

İSTANBUL ÜNİVERSİTESİ EDEBİYAT FAKÜLTESİ YAYINLARI
PUBLICATIONS OF THE FACULTY OF LETTERS, ISTANBUL UNIVERSITY

İSLÂM TETKİKLERİ ENSTİTÜSÜ DERGİSİ

(REVIEW OF THE INSTITUTE OF ISLAMIC STUDIES)

Kurucusu :
Ord. Prof. Dr. Z.V. Togan

Müdür — Editor
Prof. Dr. Salih TUĞ

CİLD — VOLUME : VII
CÜZ — PARTS : 3-4
1979

Edebiyat Fakültesi Basımevi
İSTANBUL
1979

The architect of the taj and its place in world architecture

M. Abdulla CHAGHATAI
(Lahore)

Prince Khurram's marriage with Arjumand Banu Begam, better known as Mumtaz Mahal, the daughter of Nawab Asaf Khan, the brother of Nur Jahan, was celebrated on 12th. April 1612¹. He ascended the throne as Emperor Shahjahan on 4th. Feb. 1628. During the fourth regnal year Mumtaz died in child birth at Burhanpur while she was about forty years old and only seven children out of fourteen survived her. At Burhanpur she was temporarily laid to rest on the banks of the Tapti river in the Zainabad Gardens. In the meantime at Agra the arrangements for her permanent burial were made. Accordingly Nawab Wazir Khan, Siti Khanam and Prince Shujā² were deputed to bring the body of the deceased Empress from Burhanpur to Akbarabad-Agra where the body was finally interred in the land facing the Jamna river. Immediately a grave with a temporary dome over it was made. Then the sky-like lofty Mausoleum was erected which to day is known as the Taj Mahal of Agra and which owing to its marvellous architectural merits and wonderful achievement as a mausoleum is regarded one of the seven wonders of the world.

Before the Taj Mahal saw the light of the day, the Musulmans all over India had developed an independent Indo-Muslim style of Architecture of their own. It was in spirit and nature an adaptation of those prin-

1. Muhammad Salih Kambo, *Amal / Salih*, Vol. 1 p. 44-54-55, Vol. 11. P. 310.
2. Ibid Vol. I pp. 551-8. Vol II. pp. 380-385.

ciples, forms and details³, which they had brought from Central Asia and Persia, whence they had come to India. Though in general appearance the specimens of Indo-Muslim architecture in different places seem to be different from one another, yet fundamentally they are one and the same. The Mughals had the opportunity of ruling India longer than any other Muslim dynasty, therefore, during their regime, there was no trace of Hinduism in the style of Indo-Muslim architecture, particularly in the works of Jahangir and Shahjahan. The monuments of Shahjahan's reign have very close affinities with those of Persia and Central Asia⁴.

It all means that the accumulative expression, of all the previous Indo-Muslim architectural attainments, is the Taj Mahal of Agra which was finally completed in 1647; when it was duly inaugurated by the Emperor Shahjahan himself on the Comemoration of Mumtaz'z seventeenth death anniversary⁵. The contemporary historians of Shahjahan's court have supplied us with a complete description of the Taj in a very ornate Persian prose which need not be reproduced here⁶, since the Taj is open to public view (fig. I) and one is free to describe or criticise it as he likes. This most unique and enviable Taj has, thus, gathered around it varied opinions and different views about its architect who designed it, which no doubt, have created considerable confusion.

On the sole authority of Father Manrique, a Portugues traveller, it is alleged that Geronimo Veroneo, a Venetian was the architect of the Taj, whereas no indication is found either in India or in Venice that he was ever connected with the art of building⁷. He was, as history records, a jeweller and the only mention of him is made in connection with the upheavel at Hugli on the part of the Portuguese, which is masterly discussed by Sir Edward Maclagan in his work the *Jesuites and the Great Mughal*⁸. Even the date of his death does not tally with the date inscribed on his grave in Agra, as discussed by Sir John Marshall⁹.

3 Marshal, Sir John. *Muslim Monuments of India*, Cambridge History of India Vol. III. P. 571.

4 Chaghatai, M.A. *Indian Links with Central Asia in Architecture*. Indian Art and Letter, London 1937.

5 Kambo, *opt. cit.*

6 Ibid Vol. II, pp. 380-85.

7 *Travels of Fray Sebastian Manrique, 1629-1639*, London, 1927 vol. ii pp. 167-74.

8 *The Jestsuites and the Great Mughal*, by Sir Edward Maclagan London, 1932, pp. 100-140.

9 Archaeological Survey of India, 1904-05.

Austin de Bordeaux, a Frenchman, was in the service of the Mughals from the days of Jahangir, and he was undoubtedly an expert in many arts, which is quite manifest from his four letters preserved in the Bibliotheque Nationale, Paris¹⁰. He had the honour of being awarded the title of Hunarmand by Jahangir¹¹. He had, however, no connection with construction of the Taj. For just before the death of Mumtaz he was sent by Shahjahan on a political mission to the Portuguese¹², but he was killed on his way back as related by his countrymen, who could easily mention his connection had there been any at all with the construction of the Taj.

It is generally mentioned that one Ustad Isa was the architect of the Taj who has been the cause of so many distortions of history of the monument. It is clearly a myth, for the existence of the MS., which makes mention of Isa, does not go beyond the first quarter of the nineteenth century and it was prepared as a guide to the monuments of Agra in compliance with an advertisement published in 1825 by Mr. James Stephen Lushington, the then acting Magistrate of Agra¹³. This fact is quite obvious from Dr. Rieu's words in the catalogue of the Persian MSS. in the British Museum, London. There is one list of architects and artizans in this MS. who were employed on the construction of the Taj, although no such information is available either in any court history or in any other Mughal history.

Turkish sources mention two names of great architects viz: Yusuf and Isa who were invited by Babur to India from Constantinople¹⁴. They were the pupils of the great Turkish architect Sinan. If some one is conjecturally encouraged to take this Isa of Turkish origin as the architect of the Taj who is referred to above in the MS. in the British Museum, then he is certainly mistaken. Because the Taj began to be built at Agra after over a century since Yusuf and Isa had come to India on the invitation of Babur. Muhammad Surayya also mentions in his Turkish encyclopaedic work the *Sijjilli Uthmani*¹⁵ that one Isa, the pupil of the great Sinan went to India and became very popular. But it is really sad that we do

10 Les MSS. a la Bibliotheque Nationale, Paris, Cinq cent Colberts vol. 483, pp. 436-439.

11 Jahangir's *Tuzuk* (English Translation by Rodgers), vol. ii. pp. 80, 82-3.

12 *Tavernier's Travels*, Ball's Ed. vol. pp. 108.

13 British Museum, MS. Or. 6568; Or. 2020; Or. 1937, pl. 12.

14 Celâl Esat, *Türk Sanatı*, İstanbul, 1928, p. 45; H. Saladin, *Manuel d'Art Musulman*, vol. i, *Architecture*, Paris, 1907, p. 561.

15 Muhammad Surayya, *Sijjilli Uthmani*, İstanbul, 1308 H, vol. iii p. 106.

not get any clue even of this Isa in our records nor in Babur's own Memoirs. About Yusuf we can only say that one MS. in the Berlin Library¹⁶ was transcribed in India by one Lutfullah son of Ahmad, son of Yusuf, son of Husain, son of Abdul Latif. I come now to one Lutfullah and his father Ahmad who were the great architects of the days of Shahjahan in India as noted below. Yusuf may be the father of this Ahmad, whose names are noted in the colophon of the MS. in the Berlin Library. Fortunately our researches reveal one architect Yusuf, who had built the fort of Shahpur in the Gulbarga district, Deccan, during the reign of Ibrahim Adil Shah in 962 H. ¹⁷.

The contemporary history of Shahjahan's period mentions two architects Ustad Ahmad and Hamid, who were employed by Shahjahan on the construction of the Lal Qala and Juma Masjid at Delhi¹⁸. But in one of his poems Lutfullah, the son of Ahmad gives credit to his father Ahmad, being the architect of the Taj as well as of the Juma Masjid and Lal Qala of Delhi¹⁹. It is an admitted fact that Ahmad was a great architect of those days but no other evidence corroborates the statement of Lutfullah that Ahmad had any connection with the construction of the Taj.

The court historians of Shahjahan, in the course of the description of the Taj, mention the names of two persons, Makramat Khan and Mir Abdul Karim, who had supervised the construction of the Taj²⁰. Inside the dome of the Taj the name of the great calligraphist Amanat Khan Shirazi, as an epigraphist appears, who had calligraphed the inscriptions of the Taj in the best style of naskhi characters which are full of holy verses²¹. We should not regard him as the architect of the Taj or that the name of the architect of the Taj is found in the inscriptions as many writers have already mistaken²².

Who was the architect of the Taj? really remains a problem. But for the seeker after truth it is clear that Shahjahan was the only person who could create such a marvellous symbol of love in memory of his beloved

16 Eat Acc. 353. Berlin.

17 Epigraphia Indica Moslimica 1933-34.

18 Kambo, MS. BM. Add. 2622.

19 Chaghatai, M.A. Annual Caravan, *The Architect of the Taj* (Urdu: Memar-i-Taj) 1932; *A Family of Architects Mughal Islamic Culture*, Hyderabad Dn. 1938.

20 Kambo, vol. ii. pp. 384-5.

21 Ibid, vol. i p. 428, vol. ii p. 266.

22 Ancient India, Delhi, Jan. 1946, *The Repairs of the Taj* by Pandit Madhu Sarup Vats, pp. 4-5.

wife. Contemporary historians are silent on this particular point and content with the bare mention that Shahjahan was great architect even when he was young prince and several edifices of his empire were designed by himself²³. Why then should we hesitate in counting the Taj as one of his masterpieces.

* * *

It cannot be denied that each country or community has its own peculiarities of architecture and thus some of their monuments can claim to be the masterpieces; but hardly a few of them occupy an international position in the general domain of Fine Arts as to day the Taj Mahal of Agra does, owing to its unique architectural features. However, by putting the Taj among such domes masterpieces of the world, an effort is made to discuss some points of their contrast and comparison (Fig. II). As the main feature of the Taj, which immediately confronts the visitor, is its central dome therefore, we begin from it.

There has been a long controversy about the origin of the *Dome* as to whether it first appeared in the East or West²⁴. But it has been established that the dome existed in the east in very ancient times and the masonry dome was originated in Syria²⁵. However, it can safely be contended that the Dome of the Rock — *Qubbat'us-Sakhra* — a building of an impressive size and monumental character on an octagonal base exists at Jerusalem since the seven century of the Christian era; when the Kalif Omar captured it in 637. Although since then it has passed through various vicissitudes.

Stupas or topes, a dome-like structures of the Budhist monasteries in India cannot be compared with the dome, because according to expert architects the dome is constructionally quite different from the stupas. Though the great protagonist Mr. E.B. Havell of the Hindu art and culture pleads that not only Indo-Muslim monuments were influenced by the stupas or bell-shaped drums of India but also the whole of Asia²⁶, yet we can confidently assert that the masonry dome which first

23 Kambo, vol. pp. 243-8; Abdul Hamid Lahori, *Badshah Nama*, vol. i. p. 149.

24 Gosset, Alphonse. *Les Coupole d'Orient et Occident*, Paris, 1889; Greswell, *Persian Dome before 1400*, Burlington Magazine 1915.

25 *La Geographie et Les Origines du Premier Art Roman* par J. Puig J. Cadafalch, Paris 1935, p. 252.

26 Havell, E.B. *Indian Architecture*, London, 1927, pp. 97, 100-2.

appeared in Syria gradually became a special and permanent feature of mausoleum construction among the Muslims who scientifically improved it by introducing several innovations in it. Similarly Mr. Havell also says «What the mihrab was to the Muslims, the lotus was to the Buddhists and Hindus»²⁷. Although centuries earlier than the Buddhists, the Egyptians used lotus in every detail of ornament of the largest as well as of the smallest monument²⁸. Therefore Havell's theory of Hindu influence on Muslim art cannot be substantiated.

The dome of the Taj, being different from others, is swelling in shape and double in construction, as that of the Gour-i-Amir or the mausoleum of Amir Timur at Samarqand. He himself on his return from Damascus in 1401, had built in his life time as the mausoleum to the memory of his beloved wife Bibi Khanam, in which he himself later on was buried²⁹.

Here we must emphasise the fact that the double dome comes not from any where else but from Muslim architecture as we quote here from Creswell, the greatest living authority on Muslim architecture. He says : «Is there, or was there any where in the Muslim world known to Timur a double dome with a swelling outline? Yes at one place and one only, and that at Damascus where stood the Great Umayyad Mosque built by Kalif Walid in 705»³⁰. The influence exerted by this Great Mosque has never been denied but it reaches much farther than generally recognised³¹.

In India the dome as a special feature of the Muslim monuments takes its appearance from the very beginning. Later on it gradually but continuously developed and evolved a distinct and definite characteristic of Muslim architecture all over India. But when we take the case of the bulbous welling and - double dome of the Taj, we find that the first double dome although not swelling in shape appears first in the Lodhi regime at Delhi in the Dome of Mian Shaikh Shihabu'b-Din Taj Khan Sultan Abu Saeed built in 1501³². After which besides the double dome it also takes

27 Ibid.

28 Foucher, A. *The Iconography of the Buddha's Nativity*, Arch. Indian Memoir No. 46, New Delhi, 1934.

29 *Les Mosques de Samarcande*, St. Petersburg, 1905.

30 Creswell, *Persian Dome*, Indian Antiquary, 1915.

31 Herzfeld, E. *Damascus: Studies in Architecture*, Ars Islamic vols. xiii-xiv, p. 118.

32 *Asarus-Sanadid* by Sir Sayyid Ahmad Khan, Cawnpur, 1904. pp. 40-44. Insc.

24. The text of the inscription on the monument bears the word - *Gumbad* which perhaps stands for the domed mausoleum.

up a swelling outline in the dome of Humayun at Delhi (1565). And both these special features in the Taj at Agra reach their culmination (fig. III). The contemporary historians call this bulbous dome of the Taj as the *Amrudi Gumbad* - pear shaped dome³³, which had never appeared before in India.

From the very beginning the dome or *qubbah* or *gumbad* among the Musulmans has been a characteristic of a tomb and wherever such tombs are found and they are in abundance in Islamic countries, these places were named *Qubbah* or *Qubab*³⁴. When the Muslim domination extended over an area wider than that of the Roman Empire and many nations embraced Islam whose architecture previously differed much from that of Rome and was in some cases even older, the Muslims employed Armenian masons in putting up their monuments. The adoption of a dome as a distinctive feature became common among the Arabs for their shrines and they showed in their construction the same judgement and skill as was shown by the Romans and Byzantines before them. But these were not the only dome builders on the earth; Strzygowsky, the protagonist of Iranian inspiration, argues that the Eastern dome originated in Asia minor or farther east, passed through Armenia to Byzantium, and thence to Balkans and Russia under the patronage of the Greek churches³⁵. Arthur Kingsley Porter has well remarked that the pendentives, the main feature of the dome construction were known in the East at a very early epoch and the *arch* among the Arabs was so much common as a special feature of construction that they used to say «An arch never sleeps»³⁶.

Similarly at Constantinople, the old capital of the Byzantine Empire, the dome with best specimens of pendentives appeared in the St. Sophia in the early days, although it has also witnessed later developments. Even before the conquest of Constantinople in 1453 at the hands of Sultan Fatih Muhammad II, almost all the empires including Muslim powers in different parts, had developed and established their own particular style of architecture. It was the period when the ancient remains of the Greeks, Romans, Egyptians, Byzantines and Iranians had begun to be counted as classics in art. Italy, however, was already enjoying a

33 Kambo, *opt. cit.*, vol. ii. 384-5.

34 Yaqt Hamawi, *Mujamu'l-Buldan*, vol. ii. p. 66, voll. ii. p. 23.

35 Porter, A. Kingsley. *Mediaeval Architecture*, New York, 1912, vol. i. p. 105.

36 *Ibid.*

brighter aspect of life which is aptly called the Renaissance. About the architecture of this period Symond says :-» The Tuscans never forgot the domes of their remote ancestors, the Romans adhered closely to Latin traditions, the Southerners were affected by Byzantine and Saracenic models which the Italians blended in their architecture³⁷. This movement gave Italy an immortal life in all aspects of Arts and Letters which no country or nation had dreamt of before. It also became the cause of attraction of a good many people from other parts of the world who sowed the seeds of revivals of learning in their own respective countries. As the Italian Renaissance was a movement for the attainment of self - councious freedom by the human spirit as manifested in the European races, as the causes and affects of this Italian revival brought about tremendous change all over Europe both in cultural aspects and political awakening. Accordingly France enjoyed the affect of this revival in the period of Louis XIV as Italy did during the Renaissance. Many French travellers went to India through Persia or by sea and after visiting the Taj they wrote what they had observed and compared it with their own architectural masterpieces both in Italy and France³⁸. But no one has mentioned that there was any European artist in India employed by the emperors.

As to the monumental function of the Taj Mahal, refrence may be made by way of comparison only of two such domed European monuments viz : the Pantheon of Rome and the Pantheon of Paris. The former is at present called St Maria Rotonda³⁹. It has a quassi - hemispherical roof and it was founded in A.D. 112 on a circular base. The experts have compared its dimensions with those of the *Gol Gumbad*- round dome of the mausoleum of Sultan Muhammad Adil Shah at Bijapur, Deccan, built in 1656, and proved that the latter is the largest dome in the world⁴⁰. In Europe domed monuments on a polygonal base are not many as we have plenty in the East. The cupola of Brunelleschi in Florence is a Romanesque building began in the end of the thirteentyh century. Can we see it in the 'Renaissanse' of the Pantheon in Rome? Note the differences, which are fundamentas. The cupola of the Pantheon is a hemispher.

37 Symond, Addington. *Renaissance in Italy*, New York Ed. 1935, vol. i. p. 609.

38 Chaghatai, M.A. *Is There European Influence in the Taj*, Islamic Culture, Hyderabad Dn. 1940.

39 Baedeker, E. *Central Italy and Rome*, 1912, p. 199.

40 Watts, Ed. *The Largest Dome in the World*, Statesman, Calcutta, 25th. Oct. 1932; Cousens, H. *Bijapur*, Poona, 1938, pp. 20-29.

set on a cylinder which can hardly be seen at all from outside. The cupola of Brunelleschi is an octagonal dome, built in two shells with a brick grate connecting them both. Outside it rises high, with pointed arches formed by moulded ribs. These pointed ribs, rising sharply up, we recognise at once as Gothic elements. The cupola itself raised on a sort of drum, was common enough in later Byzantine architecture and had already been imitated in St. Mark's of Venice. But the special type of construction which Brunelleschi used - the double shells and pointed ribs with brick grates was a feature in Muhammadan architecture at the beginning of the fourteenth century as may be seen in the tomb of Sultan Khuda Banda Oljaytu in Sultanya in Persia (1306)⁴¹. This mosque - mausoleum in Persia is one of the most outstanding and important domed tomb structures in the East on an octagonal base⁴². In India the first so far known octagonal based building is the tomb of Khan Jahan Tilangani, who was the prime Minister of Firoz Shah Tughluq built at Delhi in 1369 during the reign of Sultan Firoz Shah Tughluq⁴³. A minute study will reveal that the tomb of Tilangani is more or less an adaptation of Oljaytu's tomb at Sultanya. The ultimate source of this polygonal design is the Dome of the Rock of Jerusalem⁴⁴. But during the Mughal regime in India Humayun's tomb at Delhi and the Taj at Agra are built on a quasi - octagonal base which is described as the *Muthamman-i-Baghdadi* by the contemporary historians⁴⁵. It is very rare in the whole history of architecture. M. Durand, French author on architecture of the early last century has well arranged, as below, in his work, the *Recueil et Parrellel* all such domed monuments of both east and west on a comparative basis :- St. Sophia at Constantinople 7 th. century (fig. II).

St. Mark of Venice 977.

St. Maria of Florence 1425.

Taj Mahal of Agra- 1647.

St. Peter of Rome 1626 - 1661..

41 Art and Civilization - Essays: ed. by Marvin and Clutton-Brook, *The Art of the Renaissance* by H. Glueck, London 1928, pp. 174-82.

42 Saladin, H. Manuel d'Art Musulman, vol. i. p. 344; Creswell, *The Evolution of the Persian Dome*, Indian Antiquary, 1915.

43 *Tarikh-i-Firoz Shahi*, Afif, Calcutta, 1890, pp. 400-500; Percy Brown, *Indian Architecture*, Bombay, 1942, pp. 22, 31.

44 Quoted by Humphry Bullock - *Where the Tughluqs Prayed*, Statesman, Delhi, 10th. Sept. 1950.

45 Kambo, *opt. cit.*, vol. ii. pp. 380-85.

Dome of Invalid at Paris 17 th, cent.

Pantheon of Paris 1736.

All these above noted domed European monuments contrary to the East have almost one prototype in the St. Mark of Venice, because they resemble each other in appearance and fundamentals⁴⁶.

Fergusson says :- «The one thing I was least prepared for was the extreme beauty of the interior of the building, I remember perfectly the effect of the Taj Mahal and other great imperial tombs at Agra and Delhi. But so far as my knowledge extends, the Dome of the Rock surpasses them all. There is an elegance of proportion -which does not exist in any other building I am acquaint with»⁴⁷. After quoting this opinion of a great authority, we find that both in Europe and Asia almost all the above noted monuments seem to have been inspired by the Dome of the Rock at Jerusalem.

Once in Paris in the course of my studies I placed the plan of the Taj before Prof. Paul Bigot at my *alma metre* L'Ecole Nationale Superior des Beaux Arts, Paris, to seek his advice on comparative lines he, being inspired by his own studies of the European monuments, immediately pointed out that it was exactly similar to the Dome des Invalides, Paris, the present mausoleum of Napoleon, as noted above. A careful study will disclose that this tomb of Paris has its prototype in the St. Maria de Carrignana Eglise de L'Assomption, Genes, built in 1552, which has a similar plan and besides, it has minaret-like towers exactly above the four corners of the main building⁴⁸. Quite contrary to all such corner towers or cupolas both in the East and West the cylindrical, round and tapering minarets on the four corners of the terrace of the Taj at Agra are quite unique of their type. adoption of such minarets by the Muslims in their mausoleums and mosques is an independent feature of their own exclusively, affording beauty, symetry and harmony to yhe monuments, although one minaret as a *madhana*, attached to the mosques as a necessity, is quite sufficient such as the Qutb minar at the Quwwatu'l-Islam mosque at Delhi.

46 Durand, J.N.L. Recueil et Parallele des Edifuces de tout Gense Ancient et Modern, Paris, 1817, plates. 9, 11, 12.

47 Lewis, T. Hatyer. *The Holy Places of Jerusalem*, London, 1888, pp. 26-27, quoted.

48 Gramort, Georges. *L'Architecture de la Renaissance en Italie* Paris, 1931, p. 168, fig. 80.

The Crypt is great architectural feature of the Taj and it is worth our while to trace its origin, while its particular function concerns a mausoleum⁴⁹. In churches it was employed for the galleries of a catacomb or for the catacomb itself but later on it became a sub - terranean chapel known as a 'Confession' erected round the tomb of a martyr, or the place of martyrdom. The most important crypt being perhaps in Italy is that of the St. Mark at Venice. Thus it became a necessary part of tombs and churches⁵⁰. The Musulmans also began to use it as the actual grave chamber for the mausoleum and various examples of this can be seen in Turkey and other countries, but the best specimen is at Samarqand in the mosque - mausoleum of Bibi Khanam, known as the Gour-i-Amir, (fig. IV) because Amir Timur himself later on was buried therein⁵¹. It subsequently became a special feature of the Mughal mausoleums for the princesses who generally observe *parda*; perhaps with the idea to keep even their dead bodies in seclusion, so this underground chamber was adopted for their actual graves. They called it *sardana*. There are various mausoleums of male personages of the Mughals which are without it while those of the princesses are with a crypt at chief cities of the Mughals such as Lahore, Agra and Delhi⁵². Moreover, it cannot be denied that apart from this consideration in some places Muslim tombs can be seen bearing crypts where particularly keeping in view the condition of the soil or site on which they are built the question of masonary concerns. There is a *sardana* too in the Gol Gumbad at Bijapur which contains the graves of the wives and daughter of Sultan Muhammad Adil Shah besides his own grave⁵³.

49 Encyclopaedia Brittanica, London, Article - *Crypt*.

50 Ibid.

51 *Les Mosques de Samarcande opt. cit.*

52 Some of the prominent Mughal Mausoleums.

female with crypt :

Male without crypt :

	A H		A H
Lahore:—			
The so - called Anarakali	1024	Shah Abu'l-Maali	1024
Ali Mardan Khan's mother	1054	Jahangir	1037
Nur Jahan	1055	Asaf Khan	1051
Agra:—			
Abdurrahim Khan Khanan's wife	1027	Humayun	963
Delhi:—			
Qandhari Begam	1027	Akbar	1014
Tāj Mahāl	1040	'Ttimadu' d-Dowla	1031

53 Watts, *opt. cit. The largest Dome in the World.*

The use of emblems or symbols on the points of the spires or cupolas, was first introduced by Christians in their churches in the form of a cross. The Turks turned it into a crescent in the spires of domes of their religious monuments⁵⁴. After which a crescent began to be popular among the Musulmans. But the golden spire of the dome of the Taj is not without any interest, because just before it terminates into a point, it holds a crescent instead on the terminating point, as we find in India on the spires of the domes of the Adil Shahi dynasty in Bijapur in the Deccan, which are more round than that of the Taj. Otherwise before it the spires of the Muslim domes in India were very ordinary ones. The question arises, who first introduced this crescent in the spires of the domes. The answer is very simple - Turkish people - because the crescent was first adopted by the Turks as their national symbol. We know that the Adil Shahi Sultans of Bijapur were of Turkish origin, therefore we can infer that their domes may be an indication of their nationality. Similarly one is also encouraged to infer that the crescent of the Taj may be an indication either of some Turkish element in its construction or as a matter of beauty or of some relations of the Mughals with the Turks. However, this crescent is a Turkish symbol.

Almost all the varieties of architectural decoration and embellishments enrich and adorn the Taj; for instance, the mural decoration, decoration in relief either on marble or red stone and *pietra dura* decoration. But the last dominates all both in quantity and variety by its varied precious stones being inlaid on the white marble all over the monument, which the visitor immediately observes on the spandrels of the arches of the facades of the Taj and its main entrance (fig. V). Since long before, the Persians had this particular variety of decoration, and they used to call it *parchin kari* which is identical to *pietra dura*, a term of the Italian origin of the sixteenth century⁵⁵. In India such variety of decoration never existed before the occupation of the Musulmans. It was only due to them who introduced it first in the Juma Masjid at Ahmadabad (1410), and then at Mandu in the mausoleum of Hoshang Ghorī (1435). But during the Mughal regime under Shahjahan it reached its climax particularly at the Taj Mahal Agra and his other monuments at Delhi, Lahore and Agra. Some one has been inspired to remark that the *pietra dura* of the Taj is of the Italian origin which is an absolutely

54 Celâl Esat, *opt. cit.*, Fig. 239.

55 Kambo, *opt. cit.*, vol. ii. 380-85. and Chaghatai, M.A. *Pietra Dura Decoration of Taj*, Islamic Culture, Hyderabad Dn. Oct. 1941.

wrong attribution. Because we do not find any existence of foreign artist who would have been invited here for this particular object or he would have been credited with the honour of its introduction. The orientation of the Taj's *pietra dura* decorative motifs, which may also be called conventional arabesques, is a sufficient proof that it is an original Persian work introduced here by the Persians. This mode of decoration is quite distinct from the mosaics which are mostly found in Constantinople, Syria, and Jerusalem. Gustav Le Bon has remarked that the Arabs use two sorts of mosaics which generally cover, floors, walls, and mihrabs⁵⁶. They are certainly Byzantine in character. But on the other hand we should not hesitate to say that in all flat ornament used in the decoration of buildings of the 13th. and 14th. centuries in Italy, either in painting, mosaics or in the laid work, Byzantine, Saracenic, or Persian influence may be noticed. Because the wall decoration of the Italian houses will present that the Saracenic influences are not absent⁵⁷.

Consequently after placing the Taj among the well-known monuments of various countries, we find that its special architectural features, embodied in its double bulbous dome, *pietra dura* decoration to break away the monotony of the allround white marble, the cylindrical round minarets, underground sepulchral vault and four cupolas round the central dome, collectively give it a distinction in world architecture and thus it constitutes a class by itself. Points of resemblance may be found here and there between the Taj and the best specimens of world architecture but this circumstance does not effect its independence for which it is regarded as unique and simply marvellous.

To sum up in the words of Oscar Wild:—

«*Artist is the creator of beautiful things.*

To reveal Art and conceal the artist is the aim of Art»

56 Le Bon, Gustav. *Le Civilization des Arabes*, Paris 1884, pp. 559-60.

57 Ward, James. *Colour Decoration of Architecture*, London, 1913, pp. 60-66.

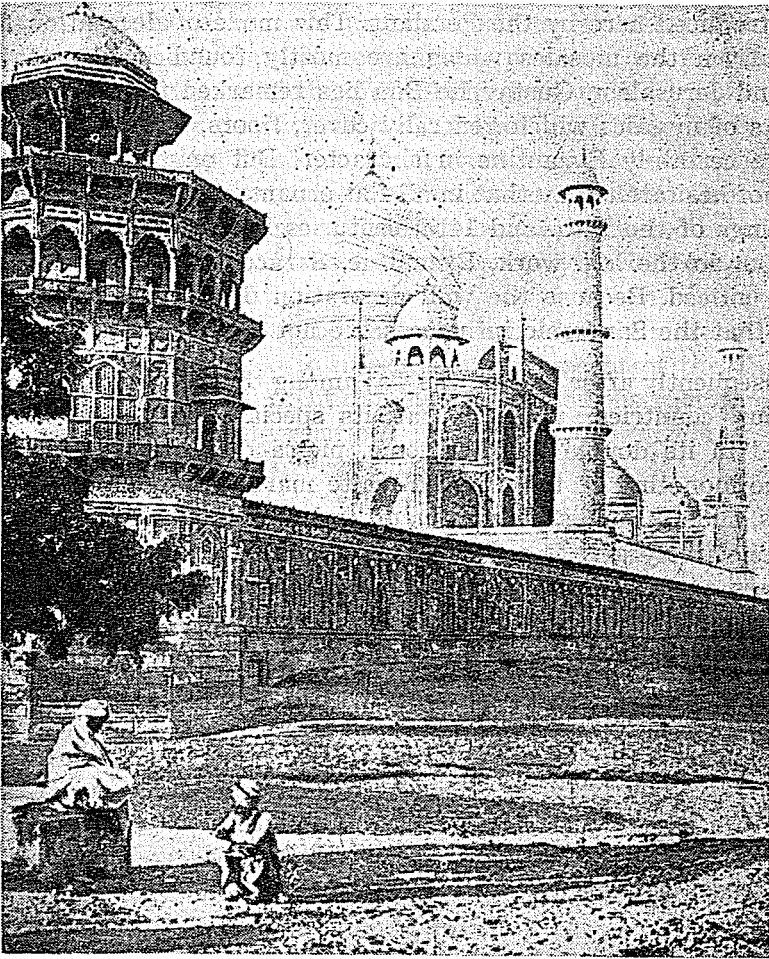


Figure I — The Taj with one corner Tower from the Jamna Sicha.

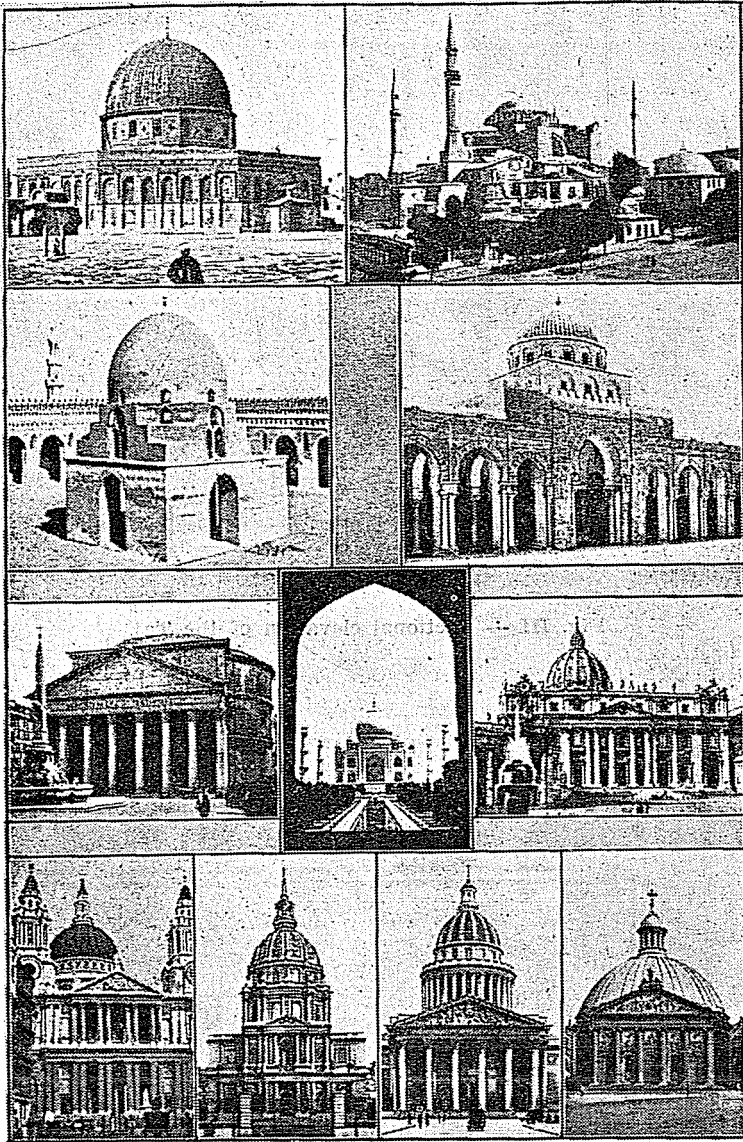


Fig. II (1-11) — Taj's Place in World Architecture.

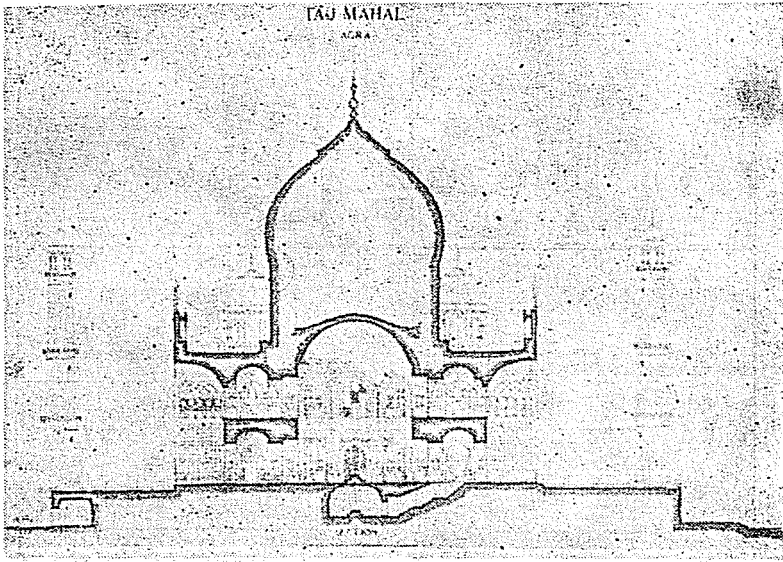


Fig. III — Sectional elevation of the Taj.

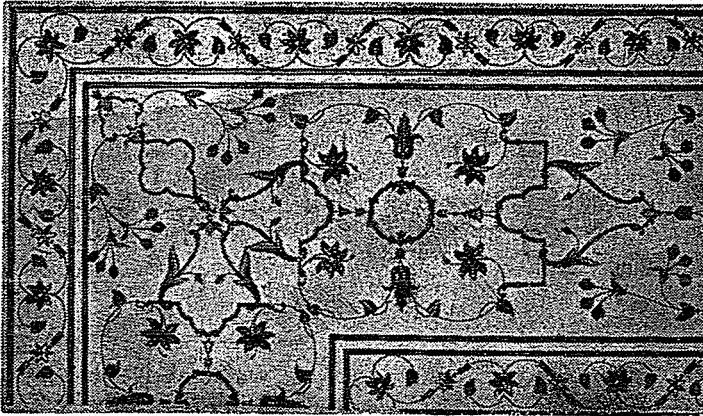
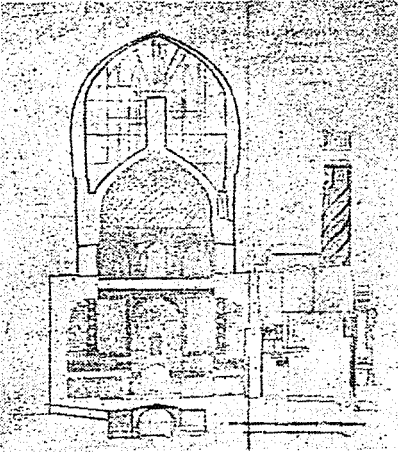
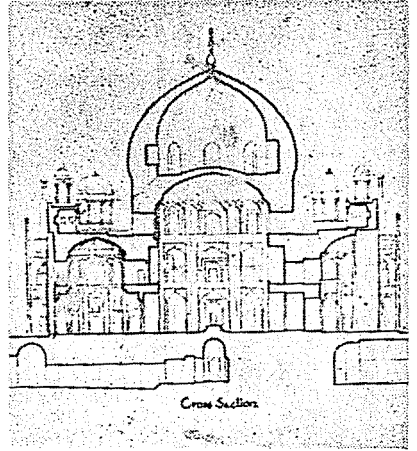


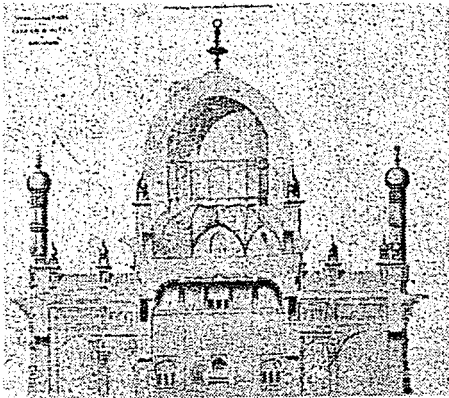
Fig. V — Pietra Dura decoration: The Sarcophagus of Mumtaz.



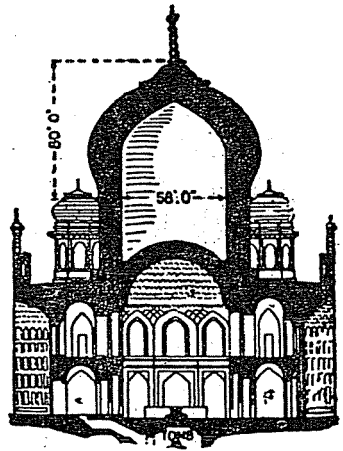
Section of the Tomb of Amir Timur at Samargand.



Section of the Tomb of Humayun at Delhi.



Section of the Tomb of Ibrahim Adil Shah at Bijapur.



Section of the Taj.

Figure IV — Sectional elevations of different tombs.