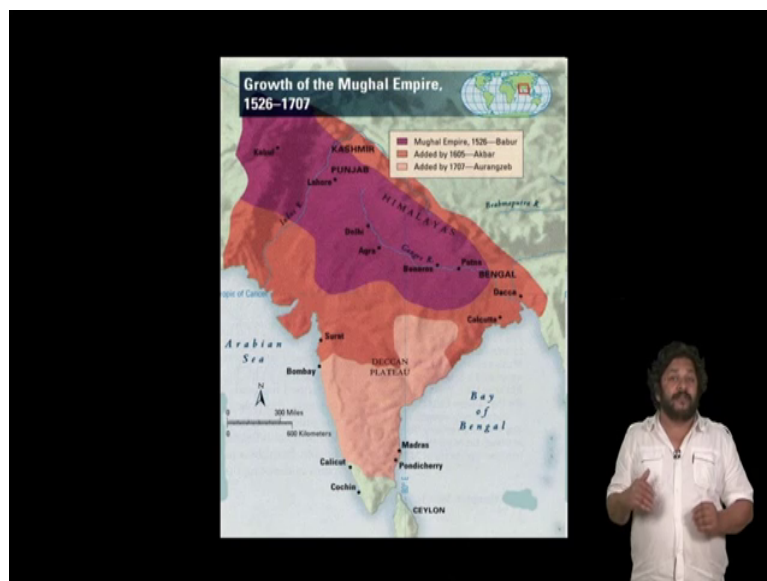


History of Architecture in India.
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Mughal Architecture – Part 01

Today, we shall talk about Mughal architecture, look at who the Mughals were, what they built and how they are architecture change through time, what kinds of influences that they bring from their homelands in the Fergana Valley and what kind of elements that they pick up in India, where we have a very different tradition of architecture.

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Who are the Mughals anywhere and what is the extent of their rule, here we see that the Mughals over a period of a 150 years expanded to cover most of South Asia, they started off by invading Delhi got beaten back, recovered Delhi in the 1550s under Humayun and from there on, till the death of Aurangzeb, there was no looking back. They with every successive emperor conquered more and more lands, after the death of Aurangzeb in 1707 the Mughal Empire starts fragmenting and by the end of the Mughal error in 1858, when the last Mogul emperor Bahadur Shah Zafar is sent off to Burma, there is very little expansion. Infected you have a contraction of the Kingdom.

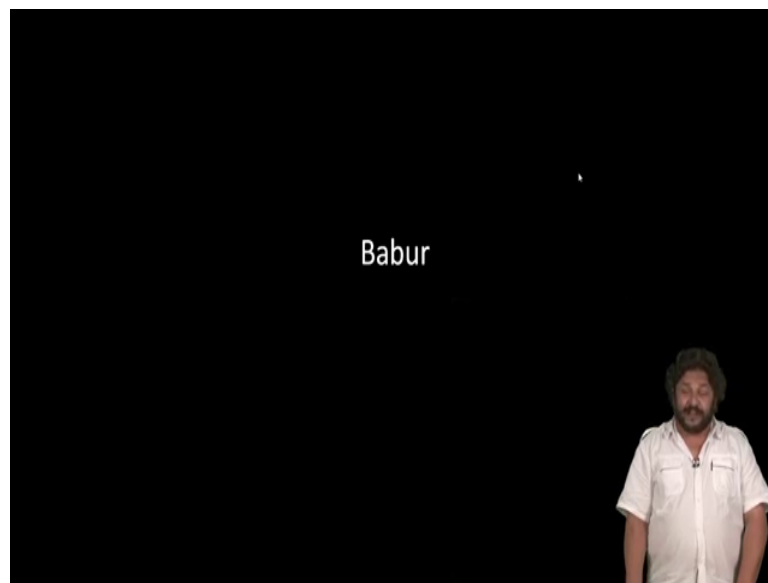
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Zaheeruddin Muhammad Babur	1526-1530
Nasiruddin Muhammad Humayun	1530-1540
Sher Shah Suri	1540-1545
Islam Shah Suri	1545-1554
Nasiruddin Muhammad Humayun	1555-1556
Jalaluddin Muhammad Akbar	1556-1605
Nooruddin Muhammad Jahangir	1605-1627
Shahabuddin M. Shah Jahan	1627-1658
Mohiuddin M. Aurangzeb Alamgir	1658-1707
Bahadur Shah I	1707-1712
Jahandar Shah	1712-1713
Farrukhsiyar	1713-1719
Rafi Ud-Daulat a.k.a Shah Jahan II	1719
Nikusiyyar	1719
Muhammad Ibrahim	1720
Muhammad Shah	1719-1720, 1720-1748
Ahmad Shah Bahadur	1748-54
Alamgir II	1754-1759
Shah Jahan III	1759
Shah Alam II	1759-1806
Akbar Shah II	1806-1837
Bahadur Shah Zafar	1837-1857

Therefore, five Mughal emperors who are thought of as the great Mughal emperors Humayun, Akbar, Jahangir, Shah Jahan and Aurangzeb and it is in the reign of these five emperors that we find most construction in the Mughal emperor.

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We shall start with Babur, the first of the Mughal emperors thought of as the founder of the dynasty, who came from his homeland in the Fergana Valley. He was driven out by his cousins, he was a direct descendant of both Genghis Khan and Taimur, who had invaded India a century before.

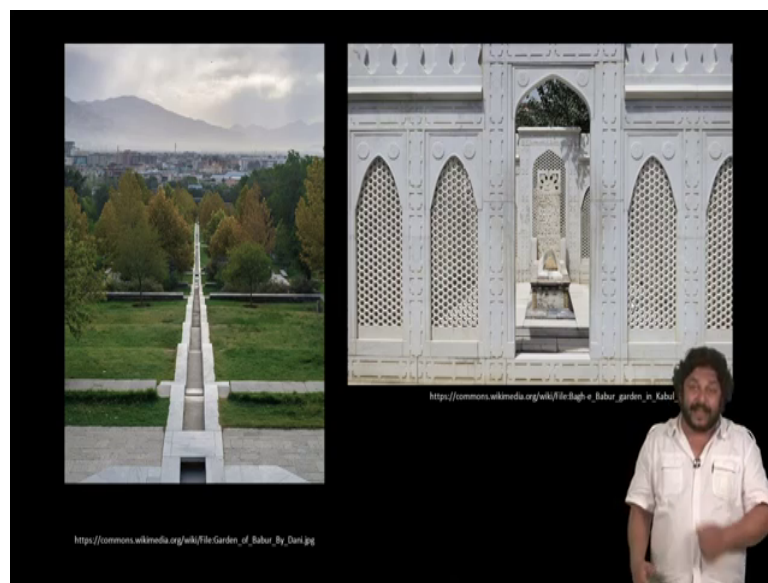
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Babur came to India throughout Afghanistan, where we find some of the constructions that he undertook, most notably the Baugh-e-Babur, Babur built the Baugh-e-Babur, a garden outside a Kabul, it is interesting for historians of architecture in India because it has a plan that would later be called a Charbagh plan, a quadripartite arrangement, what is not evident in this picture, so much is the sloping terrain on which this garden is, from one side to the other is a

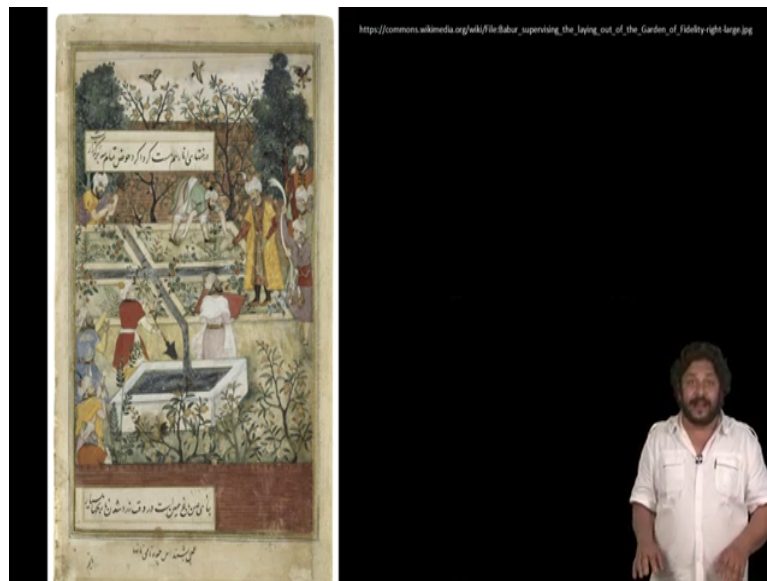
very heavy gradient which allows water to flow through naturally, the quadripartite arrangement is separated by a number of water channels, which irrigates the garden, trees of various colours and heights should have been planted in various sectors of this garden, so that once you set in the pavilion right on top, you would see the garden laid out like a carpet below you with different colours, the height of the trees would be arranged in a way that they might appear to be at same level from the top, this kind of planning would be seen in later gardens that the Mughals built in India for almost 2 to 300 years, infact this garden came to be called the Mughal garden in colonial times.

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Baburs garden has a centre water channel that goes down using the force of gravity, another feature that most Mughal Gardens in India would use, the grave of Babur himself is very simple, open to the sky in conformance with traditional Orthodox believes about how a grave should be. The garden was very badly destroyed in the civil war that Afghanistan suffered in the 90s and 2000s and has recently been completely restored. While it is not in India itself, it is an important precedent for things that will follow Baburs descendance in India.

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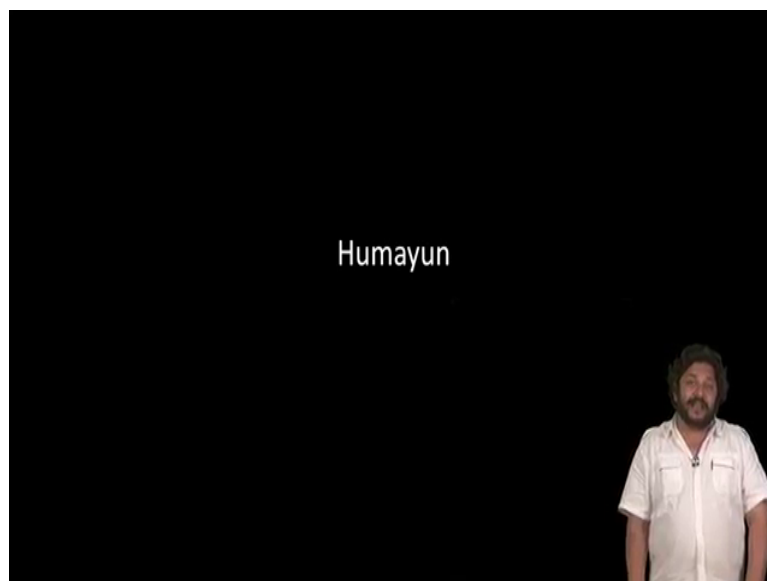
We know from later paintings of the ways in which emperors and rulers personally supervise the laying out of gardens, here is a manuscript produced under Akbar, in which Babur is shown supervising the garden that he laid out, you can see various kinds of people at work, including gardeners and masons. We also know of a number of very important treatises like the *Irshad-ul-Jeera*, which were written in Afghanistan by hereditary families of gardeners and by gardeners we do not mean who just do menial gardening, but also people who actually were men of letters, they were writing treatises on how to breed good plants, all what good gardening means on the role of gardening in governance such people were often at the Mughal court and they were entrusted with laying out and maintaining gardens of various kinds.

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Babur also built in Dholpur, a small pool called the is The Hose-I-Nilufer or the pool of lotuses carved in the yellow Dholpur rock not much of it survives and certainly nothing of the gardens that were laid around it.

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Babur dies and is succeeded by his son Humayun, who comes to power, and manages to lose his Kingdom to an important general called Sher Shah Suri only to get it back from Sher Shah Suri in 1553.

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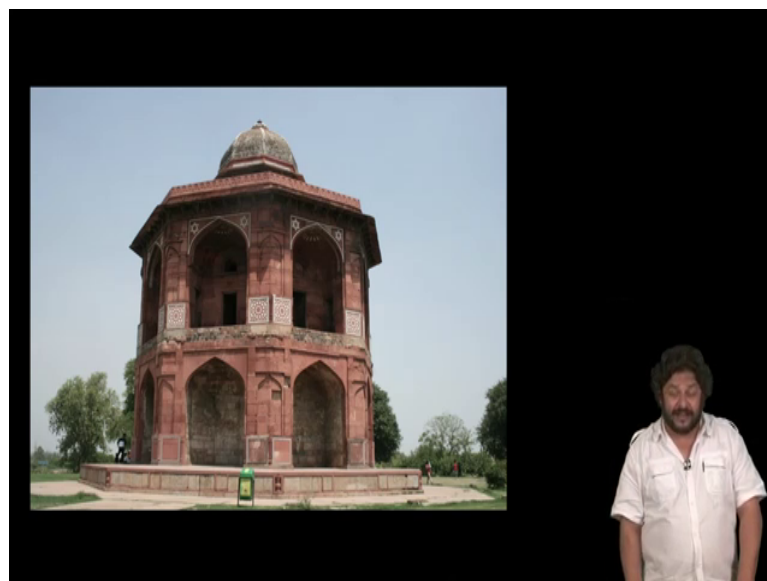
Humayun does not have a rich architectural legacy because a lot of his life was spent and running away from the forces of Sher Shah, finding a refugee in Iran and trying to regain his Kingdom, yet outside of Agra, we do see small monuments in Mosques like this one, but again there is nothing to distinguish this as being from Humayuns reign, or indeed Mughal for that matter, but please do note that the central arch of this mosque is raised, it is a large opening something that they derive from Timurid architecture.

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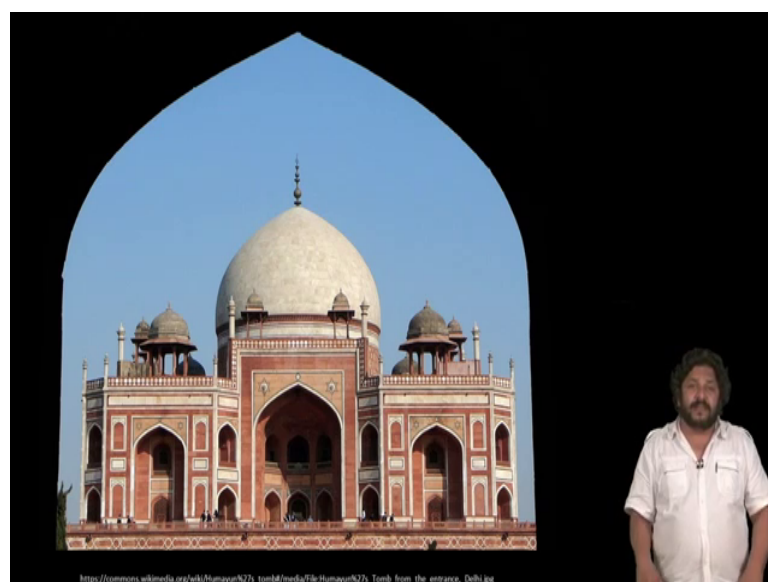
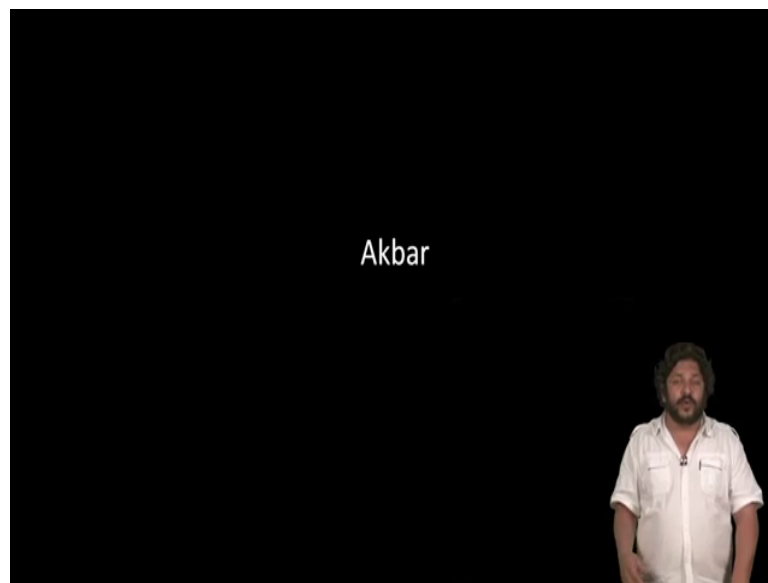
There are err, number of tombs from Humayuns reign which you find in Delhi, these tombs are largely unknown in terms of who the inhabitants were, but they are giving local monikers

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Humayuns tomb is also marked by his occupation of fort in the Delhi called the Purana Kila or the old fort, it is largely out of red sandstone, it contains a number of buildings within some of which date back from a sultanate period before the Mughals, however some buildings like this called the Sher Mandal might be attributed either to Humayun or Sher Shah, we are unsure of who built them about this building an octagonal two-storied pavilion is attributed to Humayun and it is believed that this was his Royal library from where he suffered a fall fell down the stairs and died only to have his son Akbar succeed him.

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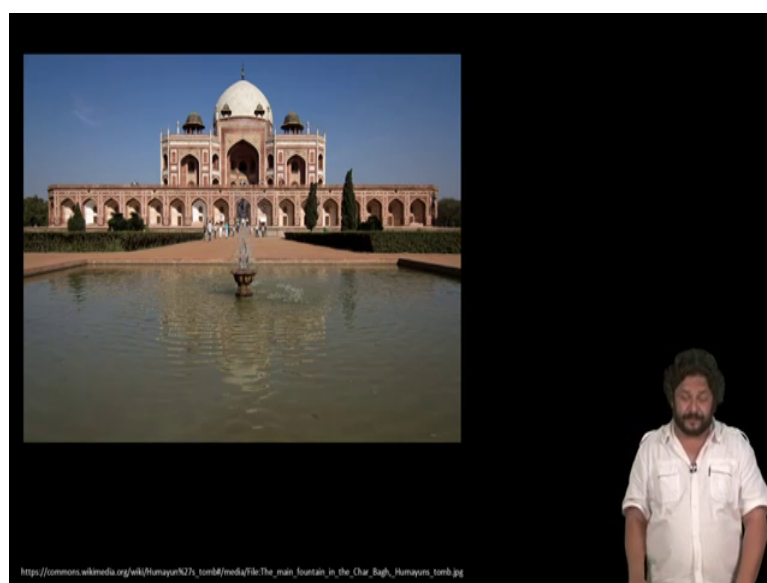
Akbar becomes one of the greatest empires of the Mughal dynasties that India has known, Akbar grows up in a completely multicultural environment, he has a number of Turkish advisers, he has relationships with the Rajputs, whom he subdued, conquers and even

marries in two, he has a completely syncretistic understanding of what the state and religion should be, and most importantly, he patronises architecture on a massive scale, observing a lot of new influences that he is being subject to, as he conquers lands in western and central India. His father Humayun, who never built a tomb for himself finds his grave in a tomb built by his son Akbar.

Akbar has this constructed in the 1570s, as a marker of his own monumentality, while ostensibly it is a memorial to his father, it actually proclaims Akbar's greatness as an emperor. This mode in which Mughal emperors will use grand buildings in owner of somebody else, to mark their own reign is notable, we shall see several mausoliar like this notably the Taj, which was built by Shah Jahan for his wife but again get associated with the name of Shah Jahan himself and similarly the last of the great Mughal emperors, Aurangzeb builds his wife or at least commissions of his wife a great mausoleum called Bibi ka Maqbara in Aurangabad.

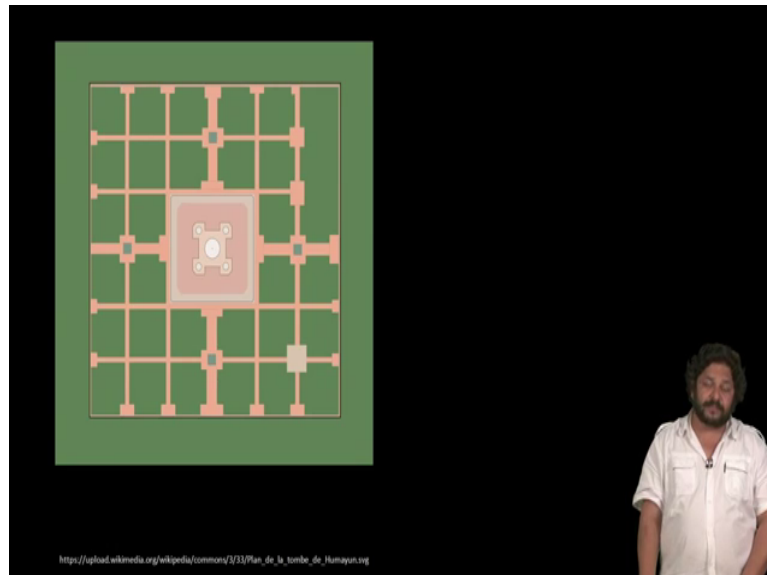
That mausoleum too is built for his wife, but it is Aurangzeb and his son whose names are remembered because of his construction, this also is the tomb that will form the template for what Mughal tombs become, for Evans these four grand openings on four sides, four corners of rooms and then a dome on top, this kind of plan is often referred to as a harsh behest plan, where you have four rooms in four corners, four portals in the centres and then a space enclosed in the middle, harsh behest literally translates it paradises and there are a number of buildings in his Farhan and Shiraz that use this kind of planning principle.

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Humayuns tomb is also set on an enormous platform of great height, in the middle what we saw in earlier in Baburs garden an arrangement of channels that divide the garden into many quarters, this large basements storey on which the monument is kept, almost like a pedestal is used to keep an object on it, is a very important feature of monumental Mughal architecture.

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And this is a plan of the garden and here you clearly see the kind of garden arrangement that becomes associated exclusively with the Mughals or the post-Mughals that is to say dynasties who succeed the Mughals.

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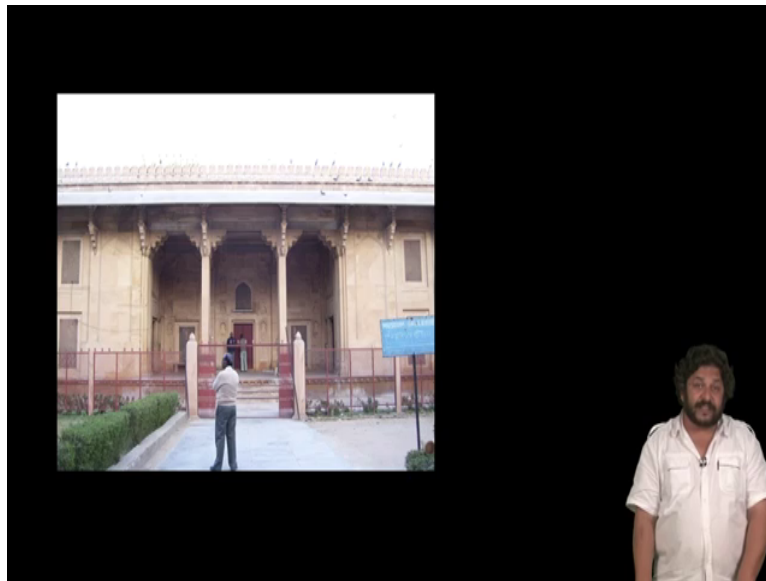
Akbar also builds himself a number of palaces in places that he takes over, this is in the city of Ajmer, now a city museum but known as the Palace of Akbar, built again in the 1580s, as he takes over Ajmer, a large gateway with this kiosk or chatris on top, those small pavilions which are on balconies here not a very elegant solution but something that will be perfected through time, this chatris again will become Hallmark of Mughal architecture.

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Inside the palace follows the same plan we have seen the harsh behest plan, which is to say, there are blocks of rooms in the four corners of the buildings and in the middle of each façade is an entry way that leads straight into a central space, note again, there are no domes on top of this building because the construction here is what is called trabeated, it is post on lentil, it does not have arches, this is borrowing from a local idiom of construction that is popular in Gujarat and Rajasthan in an earlier period.

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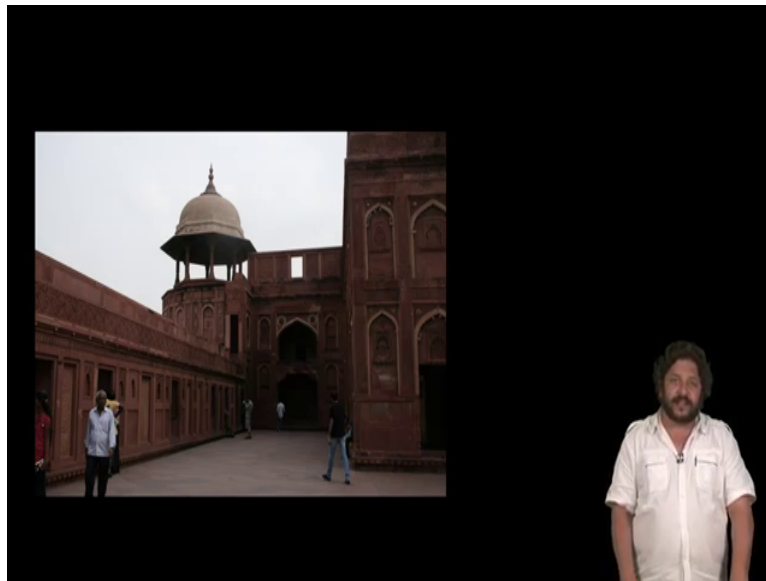
This kind of constructional detail, where you have an opening, trisected into three openings is actually it has structural antecedence and we will talk about it at some other time when we talk of other kinds of architecture.

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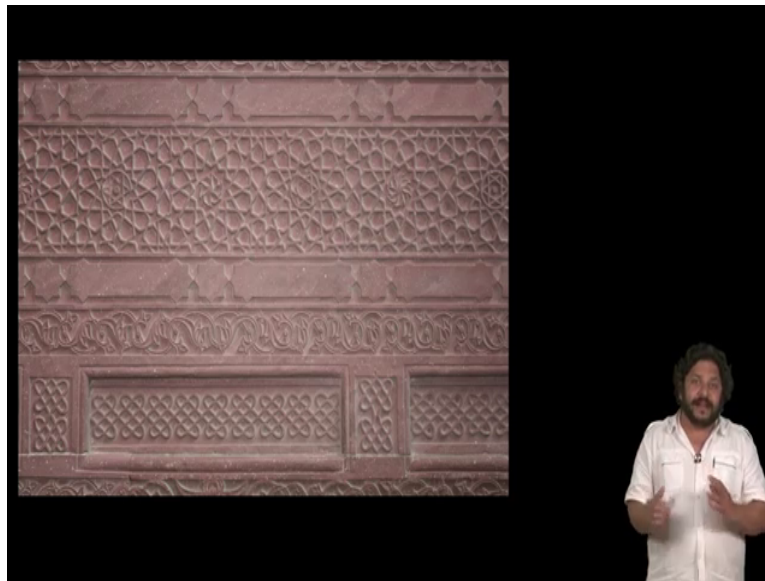
The decorative schemes come straight out of Gujarat and Rajasthan, the dramatic decoration that you have on the left-hand side is coming again out of a palate that is completely timurid.

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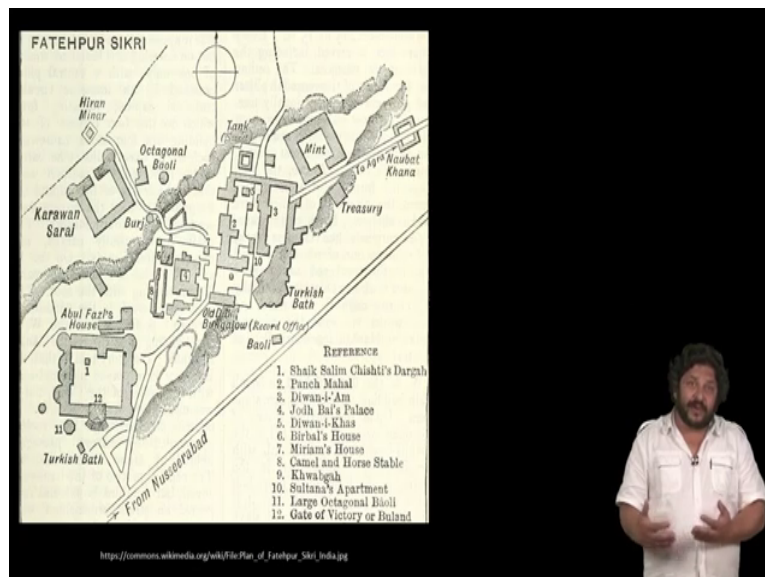
What Akbar also builds is the Agra fort, though the Agra fort is added to lot by his son Jahangir and his grandson Shah Jahan in years to come.

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But the stone decoration that Akbar employees is something that has boring completely on an indigenous style of decoration, while the patterns are geometric and use fractiles like you have in Islamic art, the tradition of stone carving of this sophistication is really something that is completely Indian.

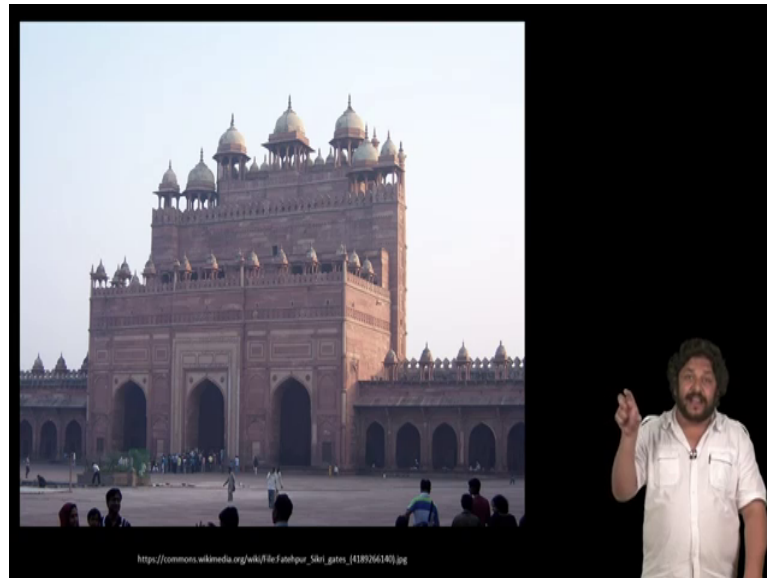
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Akbar is also best known for his city that he builds for himself called Fatehpur Sikri not very far away from Agra, a city that has to be completely abundant because of the shortage of water, Fatehpur Sikri is celebrated as a city which has elements of very dense urban planning, buildings interacting with each other courts and courtyards, enclosure walls and an

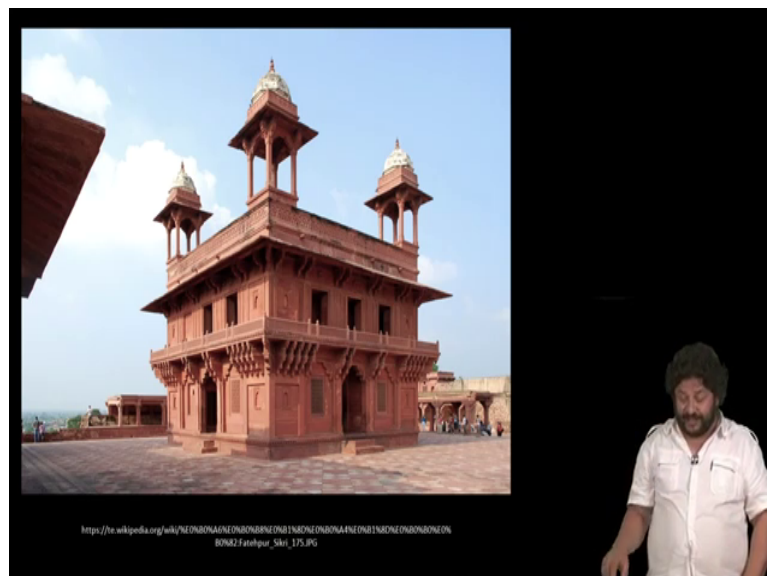
organisation in which you have public areas and Royal areas, much like you have in other Mughal forts.

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The entrance to the city is grand but if you look at it from the inside you realise that the outside is far grander than the inside, the inside is actually of relatively modest proportions as compared to the outside, which is this large Evan portal with a series of chatries on top.

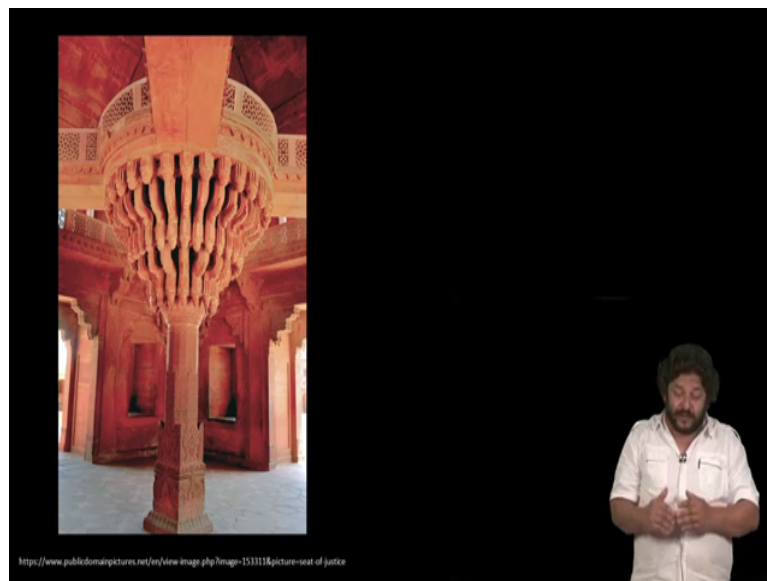
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A number of buildings in Fatehpur Sikri are not understood in terms of their functions because they have been given names later, this particular building its use is unknown, but what we do see architecturally is that elements of this building come straight from the lands

of Rajasthan, Gujarat and central India, where Akbar had made conquest in the year just before this. Fatehpur Sikri, while built in the 1580s, comes after Akbar's invasions and conquest of these lands and artisanal traditions and design ideas from these areas find their way into what he thought would be his masterpiece. Fatehpur Sikri, therefore has this big, heavy ornate brackets that support balconies, heavy cornices and also a profusion of chhatris on top of the buildings.

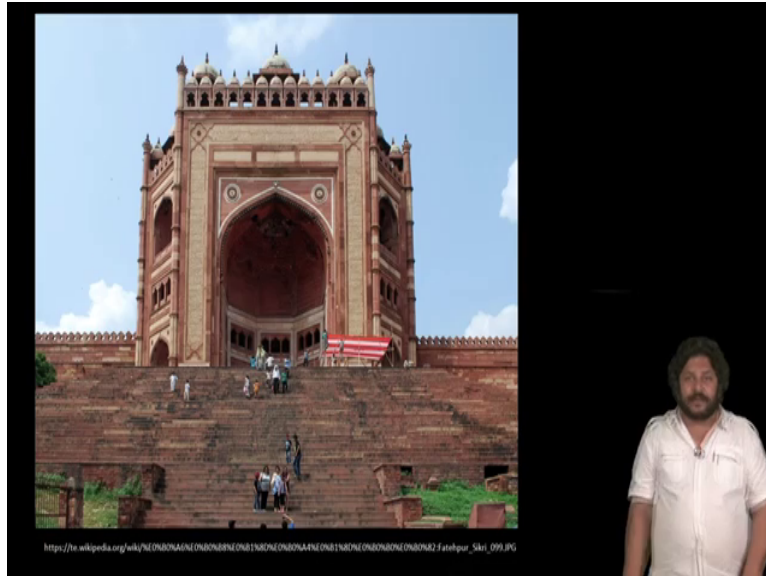
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Inside this building, which is thought of as an audience hall where Akbar sat in the middle of this column, listening to people having debates at the bottom, you have again, this kind of heavy bracketing that one finds in Gujarat.

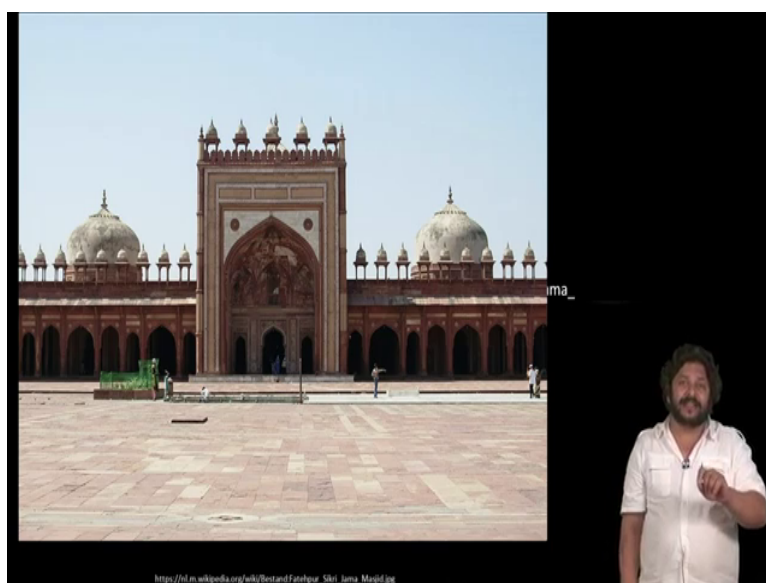
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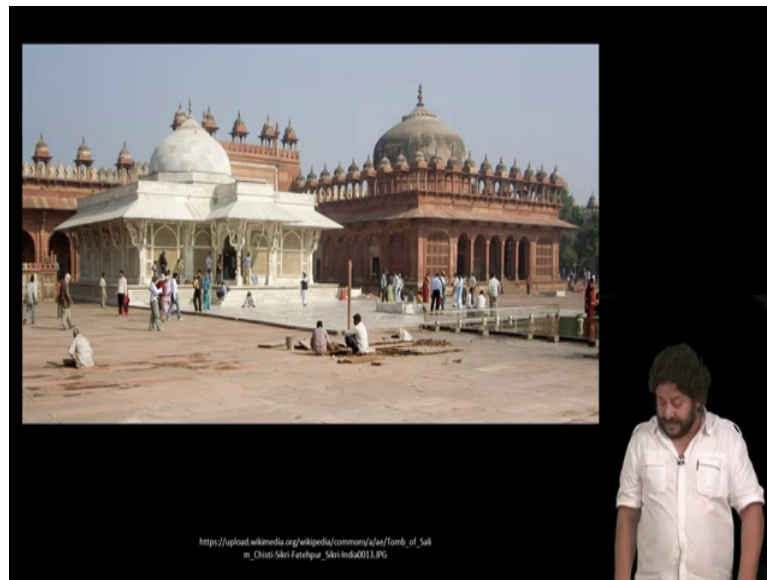
Am I cock, the Mughal historian has extensively about how traditions in Gujarat shaped Mughal architectural form, a number of palaces in pavilions in Fatehpur Sikri again resemble buildings from lands that Akbar had conquered. The great entrance to Fatehpur Sikri is called the Buland Darwaza, a massive light of stairs takes on up to this grand portal through which the city can be entered, in fact not just the city but the great mosque behind, which is the one of the first mosques that Akbar builds, this Buland Darwaza will eventually be a form of inspiration for the great jama mosque in Delhi that Akbars grandson Shah Jahan will built, similarly mounted by a great flight of stairs, the doorway itself is imposing and conditions people to come in very humbly.

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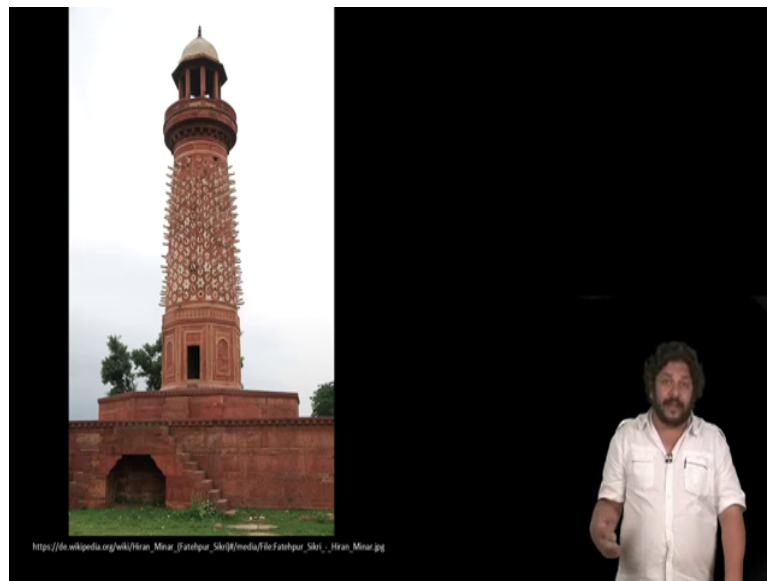
Inside the mosque that is built at Fatehpur Sikri the jama masjid, you see this element of timurid architecture the big portal, which even if there is dome behind always conceals the dome, you have a great grand facade with whole succession of chatries on top, a big courtyard in front, all of it done in the material that is favoured by Akbar, red sandstone with marble used only for accense for trimmings and for decoration.

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But in this complex is also another building done completely in white marble, perhaps inspired by the mausoleum of Shahensha at Mandlu, which is also done in white marble, this building borrows a planning principle from tombs in Gujarat, which have a central dome surrounded by an ambulatory passage and the whole of which is covered by screens on the sides or jallies on the sides, this white monumental tomb in the middle of a red sandstone setting mix it stand out, the saint Salim chisty, not only exemplifies what would be a very tight association between chisty saints and the Mughal emperors, but also was the Emperor because of which Akbar be get children, including his son Salim, who was named after the saint.

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In Fatehpur Sikri, you also have a very unusual tower, which is called the Hiren Minar, Hiren meaning deer and Minar meaning tower, there exist other towers like this in Mughal capitals, notably one in Lahore called the Hiren Minar as well, at a place, which is outside of Lahore in Sheikhpura, you also have similar towers built around the same time in the Sultanate of Bengal, which is not yet under Mughal rule, variously at Pandua and at a place close to Gaur, those minarets to our small square towers with a number of stone projections that resemble animal horns on the outside, while the use of this towers I am clear. It is believed that they were used to display various kinds of trophies that were hung on it, including hunted animals.

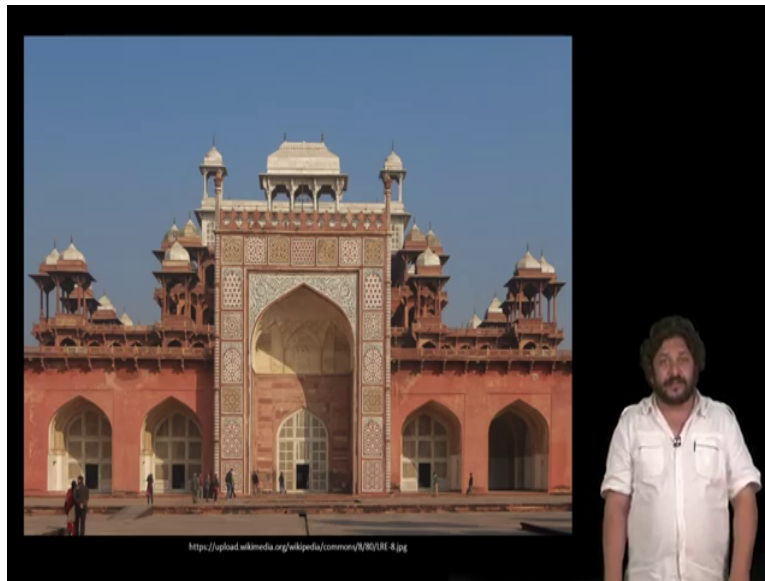
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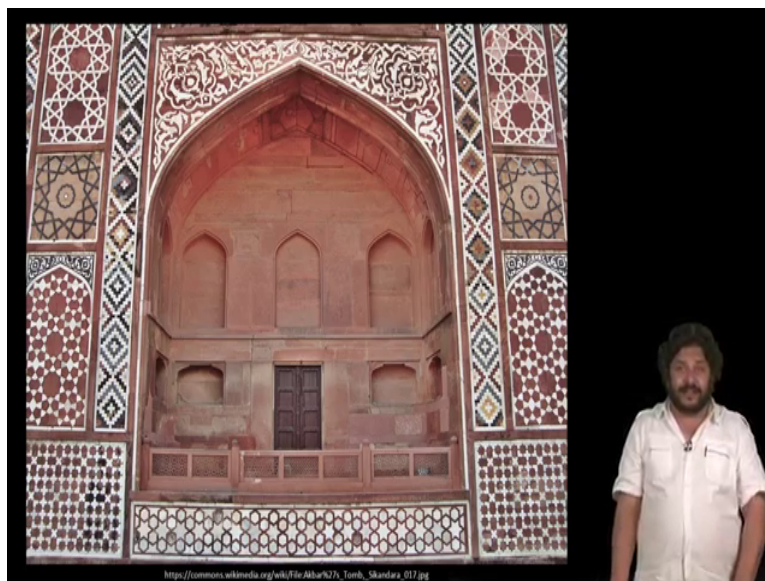
Akbar also builds for himself a great mausoleum that is eventually finished by his son, his tomb at a place called Sikandera, this tomb is entered through a magnificent doorway, which again is built in red sandstone with marble decoration and has four marble minarets on top, Akbar's own tomb at Sikandera is a multi-tier building in which the top storeys are built completely in marble, built of the same sandstone that most of the buildings in this period are, there are marble decorations, but it is really the top storey that makes it stand out almost like the marble rising through a morass of red sandstone at the bottom, there is no monumental dome that covers this, this does not follow the planning prescriptions of the harsh behest plan from Iran, this really is an indigenous building with most of the construction being post-and-lintel, which is to say trabeated with very few domes, a provision of chhatris, which are such an Indian element at this point and a set of pavilions like what would be called baraderies later completely covering the whole area of the monument. The decorative patterns though are completely out of an Islamic copybook.

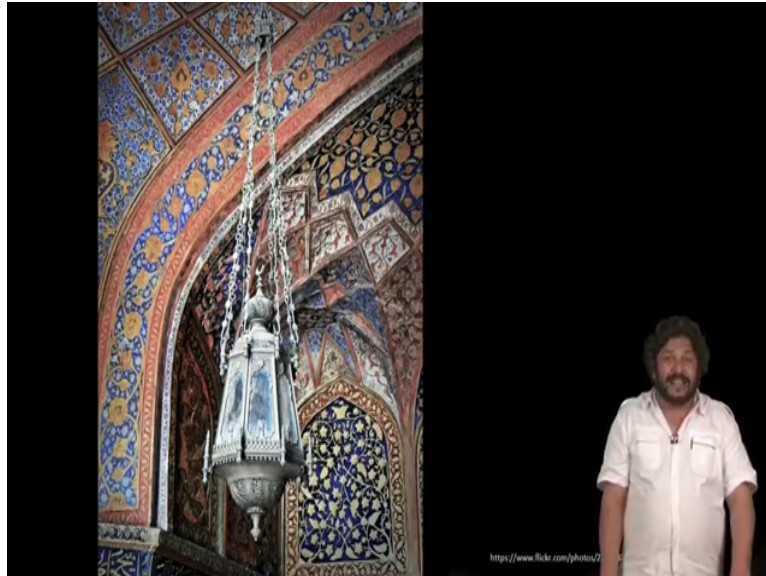
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The roofal top is a precursor to what would become known as the Bangla roof, particularly under Shah Jahan, but here it is just of vault over a longitudinally set of base.

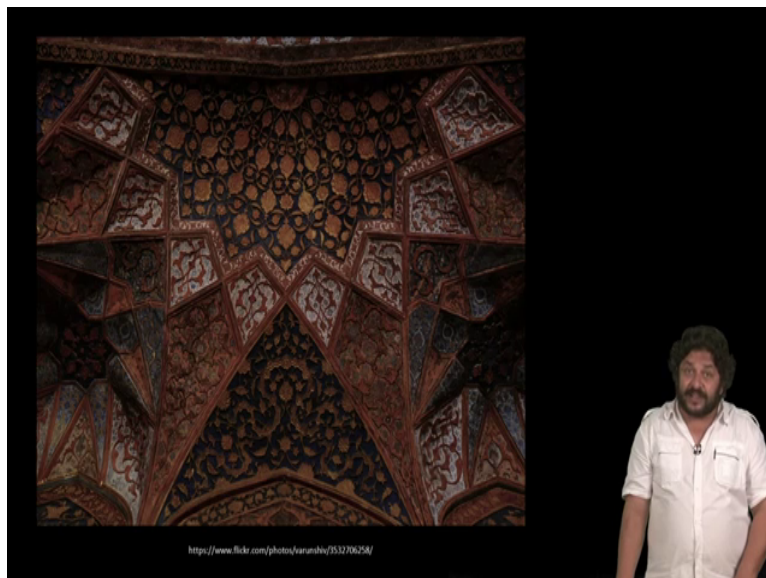
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The marble decorations is of a very fine high order, but it is not just these two colours that make up all the decorations. There were colour tiles in this area, but inside you had lusterware and paint covering most of the vaults. What is inside the mausoleum is completely reminiscent of designs that will be seen in Iran, around the same time, but even better under the suffer widths a little later.

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The wall ting in Akbars doom is completely of timurid origin and we do not see details like this 100 years later, it is Akbar son's Jahangir, who is famous as a big naturalist as somebody who likes to observe things, as somebody who was very curious about the world that a number of important buildings in the Mughal period attributed.

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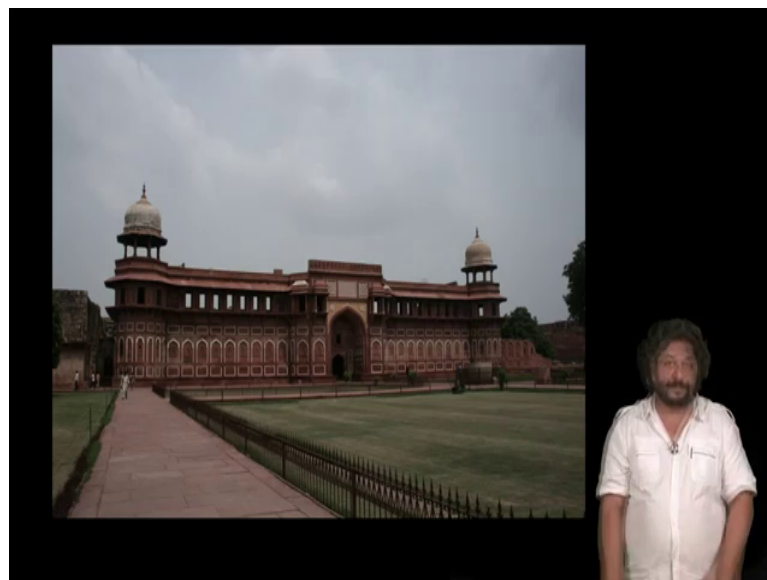
Here we have a picture of Jahangir receiving his son at court, notice that the court setting has a number of railings that separate people from courtyards and a number of elevations that support, separate the Emperor from his own court. These barriers of intimacy or distance these railings of different colours, hierarchy of heights were very important in all the court buildings of the Mughals, the Mughals also develop a convention in this period that the emperors will never be depicted in any other view, except profile view, whereas everybody else of lesser rank can be depicted in other ways, but the point of looking at paintings like this is to notice that buildings that we study now are mostly naked buildings, bereft of carpets and curtains and fabrics and furniture and all kinds of other paraphernalia that would have adorned them.

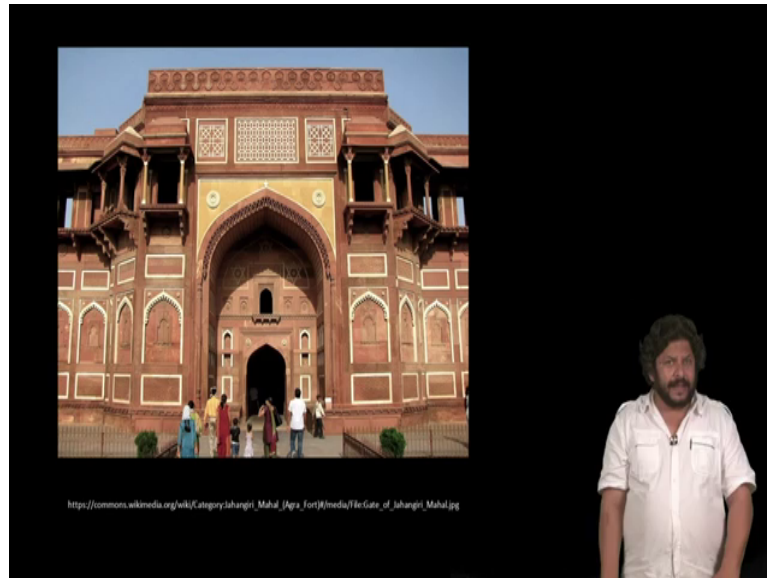
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Jahangir builds a number of buildings, including a mausoleum for his father-in-law, the father of Noor Jahan, Itimad-ud-Daulah also at Agra, you do see a typical Mughal predilection for a building that is cross actually symmetrical, which is to say all four facades of the building look the same.

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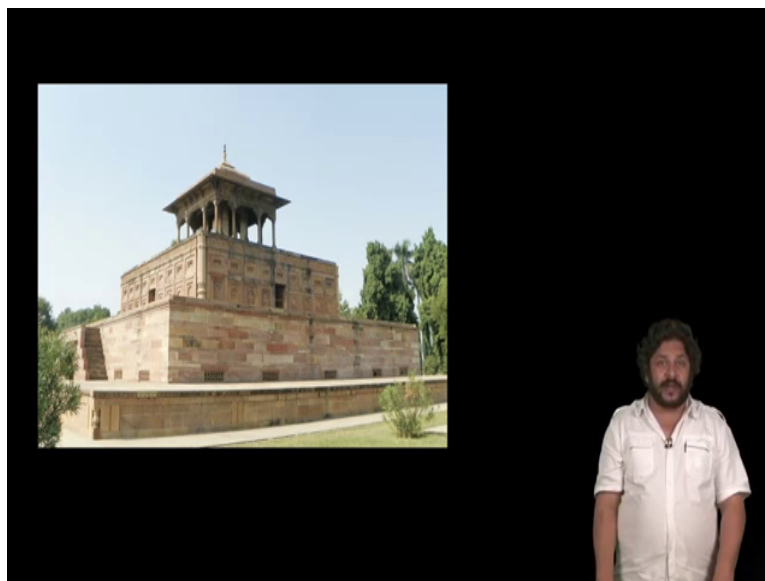
Jahangir also expands the red fort at Agra building large portions of it, he introduces gateways and builds himself a set of gardens in Kashmir, which is enamoured with making trips there throughout his reign. In Kashmir he builds sets of gardens, much like the Baugh-e-Babur, the gardens of his great-grandfather, which have cascades and flowing water coming down slopes with a central pavilion where one can sit and enjoy the trees and the sound of water with the sight of mountain in the background.

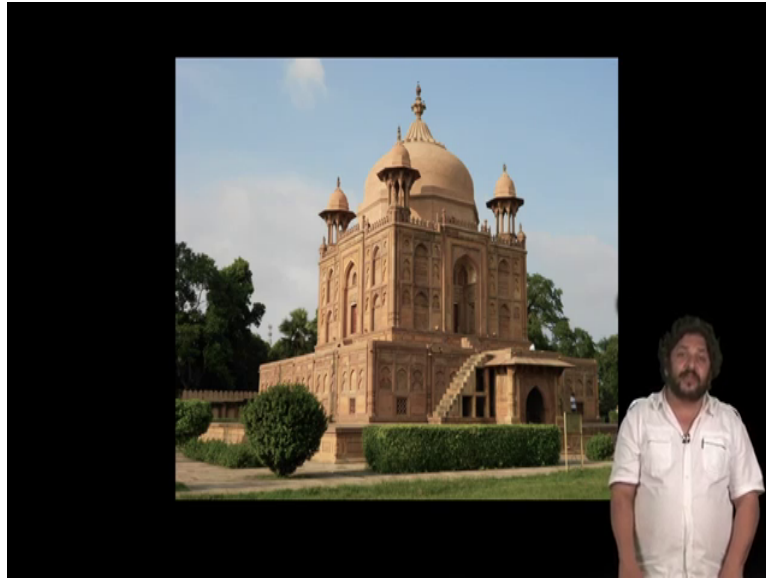
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The pavilions where in Kashmir are completely different architecturally choosing to employ local architectural traditions being built largely in wood.

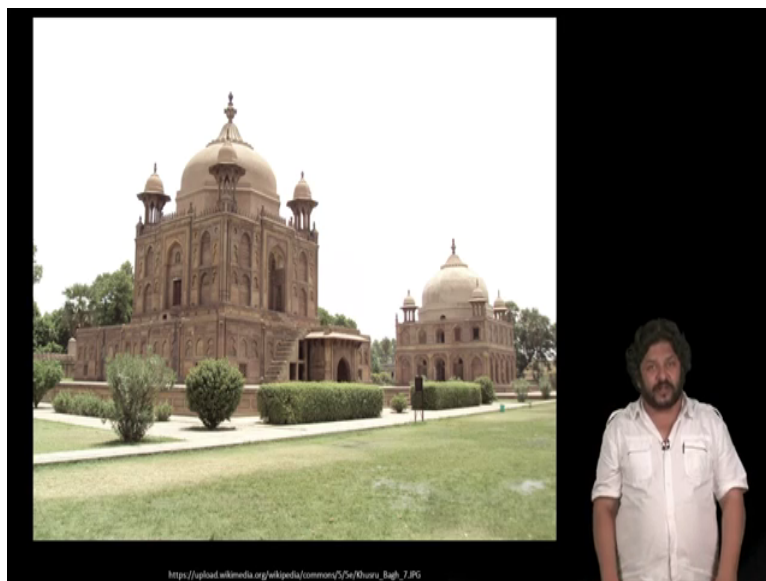
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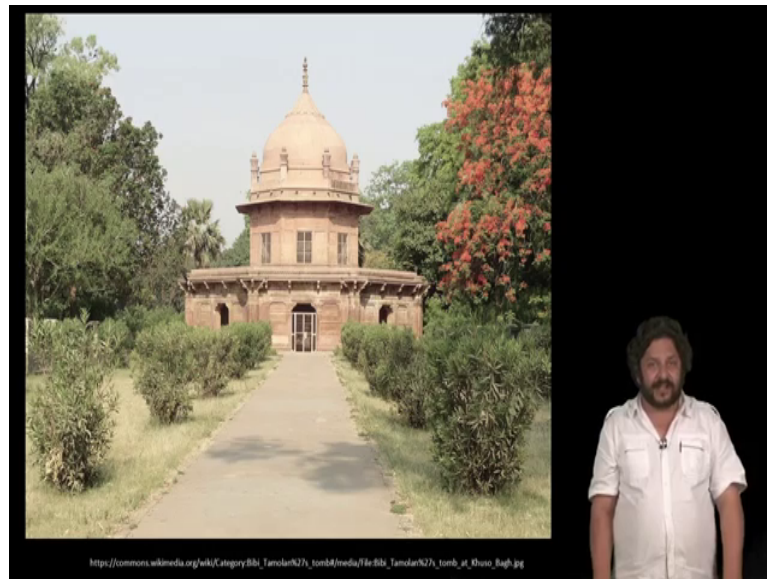
Under Jahangir's reign, you also have a set of tombs very innovative being built at a site called Khosro Bagh, which is also in Agra, these tombs in many ways will be precursors to what eventually becomes the Taj, particularly this one, which is that dedicated to Nisar Begum.

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You find an innovation of various kinds in these tombs and it is possibly these small-scale tombs of lesser-known and of the Royal family that served as experimental models to design and conceive of grand tombs that the Mughals would be known for.

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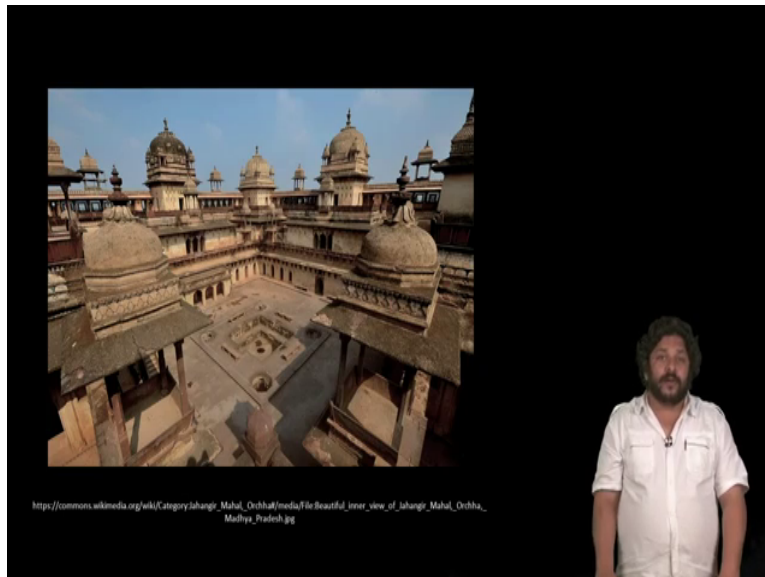
The fashion of the octagonal tombs seems to be on the decline at this point, though we do have some which are still octagonal.

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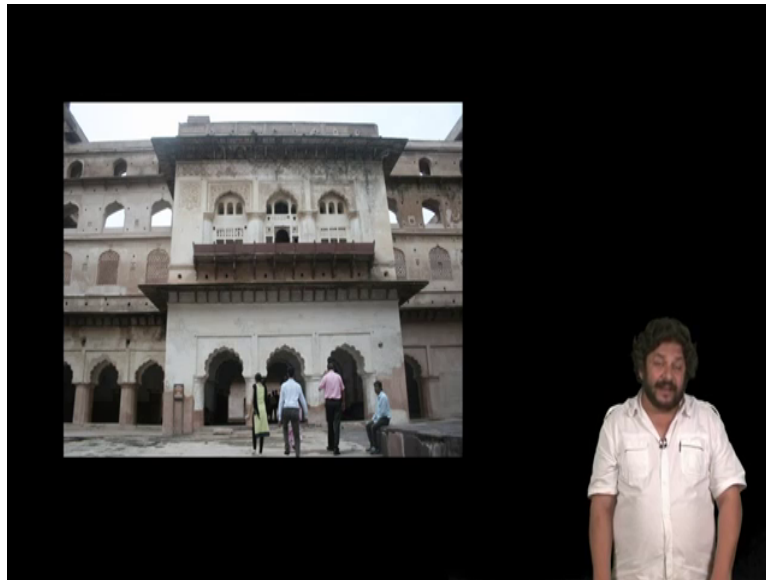
Jahangir also builds a building which is now known as Kanch Mahal on account of the lavish, ceramic in glass decoration that it used to have, this mode of decoration in which you have a special chamber that is only meant to be completely ornamented by ceramic tiles and by mirrors and glass is something that most post Mughal are contemporary states will pick up on, so you will have similar palaces being built by the Rajputs in Rajasthan and also by Marathas in the 18th century in Maharashtra.

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Lesser states who were feudatories to the Mughals like that of Orchha also emulate the great Mughal style from this period on, Orchha was ruled by a king who was a vessel of Jahangir and he built himself a grand Palace, there is a story which probably is not true that either king of Orchha build this Palace, so that Jahangir could spend a night here and Jahangir spent a night there and that was it, it was never occupied thereafter but this believing also at stories. What cannot be denied is that the planning principles of Palaces by feudatory states in this period follows the imperial Mughal pattern.

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Gateways, courtyards, columns, openings, chatries are all hallmarks of this planning, which you will find through North India in the reign of Jahangir. It is impossible to tell if a building is Mughal or Rajput in this period because architecture is not no dynastic differences, a lot of paintings are also to be found in this Palaces, though in very poor shape.

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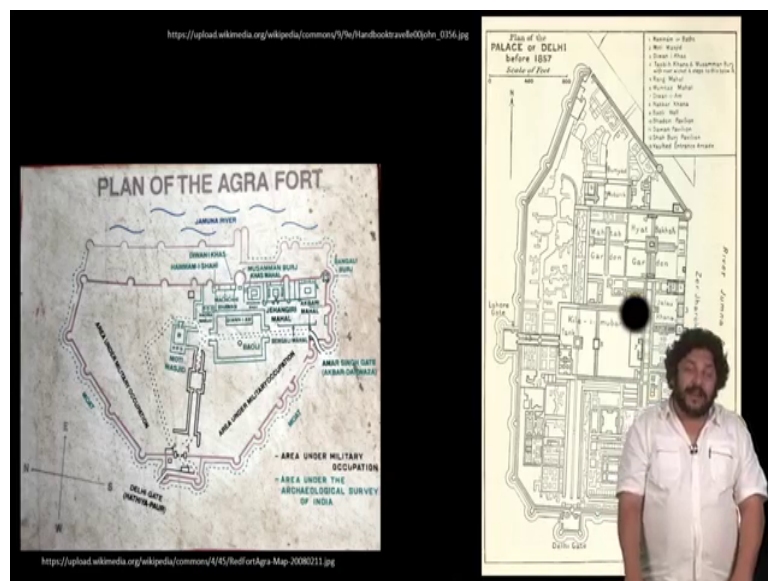




Probably the most celebrated builder of the Mughal dynasty was the Emperor Shah Jahan, Shah Jahan is known for number of commissions and also known to have created a style that will become the Mughal style thereafter, but initially when he is posted as a prince in Sindh in his reign there, that this building gets built, this mosque at Thatta, this follows a completely different idiom, unlike any other Mughal building because it is looking west wards toward Iran for its crafts traditions and its design logic, but what Shah Jahan will build that will become an emblem republic of India is the red fort in Delhi, north of where the Purana Kila was he builds himself an entire city called Shahjahanabad, with the red fort on the eastern side against the Yamuna river, he also builds in the middle of the city a grand mosque called the Jama Masjid, the cited L, which is against the Yamuna is today called the red fort, whereas the rest of the city of Shahjahanabad is recognised as old Delhi, many of the

areas in Delhi today still bears the names of the various gates of this vaults city built by Shah Jahan.

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Here is another map of the city of Delhi and the red fort, now to the bottom because East in this map is shown at the bottom, the plan of the red fort in Delhi is not the similar from the plan of the Agra fort, which also is set against the Yamuna river on its eastern side, so you have a large part of citted L or the fort facing the town and one side, the eastern side faces the river, which gives it natural defence, but also an easy exit.