

# **HISTORY OF ARCHITECTURE & CULTURE –IV**

## **LECTURE – I UNIT – IV**

### **MUGHAL ARCHITECTURE**

#### **Mughal Empire 1**

If you look at the timeline of our history of Indian architecture this Mughal dynasty comes almost at the end of the medieval India period, we are in the end of the medieval India period and almost before the time in which British came to India, so this was the time when the Mughal Empire flourished in India. If you look at the map of the extent of the Mughal Empire you will know how powerful this Empire was because it almost covered the entire country except few parts of South India. This was one of the most powerful empires in India and it rule for a very long time for over a century, so these kings were some of the important kings of the Mughal Empire Babur, Humayun, Akbar, Jahangir, Shahjahan and Aurangzeb. Why we need to understand the political history of the Mughal Empire is that these various rulers had their own interest in the field of art, architecture, music, literature etc so depending on that the architecture of Mughal Empire also changed, their ideologies and principal started reflecting in the architecture and various structures that were constructed during this period.

Let us see the various rulers in brief and the contributions done by them. Babur was the first Mughal king who ruled the Mughal Empire, it was in 1526 that the Mughal dynasty actually begins with Babur as emperor and he erected almost 3 Mosque the second one was the one that was built in Ayodhya which was later demolished. His major contributions were only building Mosque and he started building exquisite gardens in every palace and province that was one of the

important contributions of Babur. Next came Humayun one of the important contribution of Humayun was the Humayun tomb itself which was built for him but apart from that there was no other monumental building that was built during Humayun period but he brought various skilled artisans from Persia who started working in India and for the first time he employed the uses of sand stone, marble inlay together to create new style of expression. After Humayun the great Mughal emperor Jalaluddin Akbar came, he was not only important in terms of political history but also in terms of architecture. Akbar was a king who had a very broad scope in terms of secularism which also reflected in his architectural interest. He was a king who was very much interested in building new monuments and expressing his principles in those monuments. For example he was a very secular king and he always supported the concept of religious harmony, for this purpose Akbar actually started religion called Din-i-Ilahi which combined the principal of various religions like Buddhism, Hinduism and Islam and what he was trying to say was all religions were trying to convey the same principles. He created a common religion called Din-i-Ilahi which combine these principles and he was projecting that God was one, however this system existed only for a short period of time and it ultimately did not pick up, why this is important is this ideology of Akbar also reflected in the kind of buildings that were constructed during this period. He was opened to borrowing elements from various cultures like he borrowed elements from Hindu architecture and translated into the building, what we got was a beautiful culmination of both Hindu architecture and Islamic architecture.

Akbar built various tombs and he also built a city called the Fatehpur Sikri, it was one of the important contributions of Akbar and one such movement that took

place during this period was the Sufi movement. We have already learnt about the Bhakti movement which happened in South India during the 10 century so similarly during this point in medieval India there was a movement that took place in Islam called the Sufi movement. Sufi movement was again similar to Bhakti movement they tried to unite everybody in terms of brotherhood they propagated piece brotherhood etc, so they were trying to bring about religious harmony in that period. The most important contribution of this movement is it helped to blunt the edges of Hindu Muslim prejudices, if there was any disparity between these two communities it was trying to bring together these two religious communities and it was during this time that the new language of Urdu the mixture of Persian and Hindi was born.

## **Mughal Empire 2**

After Akbar came Jahangir he built the Tomb of Jahangir which was his tomb and during those times the rulers before they die they create tombs for themselves, so that they had to be buried after the death. Similarly Jahangir built his own tomb with a beautiful garden and minarets which you can see in the picture. He also built this structure which is a square water tank with an octagonal pavilion, here you can see in the image he built this for his one of his pet deer's apart from this he built various gardens, pleasure gardens and pavilions. After him came Shajahan the period of his reign was considered as golden age of Mughal architecture.

Shahjahan was very much interested in architecture and construction of new buildings, fort, palace, monuments etc. During his period a large number of construction activities was going on and there were buildings all over the place

and new experiments were being made in architecture in terms of material, construction, technology etc. He was one of the important contributors to Mughal architecture. He built various structures like the Moti Masjid Agra, the Red Fort, the Jama Masjid in Delhi and various Mosques and one of his most important contributions which you can see in the picture is the Taj Mahal. After that was Aurangzeb he also built various Mosques, forts like Moti Masjid Biwi Ka Maqbara. Bibi Ka Maqbara in Aurangabad this replica of Taj Mahal you can see all the proportion may not be the same but it was trying to replicate what Shahjahan did in Agra and he also built few forts in Delhi.

We saw in brief about the various contributions of these Mughal kings now we will see few examples the first example is one of the beautiful structure the Humayun tomb you can see in the picture. This was built by Humayun wife after his death. If you see the planning this was one of the important concept that was invented by the Mughal emperors this gardens system is called the Char-bagh. Char-bagh in Hindi actually means four gardens, the entire garden area was divided in grids of four squares. If you can see the plan you see the grids of 4 squares are being formed here like this and tomb structure is placed on the centre of the garden, so along these grids you have water channels that flows through, again in the intersection of water channel you have smaller squares of water. This concept of Char-bagh was borrowed from Persia, since Persia was a very lush green landscape kind of place they wanted to replicate the same thing so they imitated the same garden system here and invented the Char-bagh system.

If you see the structure, it is raised on a very high plinth it is almost 21 feet height and it surrounded by archways on all four sides. Again the material used here is

red sandstone with inlay works done with white marble which is a very common feature. Then if you look at the Dome the central dome which is very huge the top of the dome is 140 feet high from the ground level this dome is constructed by double layers so the outer layer supports the white marble that is layed on it and the inner one defines the interior volume which you can see in the image. Again the dome is surrounded by small domes called chathris so that it is very proportionate to the huge dome. These are the various gateways that are located along the rectangular enclosure we saw the site of how the tomb was located in the center of the garden and around the garden you had this huge Gateway. This Gateway was almost 15 meters in height and within it had a central octagonal hall and surrounded by rooms. Each Gateway was built of different styles you can see as one approaches the Gateway he is able to see the dome structure of the tomb. Another unique aspect of building this water channel is that these water channels that intersect and form the shapes not only used for decoration but also act as a reflective pool. The intersecting squares were very carefully placed and planned in such a way that when you see from this point you actually see the reflection of the dome in that particular pool, this shows how technically sound these people were. Three kinds of materials were used the red sand stone for the main structure white marble and Quartzite. These are the other images of water channels you can see how the reflection plays an important aspect of the design. These are images of the interior tomb.

## **Taj Mahal**

Taj Mahal is located in Agra that was built by Shahjahan for his wife, in terms of architecture if you see strikingly the unique feature that you see in it is entirely built off white marble and the Dome is a very unique feature which stands out. If you see the plan of Taj Mahal what you saw in Humayun's tomb was that the Tomb was located in the center of the Char-bagh but here the Tomb was actually located on the other end it overlooks the garden. Similarly this also has the Char-bagh system you can see the garden being divided into grids of 4 squares and you have water channels which run along center with an intersecting square and the Yamuna river flows behind the tomb here on this side, you have a Mosque over here and this is the main entrance gateway through which you approach the building and on either side of this you have servants quarters and the royal other tombs located here. It is divided into 5 sections the riverfront terrace containing the Mosque, the Char-Bagh containing the pavilions and the front portion containing the accommodation for the servants etc and it also contains the commercial spaces initially like markets, bazaar etc and the moonlight garden. As you approach from the Gateway towards the dome the level actually decreases towards the river. In terms of planning it is basically a square plan and with the edges Chamfered so it is a 55 meters side square and it has minarets on all four sides. In terms of elevation if you see the central archway is highlighted it is called as pishtaq. Pishtaq is nothing but an archway which is vaulted so inside you have vaulted ceiling and this is a huge pishtaq which highlights the entrance on either side you have additional smaller pishtaq one above the other so all along the surface marble inlay work is done calligraphy and precious gems and stones are inlaid in it. Again the shape of the central dome is huge and it is supported by smaller chatri kind of domes you can see the image of chatri here. A very unique

feature of this minaret is that as one approaches the building the minaret seems to be straight in nature but actually the minarets were designed to be inclined outwards, so that if one stands from the front and looks at the minarets in perspective it looks straight but it was also meant for one more reason that in case of an earthquake the minaret will not fall inwards towards the Taj Mahal the tomb it will just fall outwards and crash so this was one of the unique features of this minaret and each minaret is divided into 3 parts with balcony rings it is almost 40 meters tall and again on top of the minaret you have the dome chattri kind of feature. On top of the main dome you have this finial again which is a culmination of Islamic and Hindu features. This is the interior of the Taj Mahal which contains the cenotaphs you can see how precious gems and stones are being inlaid on the marble for the tomb. This is another view of the garden this is the water channel which also accesses the reflective pool you can see how the reflection falls on the pool. This is the main entrance Gateway the Dome itself is built entirely of white Marbles the entrance gateway was built with red sandstone with highlighting bands of white marble and also other precious stones. These are some of the images of details. This is the view of the floral motif works and the gem works that are done on the marble.

Now we saw two tomb architectures. Mughals were also famous for building fortified cities during that period so we will see two examples of such fortified cities the first one is the Shahjahanabad built in Delhi which is famously known as the Red Fort. The Red Fort actually got its name because of the use of red sandstone the wall is almost 2.5 kilometres long and the height varies from 60 Feet to 110 feet. If you see the plan it is built on square grids and it has various structures within the fortified city so if you look at the legend this is the first

structure that comes into place this is called the nakar khana or the music hall and then this is the Diwan-i-aam. Diwan-i-aam was a place where the king used to meet the public audiences so this is where people come and express the complaints or such to the king. This is a rang mahal it is a painted hall and this is a Diwani Khas this is also a place but this is for the private audiences probably were the king used to meet the ministers and other people. This the Moti Masjid which is located within the complex and then you have other structures like the bards and the women resting place on quarters on this side etc and these are the gateways that are located. This is the image of the nakar khana build entirely of red sandstone and it is three storeyed structures, it has carved archways you can see the pattern.

This is the Diwan-I-Aam which is a Pavilion were people use to come and meet the king. Again it is ornamented with inlayed marble work; this is another view of the Diwan-I-Aam. This is the women's resting pavilions called the Zenana or Mumtaz Mahal which is built of white marble. Then there are other structures like they are khas mahals which has different chambers, bedrooms, prayer room etc and other Towers and Nahr-I-Behisht's private apartments so these are other smaller structure that are present within the complex. This is the Diwan-I-Khas where the king meets his ministers it's a hall for private audience so it is more elaborate and decorated, you can see the painted wooden ceiling silver in layed with gold it has a marble platform probably for the king to sit, so it has some Turkish influences with Mughal ornamentation. This is the Mosque the moti masjid which is present on the western side very small structure with three domes built of white marble.



Similar to Shahjahanabad during the period of Akbar another city was built the same pattern called the Fatehpur Sikri in Agra, if you see the components of this city also same structure like Diwan-I-Aam, Diwan-I-Khas, Jamai Masjid it's another Mosque Sheikh salim tomb he was a Muslims sufi saint then you had Panch mahal was another additional component and palace of the queen Jodha Bai. This is a detailed view Diwan-I-Aam, Diwan-I-Khas, Panch mahal, Jamai Masjid, Tomb of Sheikh salim chisti, Buland Darwaza, Anup Talao, Astrologer seat and Jodha Bai palace.

This is the Panch Mahal this is a five storied structure Panch mahal means of five storied structure. This was meant like a pavilion where the women, the Queens and the Princess use to gather so it had different levels which tapered on the top goes from bigger or smaller. This was the place where breeze had a good flow, so they had a huge screen of jalli walls with stone jali where the women could stand and then enjoy the breeze; they had balcony kind of structures at each level.

This is the Diwan-I-Aam where the hall of public audiences was present; it is a very small rectangular structure which has a courtyard in between. This is Diwan-I-Khas where the King met the Ministers. This an interesting structure where the entire structure was supported in the interior by a single column and within very elaborate capital and it had four bridges which ran on top you can see in the interior image, so these connected to the upper level balcony from which you can overlook the interior. You can see Akbar ideologies being reflected these brackets and the capital of the columns looks very much inspired from Hindu temple architecture so Akbar was open to all ideas. His secularism and open mindedness in religion was being reflected in the architecture as well.

This structure is called the Anup Talao it is a square pool with the central platform so you had bridge on all four sides approaching the platform so where this used to be a place the people would come and discuss.

This the mosque present in inside the Fatehpur Sikri Complex, this is the Jami Masjid the exterior is very plain and modest but interiors is richly decorated with geometrical patterns and it has a very spacious courtyard inside.

This is the Tomb of Salim Chisti, this tomb stands out in the complex because it is built entirely of white marble. He was one of the most important Muslim saints who played a major role in the Sufi movement. It is a very unique feature and has a very different brackets system used for the roof support which has a serpentine kind of shape.

This is the Buland Darwaza which marks the victory of Akbar's conquest of Gujarat it is a huge gateway, it is almost 176 feet in height and the central arc has a dome valeted arch inside as you can see in the image.

This is the palace which was built for the queen Jodha Bai, since Jodha Bai was Hindu that can be seen a lot of Hindu architecture influences in this particular structure so it was basically a structure which was built with the courtyard and groom surrounding it.

Other small structures like the Astrologer's seat where there are small platforms were the royal astrologer would sit and give predictions are other structures within the complex. These were some of the important structures that were built during the Mughal Empire.

However what happened was after the death of Aurangzeb the Mughal Empire started declining slowly. Aurangzeb had three sons who started ranging war against each other so they did not last for a long time, each person ruled but only for a very short period of time, also the frequency of the war lead to a financial deficit in the empire. Slowly there was no unity among the emperor's within the Mughal dynasty, this became easy for foreign rulers to attack the emperor and slowly the Mughal Empire started declining and after few years the British came into the picture.