

-Shebl Obeid, "*Inscriptions of Stone and Marbled Coffins in Shahr Sabz and Samarkand: An Artistic Archaeological Study*," Abjadiyat, Vol. 2, (2007): 114-157. (in Arabic)

⁴ Dina Adel, "*Architecture of Domes in Bukhara since the Era of Shaybanids to the Late AL Astrachanidae (10-13A.H/16-19A.D): An Artistic Archeological Study* (thesis), (Egypt: Cairo University, 2019), 44,45. (in Arabic)

as a tradition of Islamic architecture in Central Asia and Iran (Plate 15). The Khanqah has a door leading to stairs upstairs (to the second floor) to the Sufi rooms. In the middle of the four sides, there are four doors. One of them opens to the room of the mausoleum of Sheikhal- Bakharzi (the only entrance of the mausoleum). The middle parts of the northern and southern side have windows with a cover of hollow geometric decorations of mud brick. The middle of the western side has a simple mihrab (niche) with a pointed arch whose top has simple stalactites. Above the mausoleum room, a dome is based on courses of simple stalactites with a semi-circular section, followed by a drum with eight windows arched with pointed arches and hollow hijabs (covers) of plaster (Plates 16 and 17). The dome is decorated with raised brick elevations in the form of a triangle based on the dome's surface with a raised top and ends with a round lantern (plate 18).

The background of the mausoleum includes nine stone structures: A big one is in the middle above the tomb of Sheikh al-Bakharzi (Plate 19), and the others are small of the sons and grandsons of Sheikh al-Bakharzi except one for the famous scribe (Mir Ali) to whom several inscriptions were attributed in the 10th A.H/16th A.D century. Mir Ali wrote the inscriptions of Mir Arab Madrasa¹. He was known as the promoter of the Nastaliq script² in Central Asia³.

4. ANALYTICAL STUDY:

Weather played a key role in building shrines in Bukhara, especially the models under study. Shrines were higher than the ground level to fit the weather because the temperature was less than -20 °C in winter, and the area was usually inundated, causing damage to the buildings. Therefore, the architect usually created mastabas to keep the buildings from snowfall and rain. Moreover, the architect managed to cover shrines with domes- introduced as environmentally-driven items- that fit the areas with heavy rains and snowfall to prevent the accumulation of rainwater. Bukhara's buildings also fit the summer weather because of the building material, i.e., baked brick. Moreover, the formal structure of the dome with an internal concave surface was unique because the dome was not directly based on the octagon of the neck but the pointed arch, allowing the increased height of the domed surface. The foreparts of the façades had composite and created columns, giving a unique character to other shrines across the Islamic world.

The planning and architecture of the shrines under study show that they are covered with domes whose necks are not based on the four angles of the dome's square but in the middle of the internal space. The architect translated an architectural treatment, i.e., creating a massive shrine externally to show the highness of the buried character and using a dome as a symbol of the pattern of covering shrines. Therefore, the architect significantly increased the thickness of the walls in the lower square and created an iwan entrance with a pointed arch in the middle of the four sides of the square where the neck was created in the four angles away from the foreparts and external angles. Accordingly, the viewer of these domes externally thinks that they are in the middle of the shrines.

5. ARCHITECTURAL ELEMENTS:

The general form of the main entrance's block of the mausoleum of Bayan Qoli Khan (760 A.H/ 1358 A.D) and the mausoleum of Sayf al-Din al-Bakharzi (761 A.H/1359 A.D)⁴ is similar to that of

¹ Sheila Blair, & Jonathan Bloom, *The Art and Architecture of Islam, (1250- 1800)*, Pelican history of Art, founding editor: Nikol, aus Pevsner, (USA: Yale university press, 1990), 201.

- Alaxey Arapov, *Bukhara, Masterpieces of Central Asia*, (Tashkent: 2006), 43.

- Gamil, *Ceramic Tales and Mosaics in the Architectures of Bukhara*, 87:93 .

² Maisa Dawood, *Arabic Inscriptions on Islamic Monuments since the First Hijri to the Twelfth (7-18 A.D) Century (1st ed.)*, (Egypt: Nahdet Misr, 1991), 61. (in Arabic)

³ Elsadaty, *History and Culture of Islamic States in Asia*, 169.

- Vasili Bartold, *History of Turks in Central Asia (trans. A. Suliman)*, (Egypt: GEBO, 1996), 7. (in Arabic)

- Ahmed Ragab, *Islamic Monuments and Culture (Bukhara)* (part1), (Kuwait: Kuwait Islamic Arts Center, 2017), 219.

⁴ Miuniy, *Architectural Monuments of Bukhara*, (Tashkent: 2007), 52,53,54.

Bibi-Khanym Mosque (801-807A.H/1398-1404A.D)¹ in Samarkand². Every entrance is a memorial with a deep stone whose front part contains a rectangular door opening. The entrance block is covered with ceramic decorations (Plates 17,18). The mausoleums under study adopted the same form as most Central Asian burial domes, including rectangular memorial entrances with a deep stone with a door opening in the middle leading directly to the burial dome. Sometimes, the top of the entrance opening is occupied with courses of stalactites, such as the dome of Algi Shad MalkAfa (773 A.H/1372A.D) (Figure 3). Moreover, the entrance's block is covered with ceramic decorations, such as the burial domes of Shah Zanda in Samarkand, including the burial domes of Khawaja Ahmed Aldilmy (741A.H/1340 A.D), TaghloTekein (777 A.H/1375 A.D), Shereen Bey Aka (686 A.H/1385A.D) (Figure 4), Emir Zadah (788 A.H/1386A.D) (Figure 5), and Borhan Aldein Saghergy (802-807 A.H/1399-1404A.D)³.

Moreover, the pointed arch spread in Central Asia like a local effect in the mausoleum of Ismail Samani (295 A.H/907A.D) (Figure 6), the mausoleum of Khawaja Ahmed Aldilmy (741 A.H/1340A.D), the burial dome of Algi Shad MalkAfa (773 A.H /1372A.D), the mausoleum of Taghlo Tekein (777 A.H/1375A.D)⁴, indicating the frequent use of the pointed arch as an architectural element in different architectural buildings in Central Asia for long periods.

The transition area in the mausoleum of Sayf al-Din al-Bakharzi (761A.H/ 1359 A.D) takes the form of stalactites to move from the square surface that supports the dome's base to the round, somewhat raised base (Plate 5). It is a developed form of corner niches by doubling the number of courses. Thus, it has a distinctive architectural aim. The transition area of Boyan Qoli Khan (760 A.H/ 1358 A.D) is a set of conical corner niches with a 90-degree angle on its side in the middle of the right corner angle to transform the square into an octagon on which the dome is based (a niche in each corner) (Plate 12). The oldest remaining model of the transition area in the funeral buildings of Central Asia is in the mausoleum of Ismail Samani (295A.H/907A.D). Later, it spread in the Timurid era, including the mausoleum of Shady King of Aqa (773A.H/1371A.D) and the mausoleum of Ali Alnasfy (782 A.H/1380A.D)⁵.

There are various forms of the drums of domes in the mausoleums under study, such as mausoleums with no drum, including the mausoleum of Boyan Qoli Khan 760 A.H/ 1358A.D) century in which the dome is engaged in the drum, mausoleums with a drum on eight holes of arched windows with pointed arches, including the Khor Khāneh room in the mausoleum of Sayf al-Din al-Bakharzi (761 A.H/ 1359 A.D), and a drum with eight holes of arched windows with a pointed arch with eight blocked entrances (mudahia), including the Khanqah of the mausoleum of Sayf al-Din al-Bakharzi (761 A.H/ 1359 A.D). Moreover, some coverings have a semi-circular section ending with domes of a base with round or pear-like puffs with a crescent at the top. The drums and shapes of domes spread in Central Asia, such as the mausoleum of Ismail Samani (295

¹ Andrew Petersen, *Dictionary of Islamic Architecture*, Routledge, (New York: 1996), 247.

² Al-Hamawi, *Dictionary of Countries*, 395.

- Yahya Abbas, *Samarkand: History and Culture*, (Cairo: Turkish Research Center, 1995). (in Arabic)

- Fitaly Nomkein, *Samarkand, Cultural Foundation*, 14.

³ Liza Golombek, *The Function of Decoration in Islamic Architecture*. In: M. Bentley, *Theories and Principles of Design in the Architecture of Islamic Societies, Aga Khan Program for Islamic Architecture*, (Cambridge, Massachusetts, 1988).

- Edgar Knobloch, *Monuments of Central Asia: A Guide to the Archaeology, Art and Architecture of Turkestan*, (London: I.B. Tauris, 2001).

- Mahmoud Roshdy, *The Remaining Ilkhanate Architectures in Kokand in Fergana Valley: An Architectural Archaeological Study* (PhD Dissertation), (Egypt: Cairo University", 2014): 252-257. (in Arabic)

⁴ Shebl Obeid, *The Divan of the Arabic Script in Samarkand (1st ed.)*, (Egypt: Bibliotheca Alexandrina, 2012), 26, 34, 40. (in Arabic)

⁵ Ahmed Ragab & Mahmoud Roshdy & Dina Adel, "Artistic, Architectural, and Archaeological Study of Selected Models of the Domes of Bukhara in the (10th A.H./16th A.D) Century, *Journal of Historical Events*", (2020): 255-288.

A.H/907A.D), the mausoleum of Shady King of Aqa (773A.H/1371A.D, and the mausoleum of Ali Alnasfy (782 A.H/1380A.D).

6.DECORATIVE ELEMENTS:

Floral rolls were used on ceramic coverings in architecture in the Timurid era. They were the primary base and the main element of carrying out this decoration. The artist ended both sides with half palmettes extending in the form of brackets or cynical bents or warps as extending, successive, or cross. They might have several shapes, such as cynical or crowned warps¹. Furthermore, half palmettes spread more in the decorations of architectural establishments. They were carried out in a simple styles small items in small frames surrounding the decorative structures. Tri-lobed leaves were very popular in the decoration of architectural constructions. They were implemented in crowning some decorative structures and limited to geometric, decorative, and various forms. They emerged from floral rolls. These leaves were drawn in easy forms. Other decorative elements used in decorating the architectural constructions understudy were complex floral leaves that were mainly multi-lobes whose space was covered with other decorative units implemented in the middle². Various decorative techniques were used in the spandrel of the entrance block of the main façade and the transition area of the mausoleum of Boyan Qoli Khan(760 A.H/ 1358 A.D).

Polygons were one of the decorative elements that spread in the applied artifacts, in general, and wood, in particular, They were implemented on wooden artifacts in Central Asia in different forms. For example, the six fold polygons were carried out by emptying using wooden sadayeb on wooden hijab in the dome of Kesm Ibn Alabas (807A.H /1404A.D)in the complex of Shah Zendah (777-877 A.H/1375-1476A.D) in Samarkand. Another example was complete polygons as the artist used some secondary units, including tasoms engraved on the flat ribbon surrounding the decorative fillings of the door shutters of the room of Alnahas in the complex of Ahmed Alyasawy (798-802A.H/1395-1399A.D)³.

The thuluth script was used⁴ to implement funeral inscriptions in Central Asia. It was the most common script before and after the period understudy. It represents a stage in the development of soft handwriting dated to the second half of the 2ndA.H/ 8thA.D century. The Thuluth script was used in carrying out several inscriptions of different contents, either religious or documentary. Thus, it differed from the Kufic script⁵, that was used limited to writings of religious content on buildings⁶.

¹ Alsaedy, *Architectural Ornaments and Ceramic Calcites*, 644.

² Roshdy, *The Remaining Ilkhanate Architectures in Kokand*, 252:257.

³ Obeid, *Inscriptions of Stone and Marbled Coffins in Shahr Sabz and Samarkand*, 114-157.

⁴ Adolf Grohman, *Naskh and Thuluth* (trans. G. Mahmoud), (Iraq: Ministry of Culture and Media, 1986).

-Youssef Zonon, *Old and New in the Origin and Development of the Arabic Script over Ages*, (Iraq: Ministry of Culture and Media, 1983).

-Kamel Albaba, *The spirit of Arabic Script* (Lebanon: Dar Lebanon for Printing & Publishing, 1988).

-Afifi Albahnasy, *Arabic Script: Origins, Development, and Dissemination*, 2nd ed., (Damascus: DarAlfikr, 1991).

-Yahya Algabory, *Script and Writing in the Arab Culture (1st ed.)*, (Beirut: 1994).

⁵ Ebrahim Gomaa, *Studying the Development of Kufic Writings on Stones in Egypt in the First Five Hijri Centuries: A Comparison in Different Places of the Muslim World*, (Cairo: Dar Alfikr Alaraby, 1969).

-Dawood, *Arabic Inscriptions on Islamic Monuments since*, 61.

⁶ Shebl Obeid, *Archaeological Inscriptions on Metals in the Timurid and Safavid Eras (1st ed.)*, (Cairo: Dar Alqahira for Publishing, 2002), 27 (in Arabic)

7.FOUNDATION:

Mausoleums understudy adopted the square planning that dominated the Timurid era¹. The oldest well-known example is the mausoleum of Ismail Samani (295A.H/907A.D) (Figure 6)² in Bukhara (Plates 20 and 21). The general outline is a square area covered with a dome whose four sides have arched entrances with pointed arches, some of which are openings of windows, and the other is the entrance³. Then, it was used in the tomb of Arab Ata Alkarkhaniah (367A.H/978A.D) in Tamnear Zarfeshan. Later, it spread in the Timurid mausoleums, including the tombs of Tarkan Aka (762A.H/1360A.D), Hussein Ibn Karakatlagh (777 A.H/1375A.D), Shady King of Aqa (773 A.H/1371A.D), and Shereen Bey Aka (787 A.H/1385A.D)⁴.

8.CONCLUSION:

- 1- The study showed one of the adopted architectural treatments in building the shrines of Bukhara, namely using internal iwan entrances in creating the neck of the domes.
- 2- The study illustrated the environmental effect on the structure of Bukhara's shrines in terms of using mastabas of about one meter high or the available building materials.
- 3- The study demonstrated how the architect tended to bevel the foreparts of the shrines' façades in the form of created columns to achieve two goals: The first was architectural by fostering the outer support of the foreparts of the walls, and the second was aesthetical.
- 4- The paper reported the dominant style of mausoleums design in Central Asia, consisting of a burial dome (Khor khāneh) and a visiting room (Ziarat Khāneh), as shown in the mausoleum of Boyan Qoli Khan or a burial dome (Khor khāneh) and Khanqah, as shown in the mausoleum of Sayf al-Din al-Bakharzi. These domes adopted the dominant local style, as shown in the oldest existing dome of Ismail Samani in Bukhara.
- 5- Mausoleums understudy include domes with a semi-circular section decorated with raised brick elevations and ending with a round lantern, following the dominant style beside the Samarkand domes in Central Asia.
- 6- The paper proved the spread of the pointed arch in Central Asia in the arched openings of the main entrance of the understudy establishments.
- 7- The paper showed the lack of using the decorative contents in funeral mausoleums to match the function implemented on the ceramic decorations of one mausoleum only, i.e., the mausoleum of Boyan Qoli Khan and appeared on both spandrels of the main entrance and the transition areas from inside. The mausoleum of Sayf al-Din al-Bakharzi did not include any artistic decorations.
- 8- The paper demonstrated using various colors in decorating the construction because of the variety of color degrees among the decorative elements.
- 9- The content of inscriptions on mausoleums understudy was limited to the religious content, including verses of the Holy Qur'an in Thuluth to suggest the reward of the Hereafter to match the function.

¹ Shahabuddin Ibn Arbashah, *Wonders of Fate in the News of Timur*, (India: Kalkta Press, 1817), 3.

-Youssef Ibn Taghr-Bordy, *Almanhal Alsafywa Almostawfy fi Bad Alwafy* (part4) (ed. M. Amin), (Egypt: GEBO, 1906), 103, 104.

-Ismael Aka, *Great Temur Empire*, (Tashkent: 1996), 123-134.

-Elsadaty, *History and Culture of Islamic States in Asia*, 224.

² Holly Smith, *Bukhara*, (Moscow: progress publishers, 1982), 32.

-Rtveladze, I., *Muslim shrines in Uzbekistan*, (Tashkent: 1995), 15.

³ Aleskero, U., *Samarkand*, (Tashkent: 1970).

-Nemseva, N., *Shahi Zinda historical and architectural article*, (Tashkent: 1980).

⁴ Karem Kamal, *Religious and Funeral Constructions in Samarkand in the Timurid Era (771/912 A.H -1370/1506 A.D)* (Thesis), (Egypt: Helwan University, 2013), 153, 154. (in Arabic)

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Figures and Plate

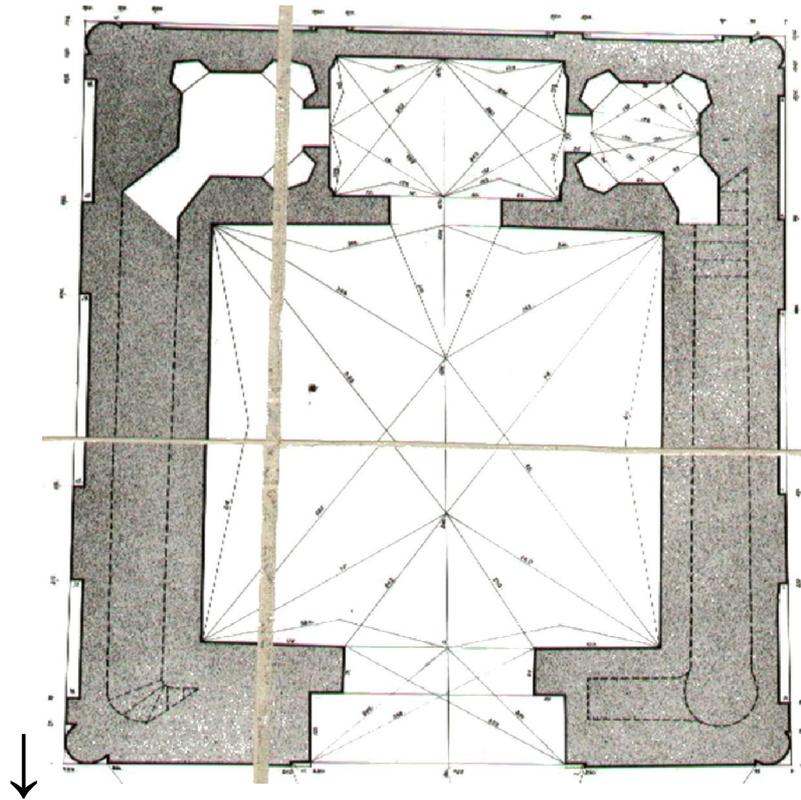


Figure (1) A horizontal projection of the mausoleum of Boyan Qoli Khan(760 A.H/ 1358 A.D) in Bukhara.

Uzbek Ministry of Culture, The archive of the history heritage of Uzbekistan, NO 3.4.4.1 .

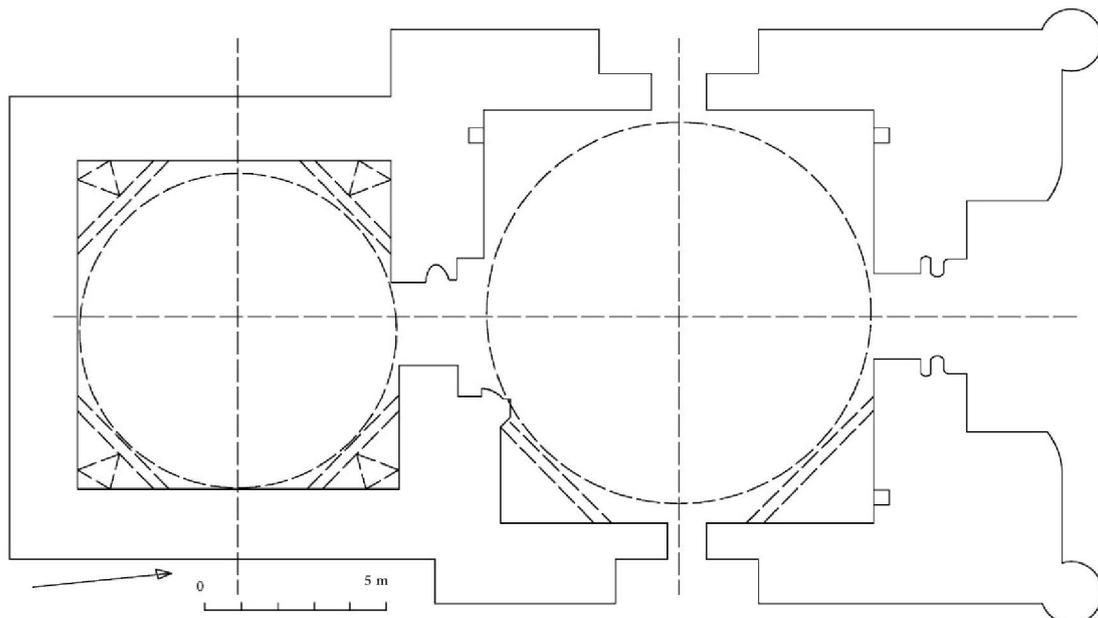


Figure (2) A horizontal projection of the mausoleum of Sayf al-Din al-Bakharzi (761 A.H/ 1359 A.D) in Bukhara.

Baranov, N.& Bunin, A. The architecture of socialistic Republics in 20 AD century, Moscow, 1973, P 273.

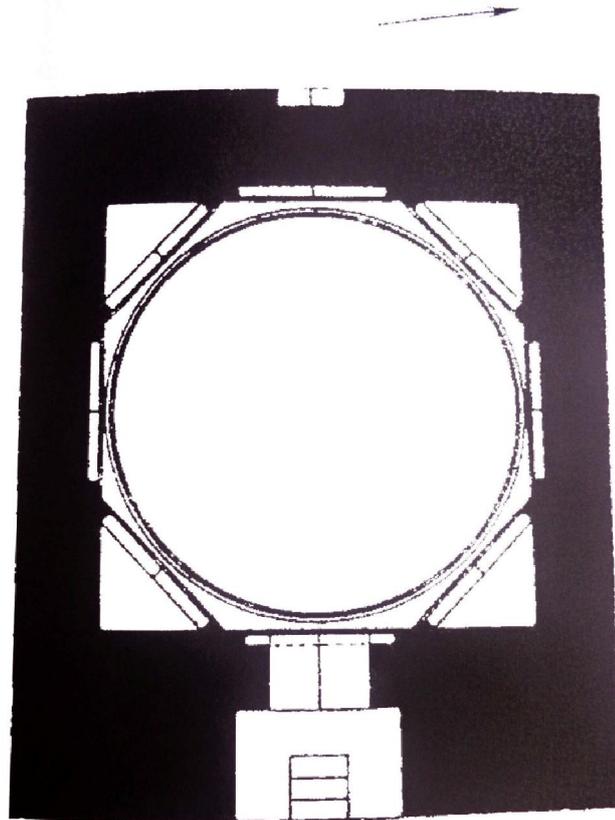


Figure (3) A horizontal projection of the mausoleum of Shady King of Aqa (773 A.H/1371 A.D) in Samarkand.
Kamal, Religious and Funeral Constructions in Samarkand, Fig 22.

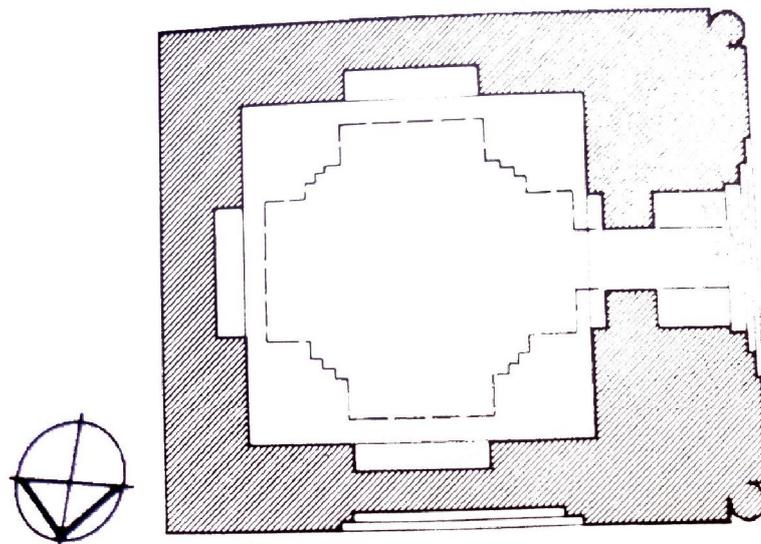


Figure (4) A horizontal projection of the mausoleum of Shereen Bey Aka (787 A.H/1385 A.D) in Samarkand.
Kamal, Religious and Funeral Constructions in Samarkand, Fig 25.

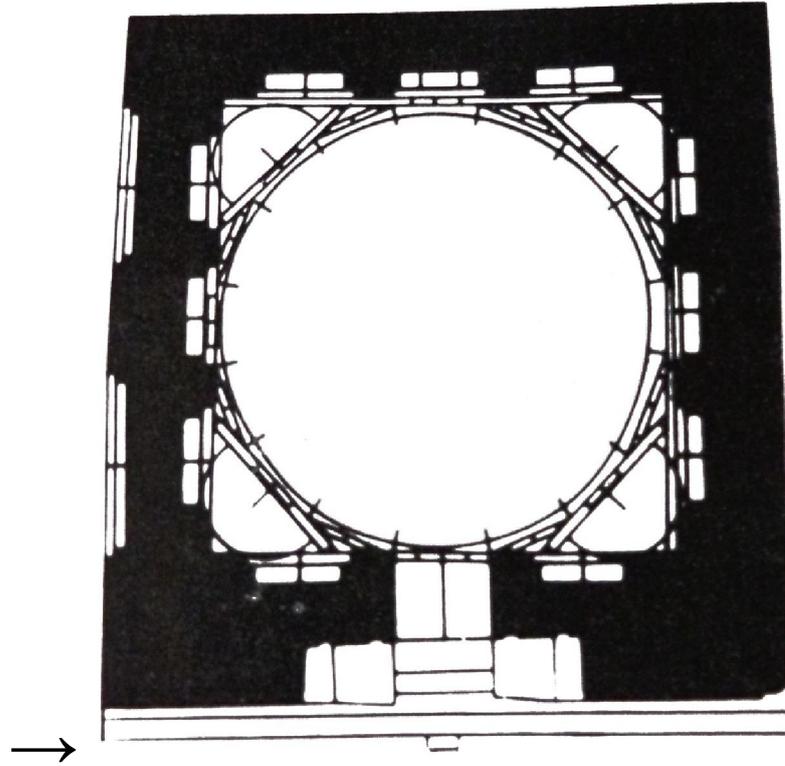


Figure (5) A horizontal projection of the mausoleum of Emir Zadah (788 A.H/1386 A.D)in Samarkand.

Pugachkova(J.), The architecture of Central Asia 15 century, Tashkent, 1976, P114.

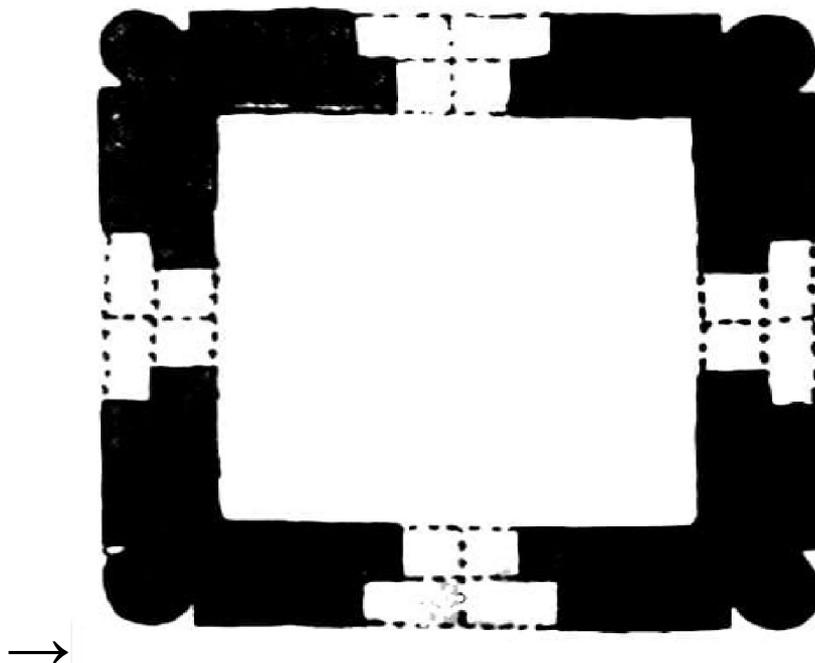


Figure (5) A horizontal projection of the mausoleum of Ismail Samani (295 A.H/907A.D) in Bukhara.

Baranov, Bunin, The architecture of socialistic Republics in 20 A.D century, P 215.



Plate (1) shows the main façade of the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (2) shows the main entrance of the main façade of the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (3) illustrates the spandrels of the arch of main entrance in the main façade of the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (4) shows the minor northern façade of the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (5) shows the transition area of the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (6) illustrates the inner part of the dome of the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (7) shows the mausoleum of Boyan Qoli Khan from inside.
(Photographed by the researcher)



Plate (8) illustrates the burial room attached to the mausoleum of Boyan Qoli Khan.
(Photographed by the researcher)



Plate (9) illustrates the main façade of the mausoleum of Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (10) illustrates the mainentrance of the mausoleum of Sayf al-Din al-Bakharzi .
(Photographed by the researcher)



Plate (11) shows the Khanqah attached to the mausoleum of Sayf al-Din al-Bakharzi from inside.
(Photographed by the researcher)



Plate (12) shows the door of the Khanqah leading to the Sayf al-Din al-Bakharzi from inside.
(Photographed by the researcher)



Plate (13) illustrates the transition area of the dome in the Khanqah leading to the Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (14) shows the inner part of the dome of the Khanqah leading to the Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (15) shows the minor southern façade of the mausoleum of Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (16) shows the lower base and transition area of the mausoleum of Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (17) shows the inner part of the dome of the mausoleum of Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (18) illustrates the minor western façade of the mausoleum of Sayf al-Din al-Bakharzi.
(Photographed by the researcher)



Plate (19) shows the mausoleum of Sayf al-Din al-Bakharzi from inside.
(Photographed by the researcher)



Plate (20) shows the mausoleum of Ismail Samani in Bukhara.
(Photographed by the researcher)



Plate (21) illustrates the transition area of the mausoleum of Ismail Samani in Bukhara
(Photographed by the researcher)