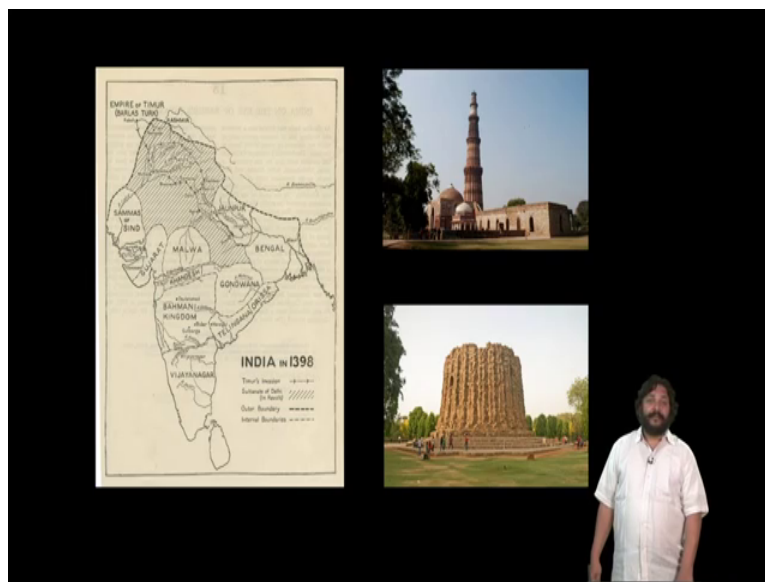


**Introduction to History of Architecture in Indian**  
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**Module 2**  
**Lecture 6**  
**Delhi Sultanate**

This week we will look at the history of the Sultanates in India, starting with Delhi where a slave or a slave commander of the great sultan from Afghanistan was appointed to set up base in India.

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This sultanate of Delhi would eventually go on to cover a large part of northern India in Punjab and in the upper gangetic valley this dynasty called the Mamluk dynasty which was really not a dynasty but a succession of sultans built a number of very important monuments such as the Qutub Minar the Alai Darwaza and also an unfinished minar that you seen the Qutub complex at Delhi, their architecture derives very heavily from Afghanistan where the (( ))(1:19) came from.

Infact the Minaret of Jam is one of the inspirations for the Qutub Minar a victory tower not a minaret for a mosque as is commonly believed. We will look at the Qutub Minar in some detail at a rather point but (( ))(1:39) to say that the Altars is used in the creation of the Qutub Minar were are local though the conceptualization and the design were from Afghanistan therefore while we have large colographic bands (( ))(1:56) we also have the stone ornamentation of local

temple traditions. The Delhi sultan would eventually be (())(2:10) the Delhi sultanate would eventually be ruled by a number of Dynasties such as the Khilji's, the Tughlaq's, the Lodi's, the Syed's and the last one of them the most famous the Mughals who also came initially as the sultans of Delhi.

Now under the Khilji's and the Tughlaq's there were conquest from the Delhi sultanate over the complete Indian subcontinent and as soon as the Tughlaq will became weak in this areas the whole country splintered into a number of smaller Sultanates. The Delhi sultanates starts in 1290's and is powerful into the 1340's when Mohammed Bin Tughlaq has a very ambitious program to bring the whole of India under his command infact he shifts his capital all the way to Daulatabad which we will look at this week as well. This whole move of capital from Delhi to Daultabad is a failure he moves capital back and as soon as his power, the power of a Delhi sultanate is weaken the power of the Tughlaq kingdom is weaken all regions of India quickly declare independence and have his governors declare themselves new sultans.

But trajectory of architecture in this different regions is different from this point on but while you have a 100 years of the Delhi sultanate they are building all over India in a style that has been sometimes call the Pathan's style a label we do not use but really a style of the early sultanate. Now this style usually has what are called battle walls a feature that derives (())(4:12) tradition of building a mud brick as you have in Afghanistan but there is also incorporation of all forms of local elements, a 100 years of Delhi sultanate is completely disrupted by a great dynasty in central Asia called the Timurids under their sultan Timur and we shall look at how that has an impact on all the sultanates of Delhi very shortly.

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Now Timur invades India in the 1390's really limits himself to the sultanate of Delhi but his name and fame and architectural creations have a very big impact on all this small sultanates across multiple regions in India who had declared independence from Delhi. Timur is known to have taken home with him to Samarkand his capital (5:17) all the areas he captures not only does he come and raid India he also goes west he has invasions of Iran of the Seljuks into central Asia towards Europe in fact he had built himself a very big empire.

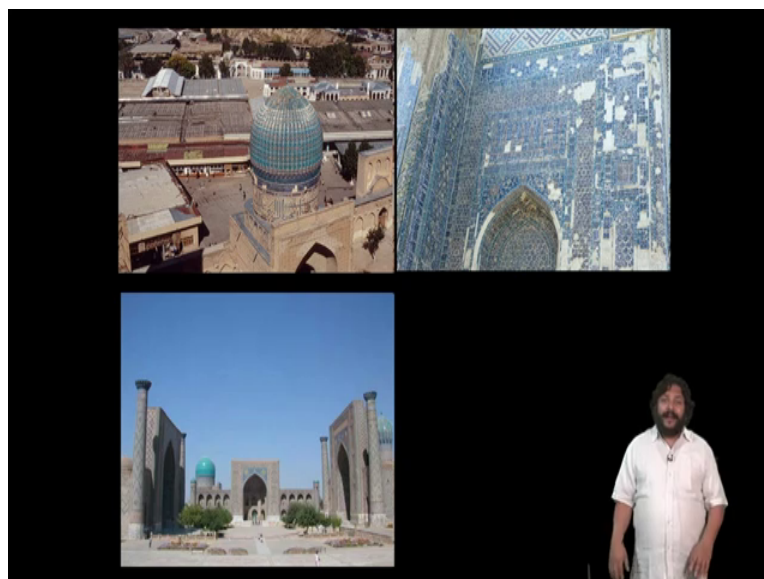
The greatest of the Timurid connections that India will have is that the Mughals will claim and likely so that they are actually direct descendants of Timur and they call themselves Timurids.

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Timur's empire spreads across large parts of the middle east, central Asia and towards India.

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At his capital city of Samarkand he builds grand squares in which we have this big portals these evans that we will see in India as well under the Mughals, this evans just flanking that flank either ( ) (6:20) or big open squares beyond which might or might not be buildings.

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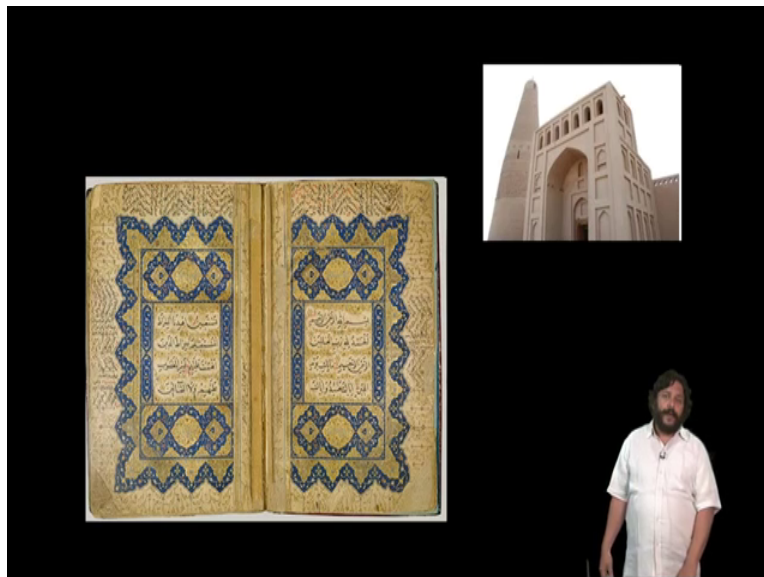
We have (( ))(6:26) decorating everything with sufi styles you have big bulbous domes sometimes double domes and it is this kind of portal that will have an enormous impact not only on the sultanate architecture of India infact the registan square in Samarkand which you see in this picture is going to be a model for the kingdom of the Bahamani's with your capital at Bidar they will build themselves a portal like this in their palace with exactly the same (( ))(7:05). But this evam would the two flanking minarets is something that the Mughals will also burrow imagine this building with a number of small cupolas or chattri on top and suddenly you have a Mughal portal.

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The Timurids also will build big evam fhasage as you see when you look at a building from behind ad his fhasage contain a completely different structure behind them so why this building might be a simple building with a dome on top from the front it looks a lot more impressive and lot more different as in a (())(7:49).

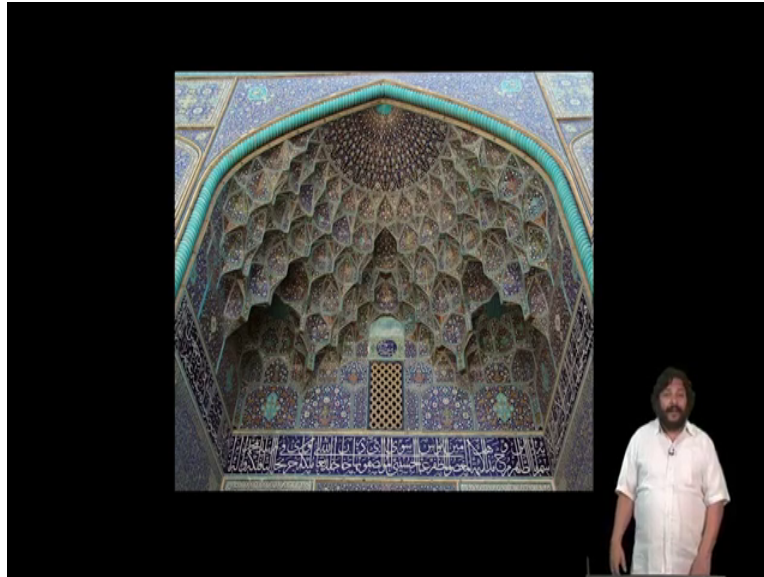
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But the greatest achievement of Timur's rule is being able to combine various kind of arts whether it is manuscript making which is to say book making, painting, architecture, tile work and so on and this is done by using exactly the same modular systems the same geometry only to

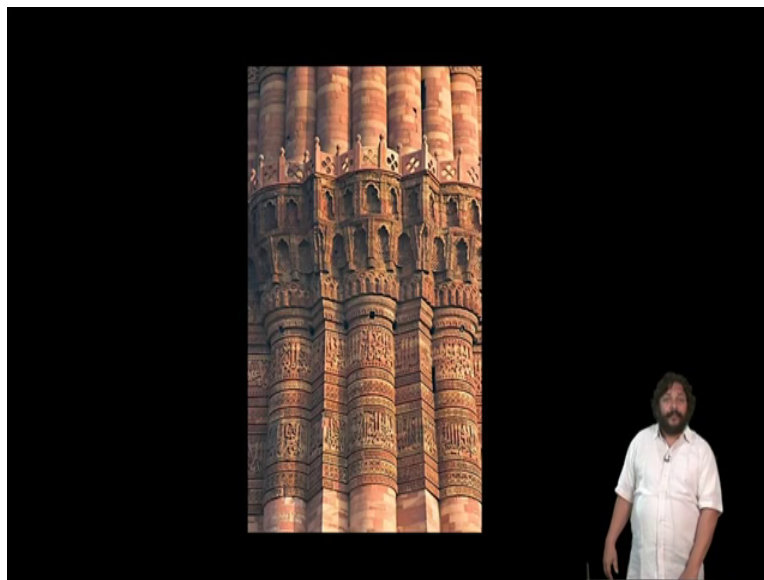
different scales for different kinds of applications and so Timurid arts while they have a unified character to them irrespective of medium or backed by (( ))(8:31) on how to build.

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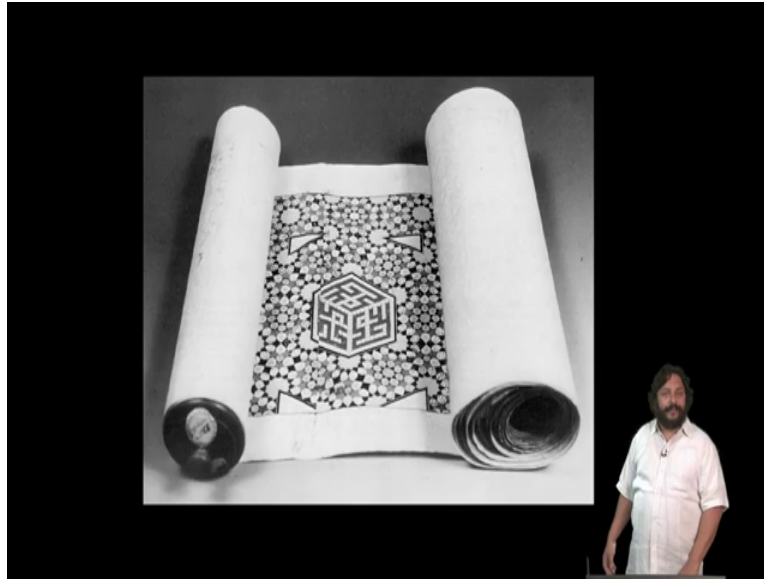
How to build forms, such as the Mukarnas which is made by putting in pieces of molded tiles together.

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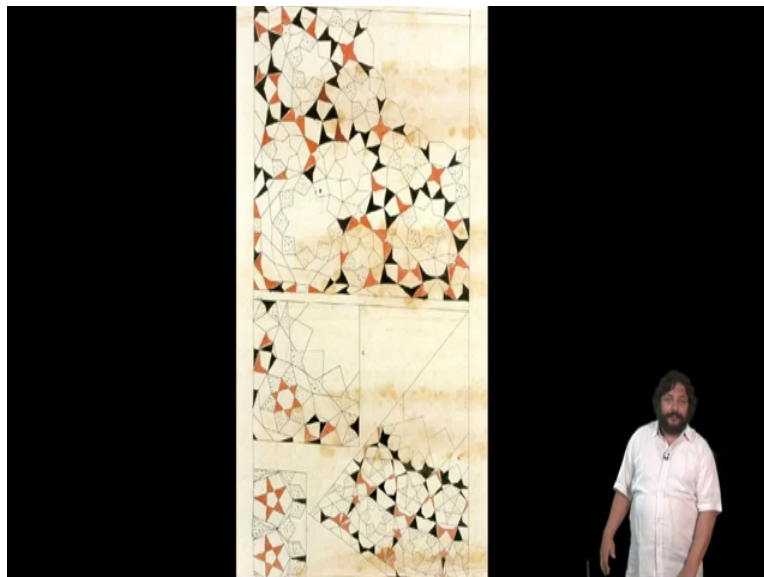
We will see similar kinds of things in the Delhi sultanate where there are attempts at making some kind of Mukarnas but again the local crafts tradition has not evolved in that direction yet.

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But most importantly what is called the (9:02) is a window into how all kinds of arts are unified by systems of geometry, this is an important (9:13) in which you have details of all kinds of geometrical applications which can be used when they are scaled up or scaled down to create everything from leather bindings and books to large palaces.

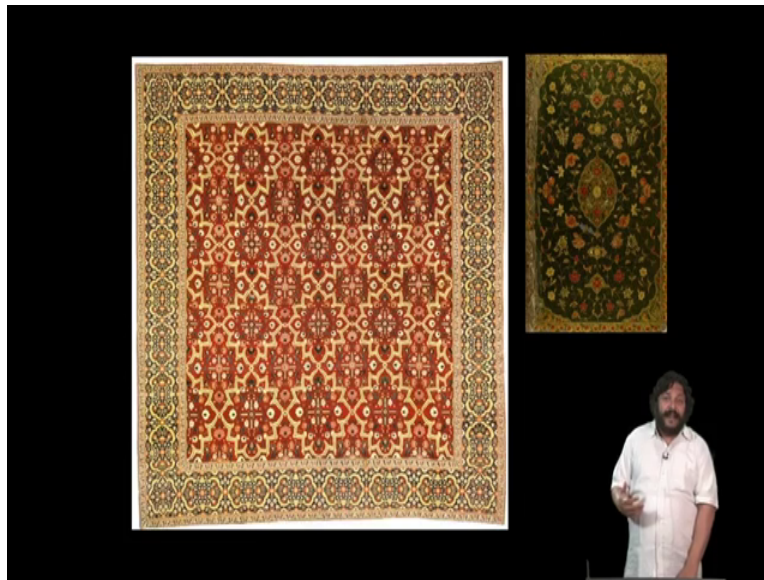
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This is what the drawings look like and again while maintaining proportions if you can scale up this drawings they can be used to embellish the walls of a palace with tiles.

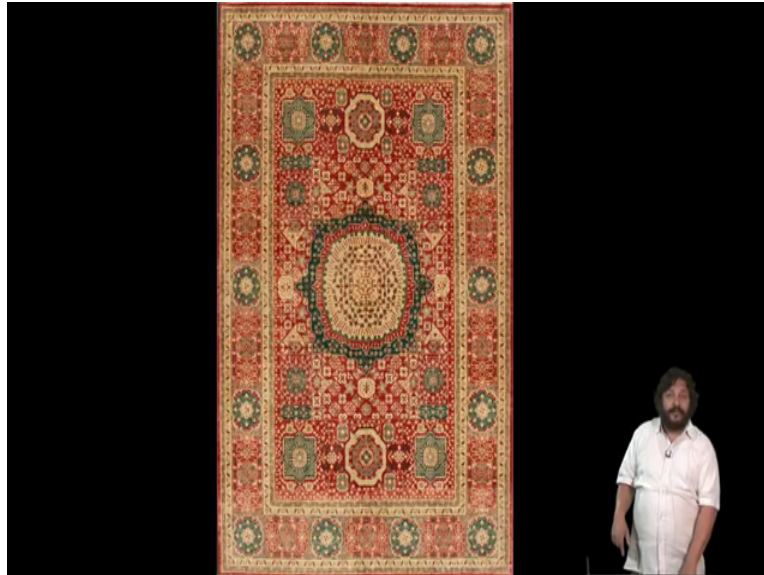


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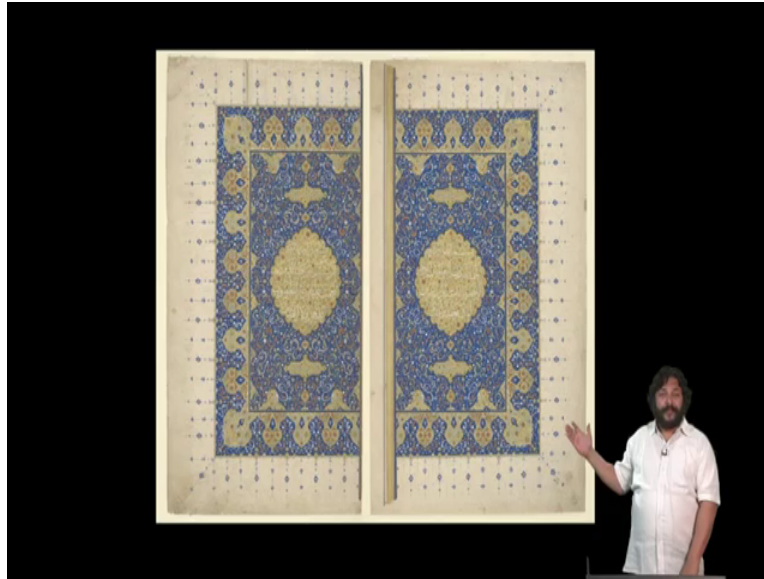


If they are reduced down to a very tiny scale they can be used for the elimination of manuscripts in the creation of carpets in what you have up here which is small leather covers for books.

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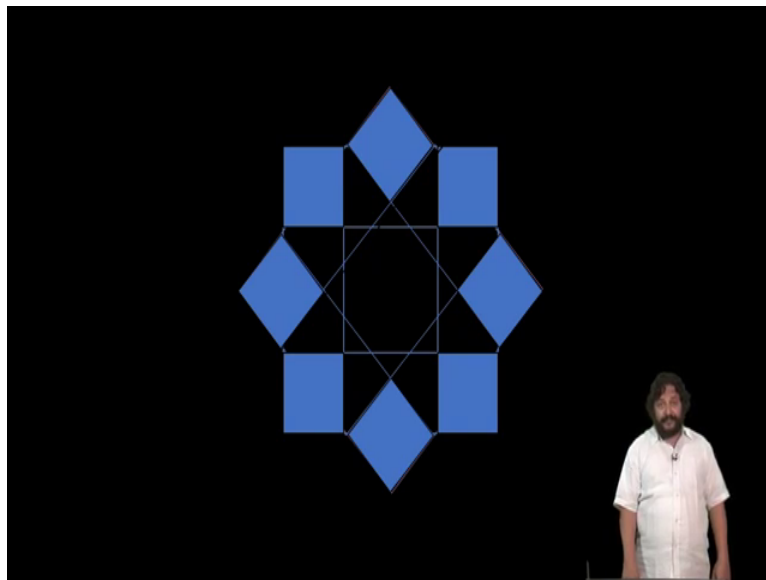


This kind of geometry is not really to be mystified it is a question of a plain simple geometrical technique that you can apply across a range of arts to book covers which look like carpets to book covers (10:21) pieces such as this and also this are all examples from miniature paintings where this kind of geometry is used as ornament to depict various kinds of surfaces, textures, buildings and settings again pastiche of the same.

Now why this is all from miniature paintings notice that this are all examples of how buildings have been rendered in various kinds of paintings and the buildings themselves would actually

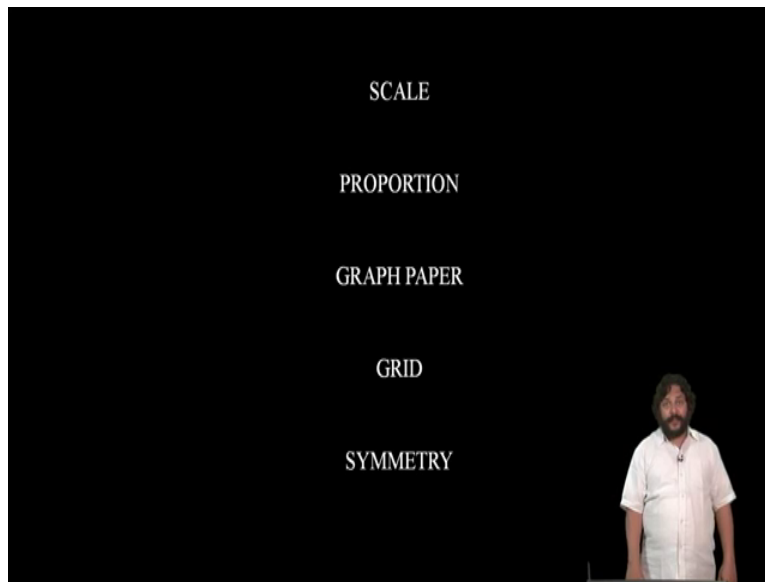
have gone the same geometry except at a very different scale so a lot of sultanate architecture in India will be very heavily shape by the idea that you can take surface decoration scale it up or down and use it for a variety of ornamental purposes. Geometry is one of the disciplines in which the Islamic resonance of the 10<sup>th</sup>, 11<sup>th</sup> century played a big role, there were excellent geometers who devised techniques of making all kinds of patterns, tessellations, mirroring variety of techniques I which to embellish buildings.

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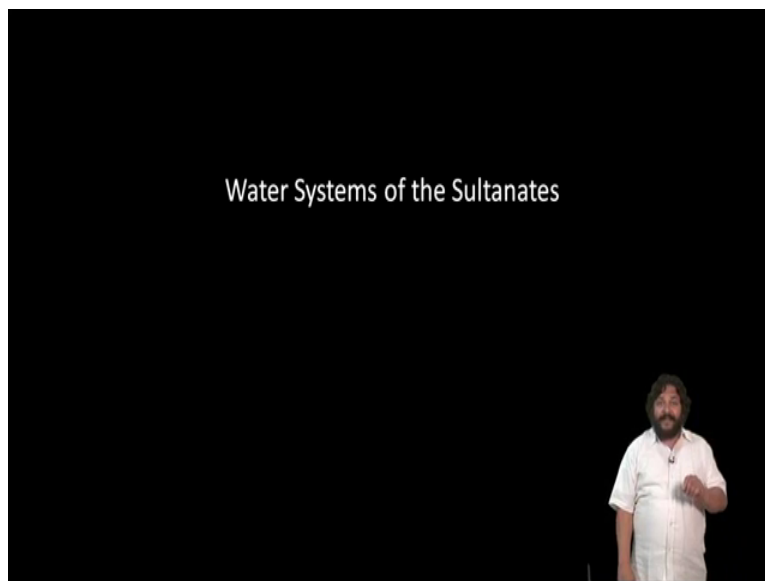
Taking something like a very simple square you can rotate it, make connecting lines in all directions and then shade certain patterns of the shapes that have been created and low and behold what you have is a very common motive used in decoration.

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Therefore this understanding of scale of proportion of grids and of symmetry is very important but the central factoring on this is graph paper which we know from the 10<sup>th</sup>, 11<sup>th</sup> century becomes quite common across the Islamic world.

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The other big thing that is brought in as a technology by the sultanates at the water systems which allow them to build cities in place where you could have never imagine them.

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As a first review Indus Valley Civilization which we have seen where you have a problem of access water that needs to be drained out.

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As supposed to Indian cities that you have which are always along river banks where you have a perennial source of water.



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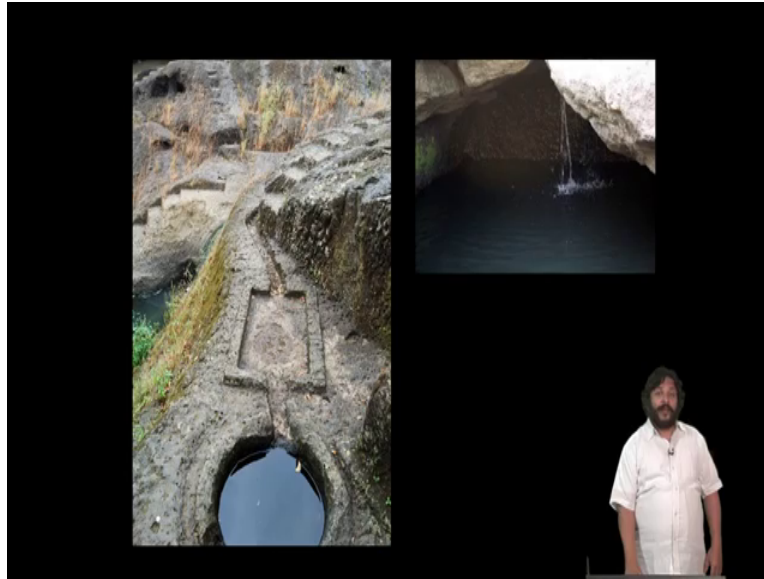


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What you start having is the large scale construction of dams and systems in the Buddhist period to store water.

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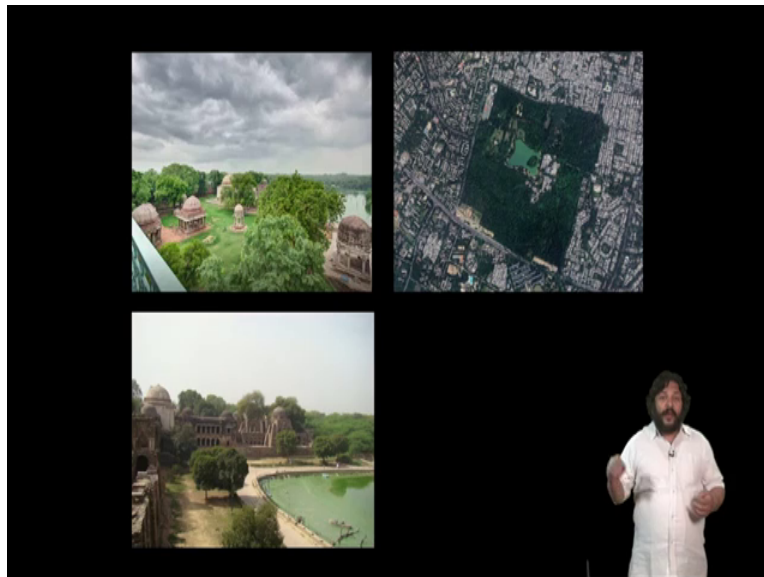


Infact if you go to the Kanheri Caves you can see carved into the rock various kinds of devices to channel and pull water but all this relies on open systems.

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We have a great tradition of step wells of all kinds of Kundas but what the sultans do for the first I was you see in this picture of the house (13:57) is build massive artificial reservoirs with a number of palace buildings on the side.



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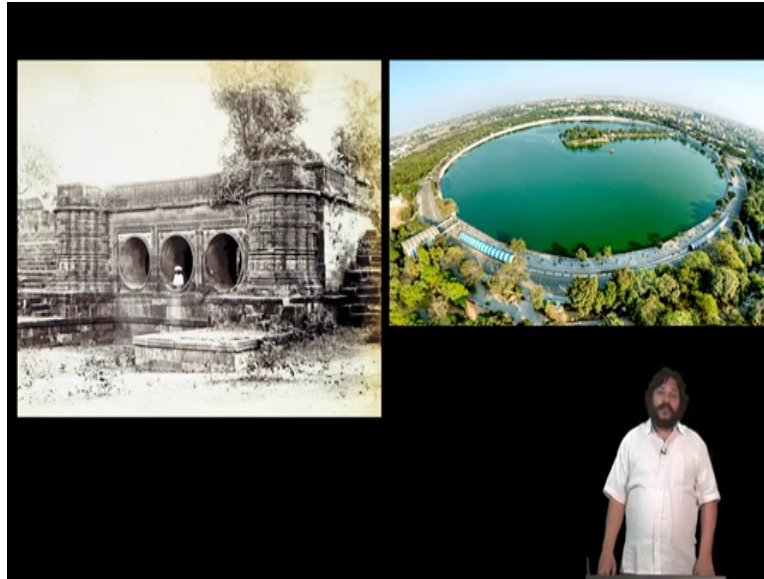
And also bring with them what is called the Persian wheel by which you can harvest water and (( ))(14:16) transforms the circular laborious movement of a pair of oxen into a vertical wheel so that the water can be pulled out.

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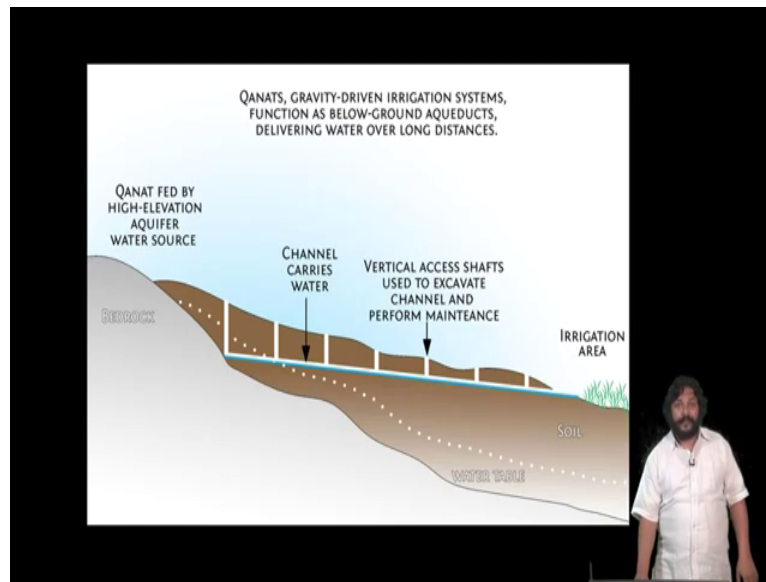
We can see examples of this all across India as in this fort of Kalyani in Karnataka where the ramp is where the oxen would go up and down the water would be collected in tanks fed into (( )) (14:42) sometimes into underground pipes from where it would be transport to the great distances.

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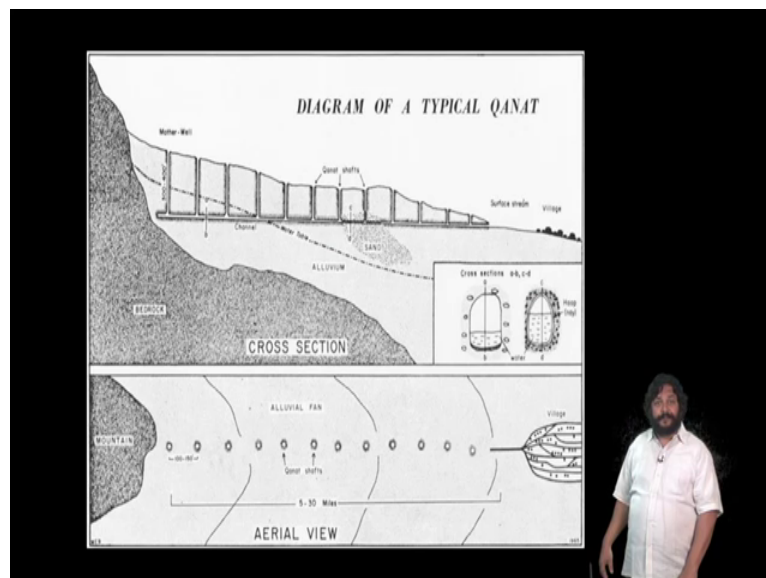
In Gujarat the sultans of Gujarat in the 15<sup>th</sup> century build the house (14:57) now called Kankaria lake a perfectly circular water body in which the water seizes you see on the further side would channel in water a whole system of hydrology was understood where water would collect have it naturally channel itself into depression in low lying areas and how it could be tapped? To fill up great reservoirs and how from this reservoirs the water will be distributed through a network of underground pipes into settlements that the sultans build.

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The other system that was brought over particularly from Iran was the system of what are called Qanats where you tap into higher water table quite a distance away maybe 12-15 kilometers away and essentially create a horizontal tunnel with a very mild slope punctuated by a vertical shafts which will bring water continuously and (( ))(16:06) to areas that you desire a water supply.

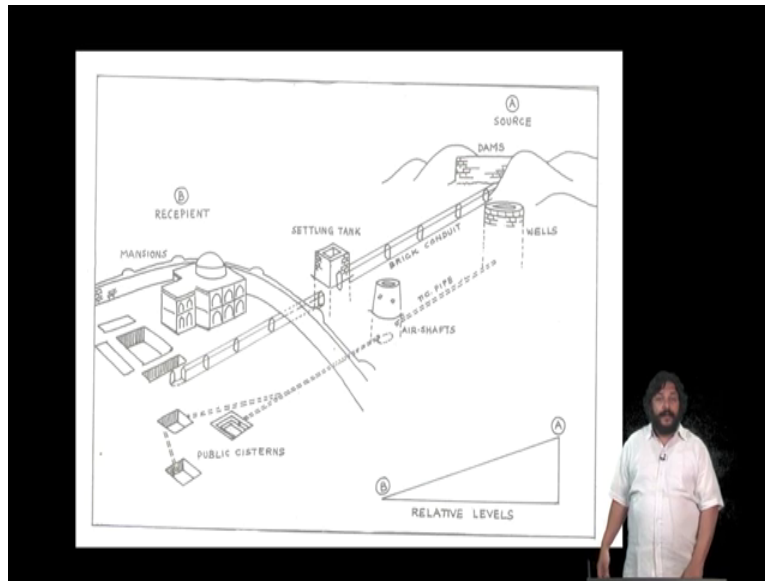
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Typical Qanats are punctuated by this kinds of vertical shafts holes and you see this across the Deccan Plato. What this kind of technology allows in for the first time you can build cities purely

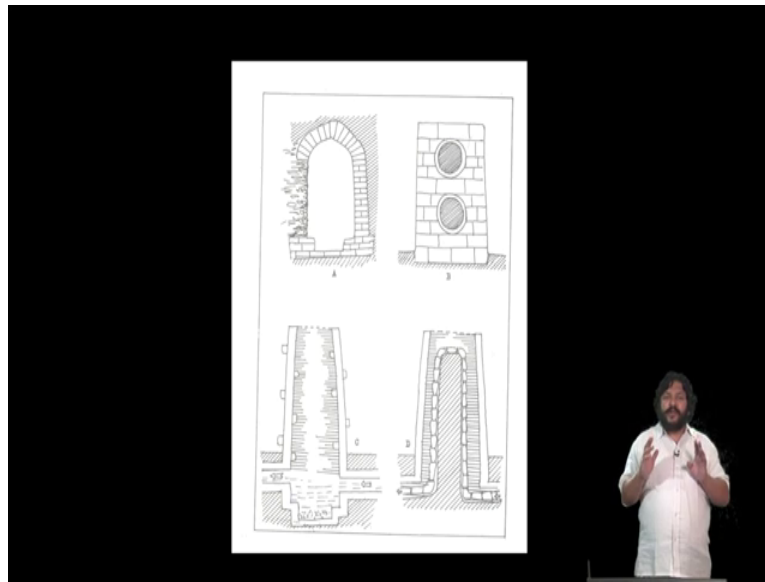
for strategic reasons strategic military or strategic in terms of mercantile value. You can build a city not based on where a river flows but on factors completely extreme less to that and therefore you have cities like Bidar and Ahmednagar and even Ahmedabad which are all possible in places that do not have perennial rivers flowing right by.

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And therefore you have systems like this that convey water over very large distances but allow the defensible sighting of sultanate cities.

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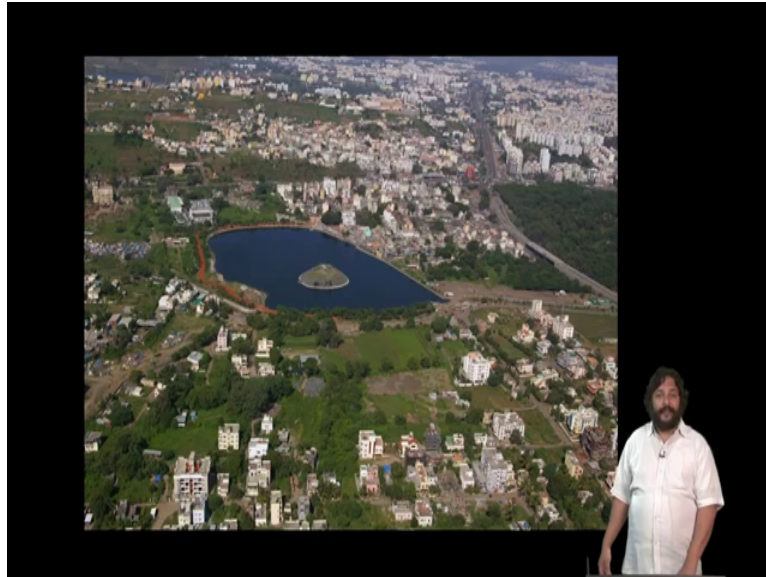
The features you see most commonly when we have water systems that bring water from far away are underground tunnels and conduits like the ones on top. So first you have a (())(17:39) lined tunnel through which water will flow or you might have a block of (())(17:46) through which you have clay pipes that convey water. But all this systems will have what you have at the bottom siphon towers and settling towers so you will have punctuated at regular intervals on the pipes certain kinds of mechanisms by which not only is the pressure of the water equalized but there is also a way in which there is sedimentation along its flow.

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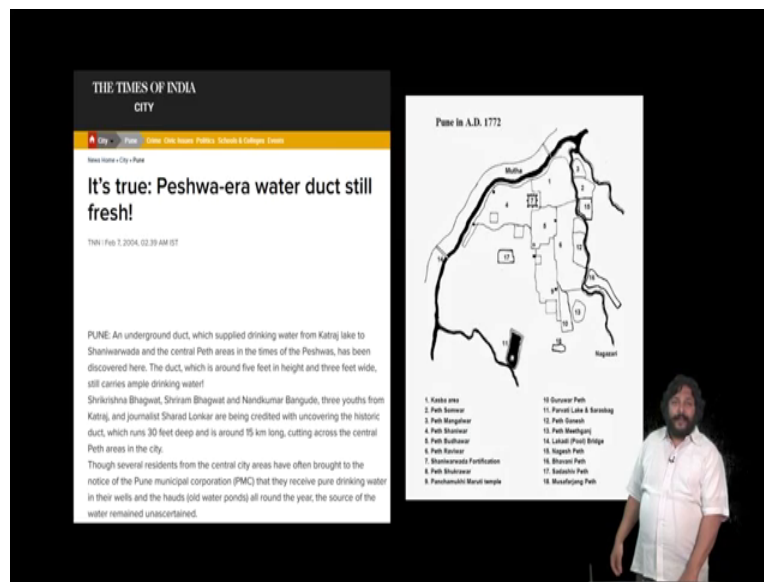
This is what the towers look like it is not impressive architecture but totally utilitarian the value is enormous the esthetic is non-existent.

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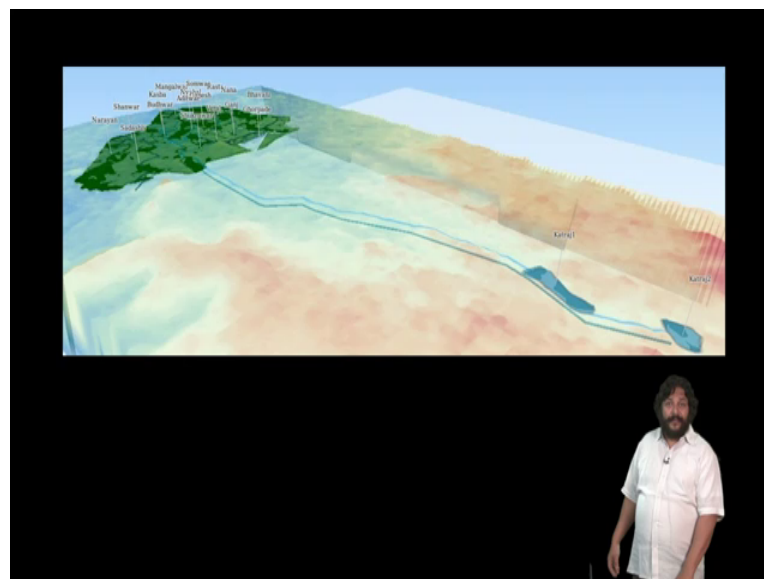


The last scale example of this ironically is not with the Mughals who are very conservative when it comes to building cities most Mughal cities are on the banks of river in very traditional ways of water harvesting. The Marathas with their capital at Pune decide to embrace this sultanate system of water conveyance from a large distance and this is the large scale implementation we see of this program.

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Where the water supply still runs. It has been actively modeled by (19:17) in recent years and it is exactly the same as sultanate periods settlements. So ironically the great sultanate legacy of water management is not picked up by the Mughals but by the Marathas thus there a few important things we have to understand about the sultanates in India. The sultanates start off with Delhi where you have the first sultans who build themselves a new capital first around the areas called Mehrauli and then Tuglakabad and then string of capitals in build in same vicinity.

Delhi is important because it controls the Gate way to the Gangetic plain it is at the edge of the desert and that is where all traffic from the north west is going to come through. The early sultanate is set up by military slaves of the great sultans who have appointed them to take care of the province the soon declare independence build monuments like the Qutub Minar like the Quwwat-ul-Islam mosque and leave behind a number of ruins in that area the success of the sultans continues through a string of Dynasties the Khilji's and Tuglaq's most notably in the 14<sup>th</sup> century they will expand their domains to all over India appoint military commanders in every part in Gujarat, in Jaunpur, in Bengal, in the Deccan, in Mandu, in Malva, in Khandesh and all even in Vijaynagar but all of them will rebel and quickly create their own independent kingdoms.

They will follow a policy of really defining local identity through new languages that are emerging but also through the regional architectural idioms. The architecture of the Delhi sultanate which is wide spread for about 25 years across the whole India is quickly taken over by regional architecture of new sultanates that emerge. But towards end of the 14<sup>th</sup> century a new central Asian king Timur has arrived on the (( ))(21:51) and he such the tone and the turner ofr what a good sultan is and it is his ideal that everybody will try to follow, they will want to be kings like Timur they will want to build buildings like him, they will want to patronize the arts like him.

The other things that come in along with an aspiration towards being kings like Timur is a deep sense of geometry and also the technologies of conveyance of water. Geometrical understanding, water technologies aspirations to be a king like Timur, combined with various regional sensibilities in what makes the regional sultanates of India very unique and we shall see examples of how this difference sultanates vary and eventually we will take a look at the fort of Daulatabad which is one of the grandest sultanate period forts continuously occupied into the 20<sup>th</sup> century, thank you.