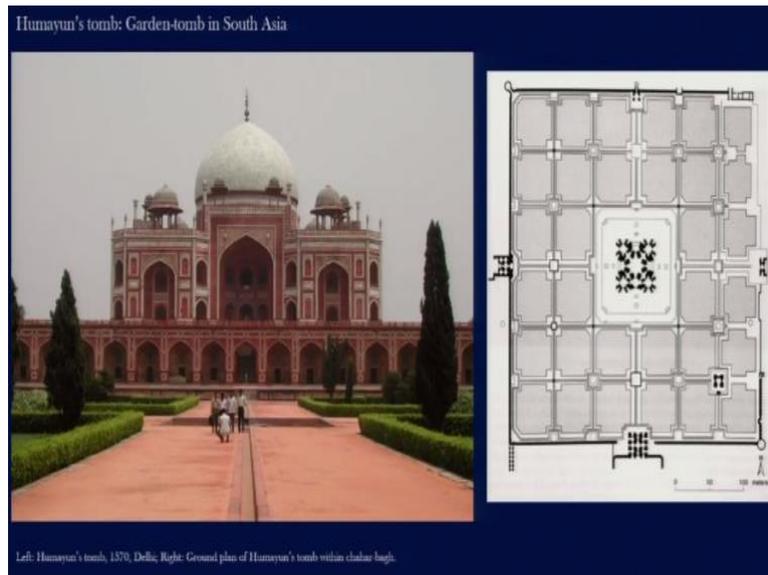


**Indian Art: Materials, Techniques and Artistic Practices**  
**Prof. Rajarshi Sengupta**  
**Department of Humanities and Social Sciences**  
**Indian Institute of Technology – Kanpur**

**Lecture – 28**  
**Idea of Garden**

(Refer Slide Time: 00:31)



Hello everyone. We are continuing on our lecture on garden and we have been looking into the idea of garden mostly in the context of Mughal architecture. So, today we will be getting more into the tomb garden. And that is the first garden tomb that we find in South Asia that is Humayun's tomb. So, Humayun's tomb is a particular structure that we see that houses the tomb of emperor Humayun and it was built by emperor Akbar in the 16th century.

So, Humayun's tomb was completed in around 1570 and we see that this is the first kind of tomb, which was built in the centre of this chaharbagh garden. So, as I have already shown you that there was this idea of bringing the Hasht-behest plan in Persia and then also how this Hasht-behest plan and the chaharbagh plan those were brought together. So, the example we have looked into from Isfahan that was from 17th century, however, that idea already was established in the Persian architecture for centuries.

So, what happened in the Humayun's tomb, we find that this is also perhaps the first and a major architectural project that Akbar had undertaken. And if we see on the right side of the screen, in this structure we have this squarish garden and the garden is also something that is

walled. And then there are those gateways, the gateways those allow people into the garden. So, all those trades that are already established for making a chaharbagh garden planning which was there in Agra that was now being emphasized even more.

Now, we do not have a pathway here or not really a major pathway like this kind of entrances that we have in these sides of this tomb complex. And why is that, that is because this end of this particular tomb complex there flowed the river Yamuna. So, the river Yamuna which flows by the city of Agra that is also there in the city of Delhi and that is how we find that most of the important and relevant Mughal monuments we find them to be situated by the river for its high relevance in the Mughal material culture and in the everyday lives as well.

So, what we have here there is this particular chaharbagh planning in which there are those water channels, the symbolic rivers, they are there and they flow to the centre of this garden. And then this chaharbagh or each of these parts are then further divided into like smaller square units. So that is how we find that it is not just like one chaharbagh planning that is there, but it is also the complexity that had been created within this garden structure.

Now, this idea of replication and multiplicity, we have already discussed when we were talking about the temples, but it is also something of high relevance we find them in the Islamic geometric motifs as well as in the Islamic visual as well as material forms. So, why this also comes important is because there had been a longstanding debate in Islam that whether to represent something that is figurative.

So, in terms of that we find that there have been views on the representation of the figurative motifs are barred or not allowed in Islam and there is a reason there are high relevance of geometry. However, we see that this view is also not absolutely correct because we already have the Persian miniatures, we also have the Mughal miniatures in which the images of the human beings are shown with great details.

So that is also something for us to think about that it is not just the geometry and the figurative expressions, but there more things to know about, and that is for a geometric motif, which does not have an individualistic edge to it. We do see that how a geometric motif when it replicates, it has that capacity to go towards this infinity, something that we have also discussed how there are those architectural motifs or the motifs which are used in the religious structures.

And when they replicate themselves, and then there are infinite possibilities of them being replicated. And that is something that also represent the complexity of the universe that is also something that also address the complexity of human lives and then all the minute aspects of the universe which are created by the supreme god in this context that will be Allah. So, that is the reason we find why the importance of these units which can be replicated.

And which can make this piece into this much more in a complex, almost like a miniature version of the complexity of the universe is something that is practiced in this garden form as well. And we should not also forget that how this garden is also something that is integrally related to the idea of paradise in Islam. So that is the reason we find all these ideas are coming together, the complexity of the universe, at the same time the idea of the paradise, all of them they come together into this garden planning.

Now, apart from the garden planning and then these symbolic streams that we have here and these water channels which were created for recreating this chaharbagh plan, they all direct towards this central complex which is square in its ground plan and something that is situated on a high platform. So, the relevance of high platform we have already discussed in the Buddhist, in the Jain as well as in the Hindu context.

And for the tombs being situated on a high platform not only just relate to its relevance as in a place which is reserved for these revered personalities, but it is also something that we find that in a tomb complex in the Mughal tombs or also in the other Islamic tombs, in many of those tombs, we have this one particular site to mark the grave on the ground level, and in the underground level or in the basement, we have the actual grave.

So, for that reason, always there is a need for having this two storeyed planning on, for example if the people in Humayun tomb, people climb up the stairs and then they walk around in this plain on the platform. On this platform inside of this tomb complex, there is the grave of Humayun we find, but that is not the actual grave, that is only the symbolic grave which marks the space where human's body actually rests and that place will be there in the basement.

So, that is the reason there is a need for these two storied buildings in these Islamic tombs. So, in one hand, it also gives priority or it also shows the reverence for the departed soul, but also

at the same time it serves this twofold function for having this one symbolic grave and one actual grave in the same complex. So, with this we also find that this entire structure is then situated on this high platform and if we look into the planning of it, then we know that here is a clear example of the Hasht-behest plan.

So, at the centre, there is this one octagonal like unit and alongside there are those four units here which are which all are identical and then there are those other units. So, altogether there are those eight units around the central one, so that is how this Hasht-behest plan is created or this plan of the eight heavens is created. So, this plan as we see all these wings which sort of come out of this squarish structure they are here.

So, these are the wings that we find this are sort of projected out of the central tomb structure. And there are those four wings on the four sides and in the central part, there is this one unit or this central room where the grave of Humayun or the symbolic grave of Humayun is kept. If we see some of the architectural motifs that we have already started looking into there is this high arched gateway or iwan which we have already looked into in Fatehpur Sikri and then there are also these gateways slightly lesser in size.

But they also are replication of the central gateway or the central iwan that we have. There are small minarets in the corner that we have here and then also there are this very important these chhatri structures those are also there on the top of each of these projections or the wings. At the centre, we have this high imposing dome that we have here which also came to be of high relevance in many tomb structures in Islam.

Now, talking about the dome, what we find that this particular tomb structure is also covered. And then there are debates around erecting a tomb in Islam that if whether the tomb should be something that needs to be humble or a tomb should be a place which shows the structure of royalty because in some belief system we find it within Islam that tomb needs to be something which is greeted by air, with rain, with sunlight and that is the reason we also have open air tombs like the humble ones.

But for the royalty or for the important people of the state and in the state politics as well as in religion, we find that there are these covered tombs which almost become a space of reverence for these departed souls. So, there have been this debate about whether to make these tombs

grand or there needs to be as humble tombs. So, of course for the economic and political power, we do not really see the Mughal emperors they had their tombs to be really humble except for Aurangzeb whose tomb is really humbled as compared to all his predecessors.

**(Refer Slide Time: 12:02)**



Now, these are some of the shots of the interior that we have hear from Humayun's tomb and Humayun's tomb we have this central space which is octagonal in its ground plan, something that is also there in this Hasht-behest plan that we have here. So, this is something that we find this octagonal ground plan is there that is very evident in the interior of the Humayun's tomb.

Now, this octagonal plan has also much relevance in the Islamic belief because it has been believed that the seat of the God or Allah is also octagonal and also this fabled throne of King Solomon had also been considered to be this octagonal and that is the reason this octagonal shape we find to be being replicated in many architectural forms, for example within the tomb structures, of course within the Hasht-behest plan.

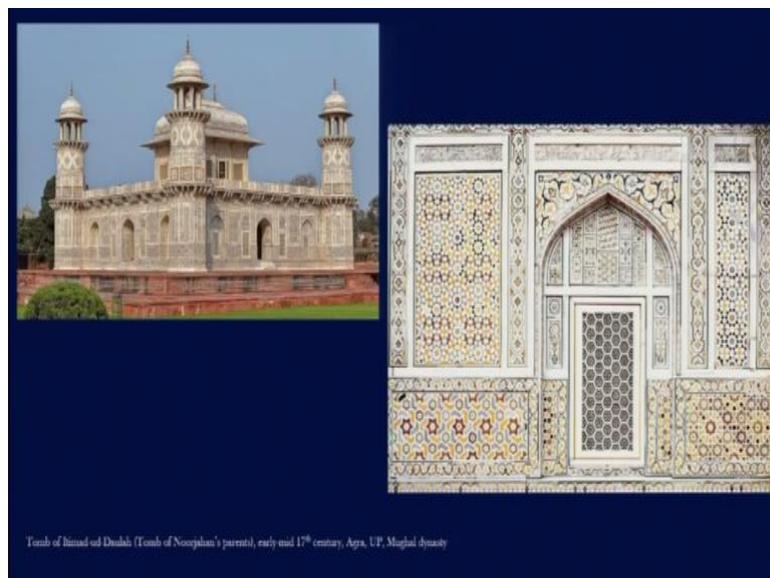
Also even later on when we see some of the fabled thrones, for example the peacock throne and so on of Shah Jahan, even there we find this octagonal plan has been carried out. Now, apart from this octagonal plan, the units and the use of these red and the yellow and white stones like the white marble and red and yellow sandstone, there is also another feature of this tomb complex which is of importance.

And that is here we find on the left side of the image as we can see that the dome of this Humayun's tomb, really this high imposing dome, this is actually a double dome. So, what is

a double dome? So, double dome is something in which we have one dome here and then on the top of that, that also supports the outer dome on the top of it and that is how the outer dome is supported by this structure which lies beneath like this one.

And so there is a possibility to have these imposing high domes which would not have been possible otherwise. So that is a reason what we have here in many of these imposing like really monumental tombs structures in the Mughal context we find them to utilize this double dome structure which is highly stable and they also give monumentality to this tomb and other structures.

**(Refer Slide Time: 14:45)**



So, from there we also see that there are some of the other monuments and the tomb structures that came into being. And from there, if we see that the Humayun's tomb is this tomb complex in which in the centre of chaharbagh this tomb complex was situated. Then we also say there are some of the other tombs which were built in the later times, for example in the 17th century and also in the later times.

So, they were situated, they were sort of pushed further to the river. So, one of the examples of that will be the tomb of Itmad-ud-Daulah who was the father of Noorjahan. So, actually even though we call this tomb as it Itmad-ud-Daulah's tomb, but here the graves of both Noorjahan's parents are there. So, after Akbar we find that during the rule of Jehangir, Noorjahan or Mehrunnisa came into prominence and she was one of the most celebrated Mughal women.

So, her parents were buried in Agra and again in one of those riverfront gardens. And in this one, we find that in this particular tomb complex which is modest in size, however, this is also tomb which was started being built around 1630s, which was some 60-70 years later from when Humayun's tomb in Delhi was built. But here we find there was a complete shift in material and from the use of this red and yellowish sandstone and selected use of marble.

Here we find that the sandstone was used for making this high platform and then the entire structure was made of marble. So, in this one what we have and here on the right side we have detail of the stone complex in which we find that this is perhaps the first Mughal monument or like the first Mughal tomb, which was built out of complete marble. And within the marble walls, we have this very intricate work that is called parchinkari or the stone inlay work.

And in stone inlay work we find that different shapes of the stones were carved and then they were inlaid on to this marble surface and that is how this incredible amount of complexity was materialized on to these walls and on to the stone surfaces. And so in one hand, this is the tomb structure that we have here. So, the minarets in the Humayun's tomb as we have seen those were almost like those very narrow, thin, symbolic minarets.

They have become much more wider and really bulky in the tomb of Imad-ud-Daulah where we have this four really imposing minarets on the four corners of this tomb complex. And then at the centre, instead of a dome we have this tiered pavilion on the top of it, so which is also a difference from Humayun's tomb and as I have already said this is also situated within a garden and right beside the river Yamuna in the vicinity of Agra.

Now, the other important part of this tomb complex what we find there is that already from the Humayun's tomb and in Fatehpur Sikri and in the other Mughal palaces as well as in the tombs we have use of this incredible jali work. Jali or perforation that we have here so that is also something that is a characteristic feature of the Mughal stonework. So, here in one hand, we have this kind of work when we see the inlay work has been carried out with utmost care and importance.

And then there is also these jalis or the perforated windows, and these perforated windows are also based on how these geometric shapes can replicate themselves and how this multiplication replication they are carried out by, they are made into this material presence by the means of

these structures and they are not just there for decorative purpose, but they also allow light and air inside these complexes.

So, as we are looking into the site like Agra and Delhi which are in the northern Indian plains, during summer these places can get really hot, so the ventilation, the air circulation within these closed structures is also very important. And this kind of jalis that is the reason they are very important part of this architecture in this part of the world.

**(Refer Slide Time: 19:54)**



Now, from there we move little further that how these structures they have also made a huge impact on perhaps the pinnacle of the Mughal architecture and that is the Taj Mahal. So, Taj Mahal was started being built around some 15 years later than the Itmad-ud-Daulah's tomb which started in around 1630 and Taj Mahal started in the mid 1640s. So what we find here that in the Taj Mahal, if you see the ground plan of it.

And of course, this tendency towards building the tomb complexes entirely out of marble that started with the Itmad-ud-Daulah's tomb that came in to its full glory in Taj Mahal. Now Taj Mahal is a structure which was built by Mughal emperor Shah Jahan and as we know that Taj Mahal is also a structure which is celebrated for Shah Jahan's wife Mumtaz Mahal, but there is more to it than Taj Mahal being a symbol of the love between Shah Jahan and Mumtaz.

So, we see that in one hand, that Taj Mahal primarily it was made as the grave or the tomb of Mumtaz Mahal, but also we see if we follow the career of Shah Jahan and his aspirations for making architecture, then we see that either way Shah Jahan wanted to build an architecture

which will symbolize the glory and the power of the Mughals. And to take that further, he claimed that the Hindustan has become the Rose Garden on earth and that had happened during the time period of Shah Jahan.

And so, this analogy about garden that came back again and again in how the Mughal rulers they have implemented this garden planning or the metaphor of the garden in their architectural projects as well as this in different kinds of this cultural aspects as well as for the city planning and so on. So, what we find to be very specific about the planning of Taj Mahal. The Taj Mahal is a place which also sort of makes intervention into what is the material world, what is the spiritual world.

And here is the entire planning of the site which is oblong, which is rectangular and in this one we have the implementation of the chaharbagh planning at the centre. However, we do not really see the tomb complex to be there at the centre, but now that is moved to the further north and that is right beside the river Yamuna. So, this is something that is there and it was made deliberately to have the vista like presence of this monument, which can be seen from the other side of the river.

Now, if we also follow that what all was there in this entire complex, we see that it is not just the garden and the tomb complex which was part of this entire planning, but there is also this Naubatkhana and then there are the other tombs, which were of the other Mughal royals. And then right outside of that, if we see this particular area from the satellite image, here we find that the thickly populated bazaar had started.

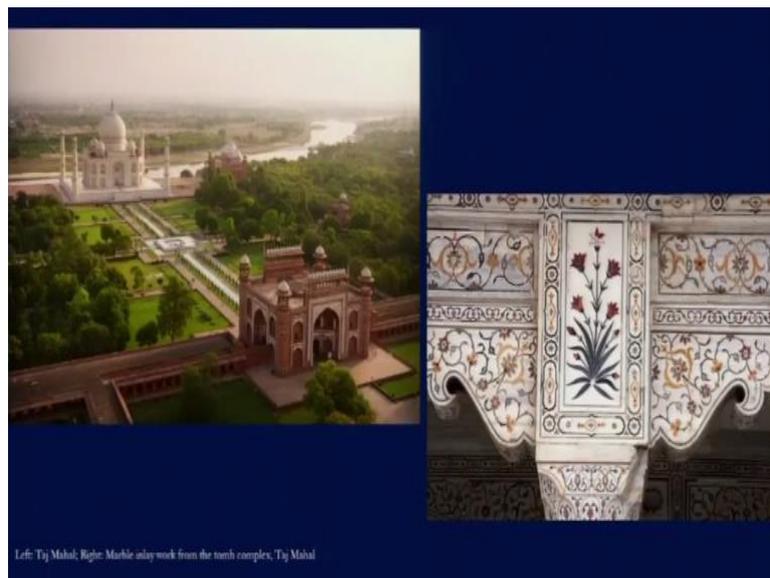
So, there is this bazaar which is congested, which is chaotic, and there are many lanes and bi-lanes and people and you know different kinds of hustle and bustle of the city that is going on. And as I have already mentioned that in the 16th and 17th century, Agra was one of the most populous and prosperous cities in the entire South Asia. So, from that hustle and bustle, from the chaos of the city, from the bizarre, then suddenly once you enter into this tomb complex, into this garden complex.

Then that makes an intervention into the entry from the material world to the spiritual world and that is something that Shah Jahan had originally imagined. And that is also the reason why Ebba Koch and some of the other art historians we find them to have claimed that Shah Jahan

might have built Taj Mahal either way, whether as a grave for his wife or for other reasons. But his main ambition was to signify the power and the glory of the Mughals.

And that is the reason he took this tremendous, this incredible architectural project to replicate the paradisaical garden on the face of the earth and that is also something with all these architectural projects with this beautification with transform the land, then Shah Jahan could also claim that how Hindustan has become this rose garden under the rule of Shah Jahan.

**(Refer Slide Time: 25:17)**



So, some of the issues that we find in Taj Mahal are also as I have already mentioned that how there are certain characteristic features of this structure like the use of the high platform and then those wings in four sides from the central pavilion, which were there in Humayun's tomb and this high imposing dome, all those features we can find them to be already established in the Mughal architecture.

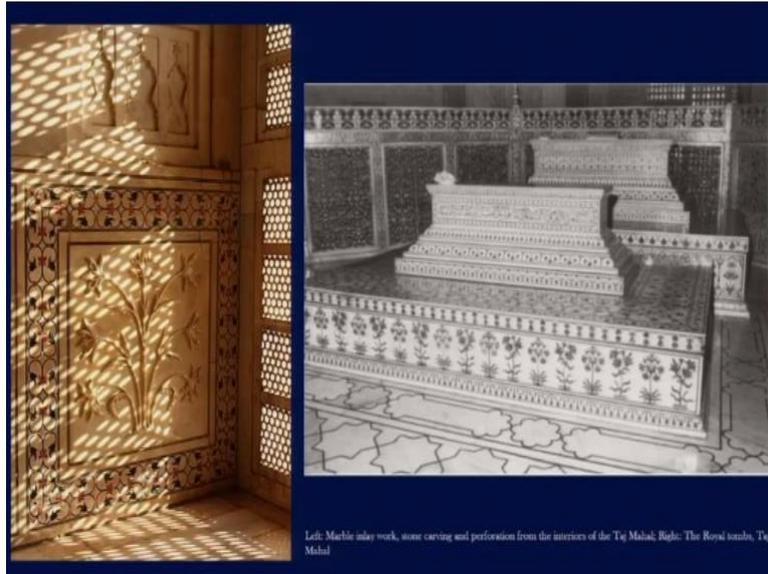
And in Taj Mahal, there are those four minarets in four corners of this building. So, these minarets also they sort of balance this imposing architecture at the centre, which sits on to this high platform and so this vertical growth of this minarets they also make a balance between the central tomb complex and then what is there in the sides. So, apart from that, we also have two other architectural complex eminences in the two sides of Taj Mahal.

And that one is a place for people to stay there, and another is a mosque and we have already discussed how a mosque or a prayer hall around the tomb complex is also something that is of high relevance because there the devotees would offer prayers for the departed soul as well as

during the communal gatherings. So, those things to be very much part of the Taj Mahal complex that we find here.

Now, the other thing that we also have here is the use of dispersion parchinkari or minakari on stone. And we find that there are different kinds of geometric as well as these floral motifs, which were brought in and they were continued as part of this, the decoration of the tombs.

**(Refer Slide Time: 27:12)**



Now this, as I have already mentioned how this idea of this different kinds of stonework, for example jali and then parchinkari or the stone inlay work, and this low relief works on stone, all of them they come together in the Mughal monument. And then this symbolism of the garden that also played a very important role if we also see in the graves of both Shah Jahan and Mumtaz.

For example, here and here in the graves these are credibly ornamented and then they are meticulously made these graves and these graves we do not really have much of inscriptions to praise the Lord or to offer solace and prayers for their afterlife, but we see there are different kinds of motifs of the plants and flowers and creepers. And basically, it is also a symbolic representation of a garden within the tomb and this is the garden of paradise that had been depicted through the visuals in this tomb complex.

So, in other words, we find that how this idea of the garden it's not just in the physical space, but also as a symbol that came into the imagery that was used in Taj Mahal and so bringing the philosophy, symbolism, and then the political power of the Mughal as well as this grand

planning which comes from Persian as well as Indian sources, for all those reasons, we find the Taj Mahal to be one of the most celebrated architectures done during the Mughal time period.  
Thank you.