

The Mausoleum Of Humayun

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Abstract: Humayun's Tomb is the first mausoleum which was built by Baburids in India. Also, the world's most well-known mausoleum Taj Mahal has been inspired by this Tomb. However, until now this magnificent mausoleum's commander and which architectural style was used is still debatable. In this research we will try to identify the commander of Humayun's Tomb and clarify which architectural styles was used and from which traditions this heritages was inspired. Moreover, we analyze the main characters, innovations of the Humayun's Tomb and identify later impacts for developing mausoleums of this type.

Index Terms: Baburid architecture, Indian architecture, Timurid style, Mausoleum of Gur Amir, Mausoleum of Taj Mahal, Akbari style, Double-Dome.

1 INTRODUCTION

Humayun Tomb is located around the beautiful shore of the river Jamna, was the place chosen for the turbine many advantages. First of all, this place is located near the famous mausoleum of Nizamuddin, popularly considered as a sacred place of pilgrimage. Secondly, Humayun has built his magnificent city Din-Panah in that place. Third and finally, Delhi was known for its skilled craftsmen and building materials and architectural tradition during those times. [1, 15p] According to Ram Nath "Its planning on the river-bank was also an innovation at Delhi. The pre-Mughal tombs of the seven royal seats of Delhi are isolated structures without any such natural setting or surrounding... the inspiration came from the indigenous sources. Sites near water were considered to be sacred in India since times immemorial. We get the earliest references in the Brhat-Samhita of Varahamihira assigned to the Gupta period, c. 5th century. These ideals were not only very well known to the indigenous builders, they were also very much in vogue in the country and one only needed the discretion to apply this formula of temple-art to tomb architecture. With such a bold innovator as Akbar, there was hardly any difficulty or even hesitation to adopt it. It was in accordance with these ancient dicta that the planners selected a site on the river-bank for construction of the tomb which would enshrine the sacred relics of the ruling emperor's father". [2, 249p]

2. THE BEGINNING OF CONSTRUCTION OF THE MAUSOLEUM

Humayun Tomb was built by the support of his wife Haji Begim (Bega Begim). During the war in Chausa Begim was kept as a prisoner and her daughter Aqiqqa was lost. However, Sher Shah has sent Begim to Humayun. [3,219p] Begim with Banu Begim (Akbar's mother) and Humayun's sister Gulbadan Begim return in Indian in 1557.

Bega Begim wishes to build tomb for her husband and construction will begin in 1562. [4, 133p] Bega Begim in the years of 1564-65 has gone to Mecca, and has become as a Haji Begim. [3, 220p] During of construction of Tomb, Abu Fadl has kept records considering those Tomb's. He records that when Akbar started for the conquest of Ranthambor on Monday 1 Rajab 976 (21 December 1568, he went to Delhi to visit its religious shrines and: "Especially did hi visit the perfumed shrine of that sitter on the spiritual and temporal throne, His Majesty Jahanbani Jannat-Ashiyani, and did he confer princely largesse on the attendants thereupon". [5, 489p] This data shows that in this period the mausoleum was completed. However, Badaoni manuscripts little difference: "And in this year (977/1569-70) the building of the tomb of the late Emperor which is heart-delighting, paradise-like, was completed. It is at Delhi on the banks of the river Jamna and took Mirak Mirza Ghiyas eight or nine years to build. Its magnificent proportions are such that the eye of the spectator gazing on it only with wonder". [6, 135p]

2.1 Identifying Chronology of Construction

Reading various writings, in the gravestones, can help us to identify the chronology of the mausoleum. There are more than 150 gravestones in the Tomb, therefore, the complex was known as "Cemetery of Timurid dynasty". [7, 36p] Some of the gravestones are missing the writings of the date. There are two gravestones in the room of South-West, the gravestones belongs to Shah Alam Bahodur King and his wife. In the gravestone of his wife verse 255 of Surat al-Baqara was written, "Allah – there is no God but He, the Living, the Self-Subsisting and All-Sustaining. Slumber seizes Him not, nor sleep. To Him belongs whatsoever is in the heavens and whatsoever is in the earth. Who is he that will intercede with Him except by His permission? He knows what is before them and what is behind them; and they encompass nothing of His knowledge except what He pleases. His knowledge extends over the heavens and the earth; and the care of them burdens Him not; and He is the High, the Great". [8, 43-44p] On the second gravestone, the Qur'an verses 26-27, was written "the earth will perish. Face of your Lord full of Majesty and Honor will abide forever "is written. [9, 615p] The south-east chamber has three marble tombs generally known as a graves of Humayun's three little girls. In the first grave Ayat`ul-Kursi with the date 1580-81 has written, as well as Kalma and 26-27 verses of Rahman Surat has been written. Additionally, the second and third of these verses has given the same information as previously mentioned, however the date on the third tomb is 1592-93. The north-east chamber contains two white marble female headstones denoting the graves of Haji Begum and Hamida Bani Begum. The former's headstone

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bears Ayat'ul-Kursi and the date 1582. The tomb of Muhammad Sultan, son of Roshan Koka, arranged on the porch toward the north-west of the sepulcher bears the date 1570-71. There are a few different headstones with Qur'an verses and some of them bear dates yet they are all later. Inquisitively, there is no date on both of the two gravestones. But the commemorations, there is no other engraving in the tomb. In this setting, the pertinent dates are 1570-71, 1580-81, 1582 and 1592-93. The most punctual is 1570-71. As mentioned earlier, there were not any graves before completion of this tomb, and this shows that tomb was built in 1570-71. Regardless, Abul Fadl and Badaoni's explanations are convincing in this appreciation. [2, 244p] According to Badaoni, one of the few contemporary historians to mention the construction of the mausoleum, it was designed by Mirak Mirza Ghiyas, an architect of Iranian descent who worked extensively in Herat and Bukhara as well as India before undertaking this project, which lasted from 1562 to 1571. [6, 135p] His name even mentioned by Babur: "Mullah Qosim, a teacher of Shah Mohammad sangtarosh (stone cutter) Mir, Ghiyas Mirak sangtarosh and Shah Boboyi Babur has commanded to build buildings in Agra and Dhulpur". [10, 263p] According to this information, Mirak Mirza, Ghiyas was the head of stone cutters. Mirak Mirza Ghiyas served as an architect during Babur and also he continued to serve in Humayun's time.

2.2 Identifying the Architectural Heritage of the Tomb

It should be mentioned that Humayun's tomb could not be built with only local Indian architects. Therefore, it has been combined with other architectural traditions. For instance, it was not surprising for Babur to bring talented architects from other countries. First of all, Babur does not favor Indian architecture, that's why he invited some masters from Sinan as well as he attracted some architects from Alban. [11, 742p] Secondly, Humayun suffered in Persian palaces of Iran during those days, and he has affected by the Persian culture. [12, 807p] Humayun's wife Haji Sahib before getting married, she has grown up in Khorasan. Khorasan was known as "Persian Culture Center" during those times. [13, 41p] Gulbadan Begin states: "Humayun visited all gardens and building of Sultan Husain Mirza and has admitted that the previous architecture were magnificent". [3, 46p] Humayun likewise has brought some architects from Persia. [14, 45p]

2.3 Clarification of commanders of Humayun Tomb

According to Persi Brown: "Here it the Begum Sahiba settled down in 1564 with her retinue, the latter sufficiently large in number to form a small colony, and proceeded with the project on which she had evidently set her heart. The Begum shared in all Humayun's eventful experiences, including his forced sojourn in Persia, and seems to have absorbed something of the artistic spirit of that country, as she turned to it not only for its traditional knowledge in the art of building but also for the personal to carry out her scheme". [15, 90p] However, Ram Nath was against to this statement, and mentioned that: "Haji Begum did not settle down at this place in 1564; instead, she went to Mecca in 1564-65 for Hajj and returned three years later. That she absorbed a Persian taste is a surmise. That Persian artisans were recruited to work on this project has not been mentioned by any source whatsoever". [2, 269-270p] As, Ram Nath noted: "Akbar was fully aware that it was the first monumental tomb of his dynasty, the interests of which

weighed heavier in his estimation than any other consideration, and the first family relic of his reign and it was not possible for him to leave the construction-work exclusively to the feminine discretion of the Haji Begum. Abul Fadl attested, that he went to pay respect to his father's supurdgah at Sirhind in 1558 and, again, he paid a visit to the mausoleum at Delhi in 1568. This indicates that he was associated with the project continuously, from beginning to end. Humayun's tomb is altogether different from the typical pre-Mughal tomb in respect of its site, lay-out, plan and design and it is, in fact, a marvelous innovation on the Indian scene. Can we afford to ascribe this marvelous innovation to an old mediocre lady of the deceased king's Harem? This is impossible. Only a rare genius of Akbar thought, approach and decision could have worked out! The circumstances of the case thus show, without the least doubt, that Akbar took keen interest in the project and exercised decisive discretion in the matter of planning and designing of the grand sepulcher of his father". [2, 247-248p] However, Glenn Lowry said: "The architect of the tomb, Mirak Mirza Ghiyas, with his Central Asian background and familiarity with the great Timurid monuments of Herat and Bukhara, as well as the Sultanate buildings of India, was the ideal choice for this project". [4, 145p] The above analysis of the data clearly shows that, after death of Humayun his wife Haji Begim wants to build tomb for her husband. However, it was commanded and controlled by Akbar, and was built by project of Mirak Mirza Ghiyas.

3. THE GARDEN TOMB OF HUMAYUN

Humayun tomb is essentially square its corners are chamfered so that it appears to be an irregular octagon. [4, 133p] The east-west pivot slicing through the west entryway lies in the heading towards the Lodi Road and the tomb of Safdarjang which appeared later. The north-south pivot slicing through the south entryway, which was additionally the principle door amid the underlying days, lies toward the dargah of Nizamuddin Auliya. [1, 18p] The garden in which the tomb is set is 348 m. sq. Encompassed by a momentous divider, it both manages one's first impression of the structure and controls access to it. [4, 135p] A 5.8-meters high wall encased the tomb from the three sides. The eastern side is open for the beautiful perspective of the stream Yamuna and has a creative structure. [1, 30p] The tomb is situated in the middle of the first preserved Baburid garden on a classical char-bagh pattern. The khiyabans (paved walkways) that divide the garden into its four parts terminate in gatehouses and subsidiary structures. [16, 44p] Ram Nath pointed out: "The garden-designer of the Tomb of Humayun is substantially indebted to Babur, the Prince of Gardens. He learnt the technique of an artificial terraced garden and the system of water-courses, tanks and waterfalls through chadars from the latter. Of course, he utilized the inspiration in his own ingenious way with reference to the Grand Mausoleum which he was required to provide with a beautiful setting. The eight P platforms of Babur's Bagh-i-Gul Afshan denoting the eight divisions of the mythological Paradise were set in two rows independently without being in relation to a tomb or palace and each one had, around it, a network of water-channels only. The garden-designer of Humayun's Tomb has used the same eight P platforms, of equal dimensions, in the setting around the main mausoleum, two on either side, here each one having four oblong octagonal ponds around it interconnected by the water-channels. This marks a marvelous development of the original

plan". [2, 258-259p]

3.1 The Gates of the Humayun`s Tomb

Entrance to the tomb garden was provided through a gateway on the southern wall, now closed. The western gateway is in use presently. [17, 105p] Southern gateway which is shut at present was the fundamental passageway initially. It is an extensive double-storied building of local grey quartzite with which red sandstone has been utilized extravagantly on all edges, and white marble on all conspicuous frameworks of the curves. The focal entry which gives passage rises just about to the entire tallness of the building. It is flanked on either side by twofold curves, one over the other. A screen of curves connected to the portal on either side at a slanted edge adds to the fantastic impact of this forcing entryway. [2, 248-257p] The large forecourt has usually been the entrance for the Central Asian, Persian and Baburid gardens. The gateways were used as living quarters for caretakers and religious staff for the upkeep of the resting palace. [18, 114p] Keeping with the common conventions, the building framing the fundamental entryway has a few rooms, on both the floors, which may have been utilized additionally as a rest-house for the guests. Little minarets ascend on both the top closures of the entryway to accommodate symmetry. [1, 31p] The western gateway is smaller structure having central portal, and wing of double-arches to it on either side at an inclined angle giving a plastic rather than a monumental impression. [2, 257p] This gate, through which the garden is drawn closer, remains on a one-meter high stage. Open through five stages, and made of quartzite, red sandstone and marble, is around 14,7 m. high from the level of the stage. Chhatris 1.5 m. sq., bolstered by the 2.25 m. sandstone columns embellish the north-west and south-west corners of the gateway. White marble has been lavishly decorated to alleviate the dullness and loan extravagance to the structure. A tremendous central corridor, 7 m. sq. in the focal point of this passageway entryway with 2.7 m. wide and 4.3 m. high curves on both the east and the west sides of this focal corridor. [1, 31-32p] As in the previous case, fundamental material is grey stone with all the edges completed in red stone and layouts of curves in white marble for accentuation and additionally charming shading contrast. There is no mortar and no ornamentation, and there couldn't have been a superior approach to ease the tedium of the plain surfaces. Satkonas enhance the spandrels of the focal entry like the southern entryway. Frieze has been totally completed in red sandstone having a progression of chiseled cross. Every side is delegated by a lovely square chhatri made out of jali balustrades, slim columns, chhajja and a white marble vault laying on a square trimmed drum. The entire synthesis is greatly satisfying and viable. [2, 257p]

3.2 The Composition of Humayun`s Tomb

A development of this extent and size requires a thoroughly thought out site map and compositional arrangement. The territory, being on the stream front, required leveling. The patio nursery was to be given with a cautious slope to an even supply of generally rare water for watering system – excessively incredible a grade would deplete speedier. [1, 18p] Rober Hillengbrand writes: "Fifteenth and sixteenth - century drawings found in Istanbul and Tashkent contain, among much other material, detailed notations for the layout of ground plans and the construction of muqarnas vaults. Their use of gridded paper and modular units provides independent documentary

evidence for what could be deduced from the monuments themselves — that a mastery of geometrical concepts and of proportional relationships was needed to control these vast spaces and to order them into harmonious, symmetrical designs. It is size above all that empowers such factors as axially, rhythm, repetition, anticipation and echo to yield their full effect. Thus in the 4 - iwan courtyard madrasa of Ulugh Beg in Samarqand (1417), the component parts are all interdependent and logically related to each other, while at the Shah-i Zinda - a necropolis largely intended, it seems for Timurid princesses - the individual mausoleum are not sited haphazardly but operate in concert, forming a processional way towards the tomb of the eponymous saint. A long monumental staircase creates a suitable air of expectancy and ensures that from the outset pilgrims are channeled towards the tomb along the desired route. It is a textbook case of the capacity of Timurid architects to think big and to exploit space to the full. The whole site seems to have been deliberately designed as an open – air gallery displaying the latest decorative techniques". [19, 217p] There are similarities between these objects and documents of Humayun Tomb. As Glenn Lowry analyzes and writes: "The most striking features of Humayun`s tomb are its remarkable size, radially symmetrical plan, rubble core finished with red sandstone and white marble, and garden setting. Each of these aspects of the building has a pre-Mughal origin. Massive tombs have existed in the Muslim world since at least the beginning of the eleventh century; radially symmetrical buildings – tombs as well as palaces – are common to the Timurid architecture of Iran and Central Asia; there are numerous fourteenth – century structures in India made out of red sandstone and white marble; and there are several fourteenth, fifteenth, and sixteenth – century tombs that have formal settings similar to Humayun`s. There are, however, no precedents for combining all of these elements in a single monument. Radially symmetrical Timurid tombs, for instance, are invariably made of bricks covered with tiles and undeveloped areas. This is as true for the Gur-Amir at Samarkand (1404) as it is for the shrine of Abu Nasr Parsa in Balkh (1460-61) and the so-called Ishrat Khaneh in Samarkand (1460-64). [John Hoag. Islamic Architecture. New York, 1976] (264-275) Conversely Indian tombs made rubble faced with red sandstone and white marble, such as the mausoleum of Ghiyas al-Din Tughluq (1325), are usually relatively small structures with simple square plans". [4, 135p] At the crossing point of the four noteworthy highways lies the 1.2 m. high from the patio nursery level and 111 m. sq. stage. Cleared with expansive tiles of Delhi quartzite, it is come to by five stages from all the four sides to another stage around 92 m. sq. The edges of both the stages have been slanted to round up the sharpness at the edges. This second stage, six meter in stature, is likewise made of neighborhood rubble confronted with red sandstone with decorated marble groups in geometrical examples for help. [1, 35-36p] Arch's width of 3.6 m. and the height of 4.8 m. Between the arch's wall decorated with "girikh" in Persian tradition. [20, 290p] Four niche at the center of the stairs in the center of the opposite side of the room allocated for the proposed specification. The rest of the 66 arches, shelves, 2.8 m. Inner width used as the hujra. Moreover, the corners of the platform there are additional two hujra has been built. Thus, the total number of dwellings 68 units, with a shelf in the porch in the form of a small tombs. [21, 119p] The both sides of platform corners has been built in edge style. In the

empty areas there was not built any towers. During the construction of Taj Mahal, the main concept of the styles has come from Humayun's tomb, however, Shah Jahan has developed this conception to fulfill empty spaces with majestic towers. [2, 259p] Tomb of a lifestyle center built on the portal trim, soft side in front with a majestic archway. A gigantic portal of 18 m. and a height of 13.5 m. wide, and 2.8 m. providing access to the inner edge of the Pilgrims 13.5 m. and 10 m in height. located in the arcs. [22, 244p] Each side of the two arcs on the façade of a hexagonal star-shaped ornament, "satkona" has decorated. A six-pointed star which was adopted from "tantric" idea of Indian tradition and was used as a main decorative ornament in such as buildings including Qal'a-i Kuhna mosque, Din Panah, and also Atgah Khan tombs. [23] At the same time, six-pointed star was ideal symbol during Seljuk period. The meaning of the symbol was life and high mental intelligence. [24, 27p] The Star's inside lotus symbol resembles of good luck symbol in Buddha religion. [25, 2-13p] In each wings of the arch there are two-store complex constructed, also, in each of the edge corners there are double stored hujra's can be found. [26, 141p] The entire bottom arch has covered by beautiful jalis, only southern part of the center is open. Because, this part functions as entry to the mausoleum. In addition, this part built without portal. Ram Nath writes: "Each facade is composed of a central iwan containing a portal, flanked by a wing on either side, which slightly projects forward. Each wing again has a small portal in the center flanked first by blind ornamental double-arches and then by double-alcoves at inclined angels – all in a double-storied arrangement. All lower arches are closed by jalis except the central one in the south iwan which gives the entrance; there is no portal on this side. The amount of chamfer on each corner of the tomb is repeated on both sides of the central iwan in each case – thus the basic square plan of the tomb has been manipulated in a unique way to provide sunk zones and projections on each façade in order to bring about pleasant shadows. The architect's desire to respond favorably to the need of this tropical region to provide shadows for a cool repose to the eyes for aesthetic appreciation is truthfully reflected. Though the tomb does not have such an important feature as chhajja, which was typical constituent of this formula of Indian art, the shadows have been provided by skillful use of inclined angels, and deep rectangular and semi-octagonal alcoves, arches and iwans. The interplay of shadows, react beautifully on the aesthetic sense which a flat surface in profuse polychrome, so common in the buildings of Iran and other Muslim countries, could not have produced". [2, 260-261p]

3.3 The Main Central Hall of the Mausoleum

The focal octagonal chamber lodging the false tombstone over this fundamental funeral home is an octagonal structure ascending on the top the second stage, with a width of around 14.1 meters. Each of the eight sides has been given angled breaks. The break at the passageway being from the southern side is open and the remaining sides of east, west and north have marble screens with geometrical examples. Behind these geometrical screens is the stairway prompting the lower stage. [1, 49p] Eight rooms designed around the room, although, "Hasht-bihisht" means "eight- paradise". This concept is one of the factors in the architecture of Babur. [17, 105p] It should also be noted that the geometric center of the room, and extra room environment, the design concept belongs to the Timurid

architecture. For the first time such a method, used in the building which is, called Ishrat Khaneh, and was built in 1464 in Samarkand. [27, 46p] In central octagonal hall there are two-store hujras are built in each corners. In the third floor of the grid there are several windows which are designed with double dome which connected with spandrels. "During Baburid times, instead of using bricks they preferred to use stones which made spandrels very attractive". [28, 123p]

3.4 Analyzing the plan of Humayun's Tomb

The buried body of Humayun was placed in the grave which is located under the main central hall, which is 3 m. sq. area. Based on Gur Amir mausoleum, they have used the same tradition in the Humayun's tomb. The idea is that the original grave is located in the parallel axes of symbolic grave. [29, 83p] In general, there are several similarities between Gur Amir and Humayun's tomb. In both of the mausoleums there are several rooms which are used as madrasa and for travelers. This kind of mausoleums especially was projected by Amir Timur. For example, Amir Timur built tomb for his beloved grandson Muhammad Sultan, which after his death became as his own mausoleum. For this reason, this kind of mausoleums was adopted from Timurid traditions. Nevertheless, the climate of the India is dry hot, therefore, it made them to build Humayun's tomb in the style of open complex. Undoubtedly, this invention was adopted by Babur. [29, 140p] According to Ram Nath: "Tomb's plan is unique inasmuch as the tombs of the Delhi Sultanate period did not have corner-rooms and side portals in the style of a circumambulatory around the main hall with a regular arrangement of recesses and projections on all the external sides. There was, at the most, verandah rotating on all sides of the mortuary hall in the typical astasra (octagonal) tomb, e.g., that of Sikandar Lodi and Sher Shah. The "chaturasra" (square) tomb did not have even this feature and it was composed of a large square hall on the ground plan, all around. Where the original inspiration of such a plan came from – is an important question. There is no such intricate arrangement of the main floor plan anywhere else outside India prior to it and the inspiration does not seem to have come to us from Afghanistan, Iran, Central Asia, Syria, Arabia or Egypt. As the external recesses and projections and the underlying spirit of a circumambulatory suggest, the most natural course open to the builders, again, was to look at the indigenous order of things, make a choice and adopt a formula in their own way. The ground plan of the Tomb of Humayun is, in fact, a modified and enlarged version of the plan of the Temple Hemakuta. As described in the Samarangana-Sutradhara Hemakuta is a regularly quadrangular temple having portals on all the four sides, sanctum in the center of the plan and four corner-rooms, these being interconnected, thus making up a circumambulatory, with specific recesses and projections on the external sides, all in a five-storied elevation with a five-spired superstructure". [2, 263-264p] However, as Page indicates: "A suggestion has been made that the inspiration for this approach is Temple of Hemakuta, but the time gap between the two structures is so wide that it becomes difficult to accept it". [21, 119p] Addition to this, "The mausoleum matches Babur's own description of "hasht-behisht" pavilion of Herat Tareb Khana Palace, which the Mughals would have seen". [22, 244p]

4. UNIQUENESS OF ANALYZING ARCHITECTURAL STYLE OF THE TOMB

Shukur Askarov has explored this issue, and has come to the idea of that Humayun tomb historical formation are developed in the paths of Italy, Russia, Central Asia and India. As Askarov indicates: "During 1474 just finished Uspenskiy Church has collapsed, after this incident, Russians had invited architects from Rome to develop their own architecture. In 1547 Ivan Grozny has become the ruler of Russia, and in this period Moscow was known as a third Rome and ruler has ordered to build churches. During this period there was built churches such as Ionna Predteche (1547 y.) and Pokrova na Rvu (1555-1560) in Italian traditions. This conceptions of the churches was in vest gated by the Italian architect Filarete. The concept expressed in the new period, the symbol of the unity of the state and religion reinforced the image of comfort and nobles. The ruler of Bukhara Abdullah II, in order to rule over neighborhood villages, has established ties with Moscow. Ambassadors of Moscow has passed to India through Bukhara. Therefore, under the influence of Rome and Moscow new type of khonakoh has appeared. This new type of khonakoh was built during 1558-1569 by ruler Abdullah II for his religious teacher Sheikh Qasim in Karmana village. The idea of five sided plan was adopted and changed to four sided plan which is more commonly known as "chor" concept. Because the climate of Russia is cold, the khonakohs are built in closed type, however, central Asia, the climate is hot and dry this idea was designed as open complex which is commonly known as "iwan". Exactly this type of khonakoh was impacted for the creation of Humayun's tomb". [30, 52-53p], [31, 58p]

5. DOME OF THE MAUSOLEUM

Double dome of Humayun's tomb was chosen for two purposes. Inner dome was chosen for graceful appearance and outer dome gave a look of a huge view of building. [29, 53-54p] Double dome from its drum to its top has a height of 22.2. m. [1, 44-45p] The dome is in the shape of onion. The drum of dome has a height of 7.62m. The cylindrical shape drum constructed with red sandstone and has eight arches. The wall of the drum designed with ornament from quartzite and yellow stones. The curves consist of six pointed stars and hexagonal shaped forms. The base of the drum covered with a line of white and black marbles. [32, 449p] The cylindrical drum have been used before the construction of the building by the architects of the Egyptian temples. However, its use in India in terms of artistic aesthetic Islamic period have been used on a large scale by the architecture of Babur. This device was adopted to Babur from Central Asian and Iranian traditions. [33, 133p] Undoubtedly, the dome was inspired from Bibi Khanum Mosque and from the Gur Amir mausoleums in Samarkand, as an example, this is the first time in the land of the Indian was used in building of Sabz Burj. The dome of Humayun's Tomb is considered as an example of fully formed dome in contrast to above-mentioned domes. [2, 268p] The reason of using Gur Amir's double dome as an example for Humayun's tomb, is because they considered themselves as a Timurid. [4, 138p] It should also be noted that, covering dome completely with white marble has met in India for the first time. [34, 27p] The double dome of Humayun's Tomb has inspired to form the dome of Taj Mahal, and later led to the creation of the dome of the tomb Safdarjang. [1, 43p]

CONCLUSION

Humayun Mausoleum embodies a number of important architectural innovations, the following significant innovations are:

1. Double dome of Humayun's tomb was chosen for two purposes. Inner dome was chosen for graceful appearance and outer dome gave a look of a huge view of building;
2. Instead of using brackets there were chosen archway in this tomb;
3. The outer walls ornamented with red sandstone, as well as white marble and tile mosaics combined and investigated new style of composition. This style was adopted by Babur which was one of the main ornamentation of Central Asian heritage;
4. Using "chor-bagh" in the Tomb of Humayun, it is one of the aspects which was innovated by Babur.

Humayun's tomb came out of the mixture of two architectural heritage, which are Timurid architecture and local Indian architecture. Humayun's tomb is considered as a one of the greatest mausoleum that was built by Baburids. To sum up, Humayun tomb is a first mausoleum in the Indian ground which was built by Baburids, and as it's known that the construction of Taj Mahal have been inspired by this mausoleum.

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