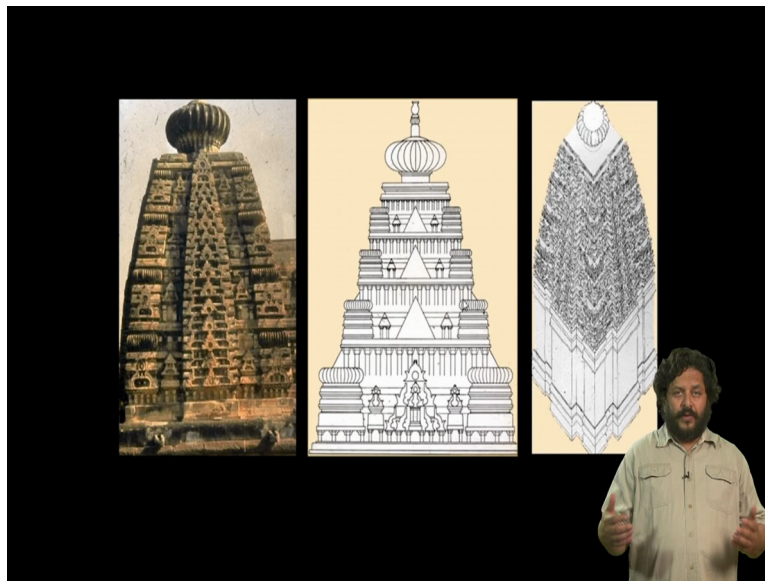


History of Architecture in India
Doctor Pushkar Sohoni
Department of Humanities and Social Science
Indian Institute of Science Education and Research Pune
Lecture 04
The Great Temple

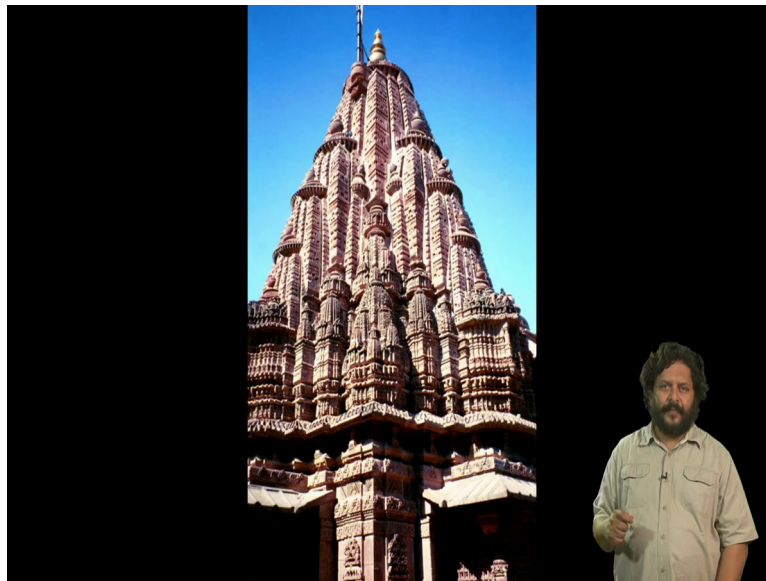
Temples as they become more complicated in plan have repercussions for have the superstructure of the temple also evolves.

(Refer Slide Time: 00:25)



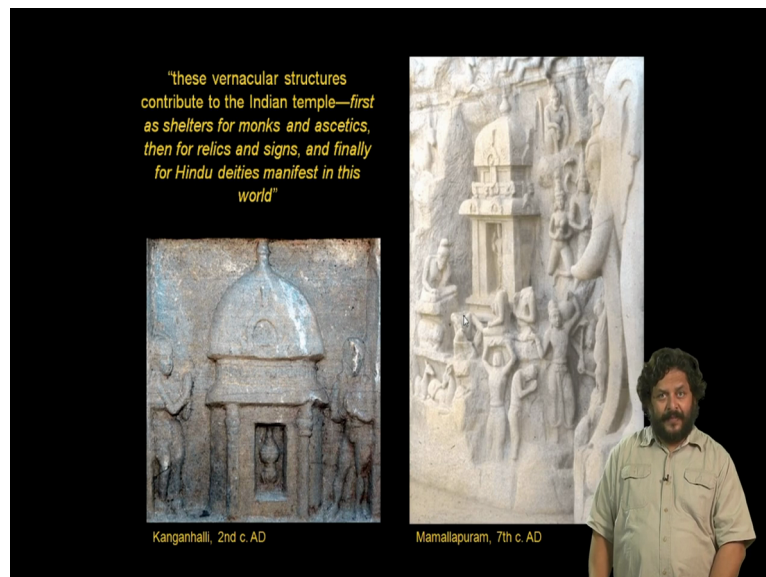
The North Indian temple, the latina temple, the nagra temple as it is called is composed of a series of multi-storeyed pavilions but here they have been compressed and because of the strong vertical lines it gets called latina, lata meaning kripa. The idea is exactly the same as a kutina temple, a dravida temple or a South Indian temple whatever you choose to call it.

(Refer Slide Time: 00:58)



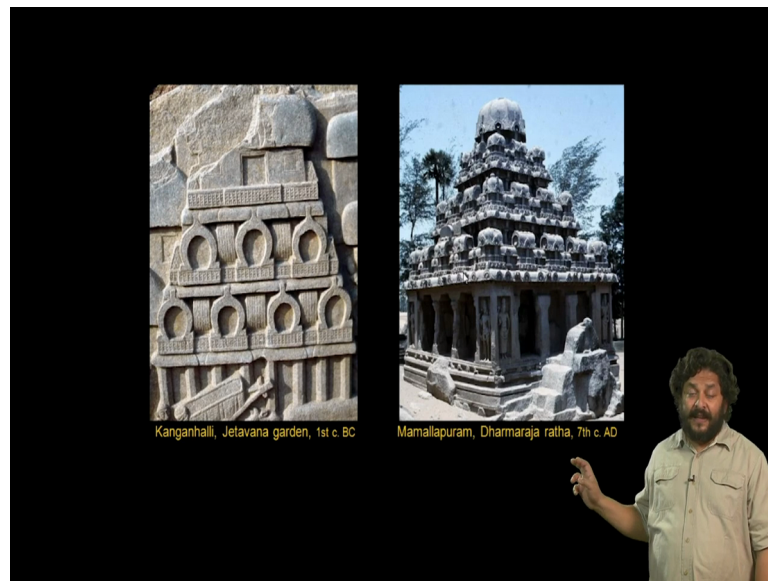
This is the shekhari style of temple building in which a complicated plan of the sanctum is manifested in equally complicated ways on top where you have one main spire and miniature spires cascading down its side. This is one way to resolve the accordion like folding of the sanctum.

(Refer Slide Time: 01:28)



Kutina temples or South Indian temples are built of simple models of aedicules. This simple hut that we saw is the module that makes up the spire of the South Indian temple.

(Refer Slide Time: 01:43)



Seen in Buddhist reliefs at Kanganhalli in the 2nd century BC to depict a mansion for the Buddha, a multi-storeyed palace built out of a simple hut like aedicules with a hut on the terrace. And seen in the Dharmaraja ratha at Mahabalipuram in the 7th century CE, 800 years after that relief is the same idea, a multi-storeyed palace made up of small hut aedicules, the square ones being called kutas and the longitudinal ones being called shalas.

(Refer Slide Time: 02:20)



At Mahabalipuram are a series of five boulders sculpted into temple like forms in the 6th century CE. Parallel with developments that you find under the in South India you have a different visualisation of what a shelter for the Gods will look like.

(Refer Slide Time: 02:49)



These rathas as they are known at Mahabalipuram can be thought of as an architectural showcase of different forms where somebody who wishes to build a temple can order (()) (03:03) saying I want so many of these shalas, so many of these kutas, I want them composed in this way. So what you see in the ratha on the right are miniature versions of two of the rathas that are built here.

(Refer Slide Time: 03:19)



The long ratha you see in the middle and the ratha you see to your extreme left are the shala and the kuta respectively. These will be miniaturized and form the different storeys of the temples. There is a lot of clever word play in these temples as well where you have an apsidal

shape also called a Gajapriksha or the back of an elephant which is placed right next to a sculpture of an elephant with its back towards you.

(Refer Slide Time: 03:56)



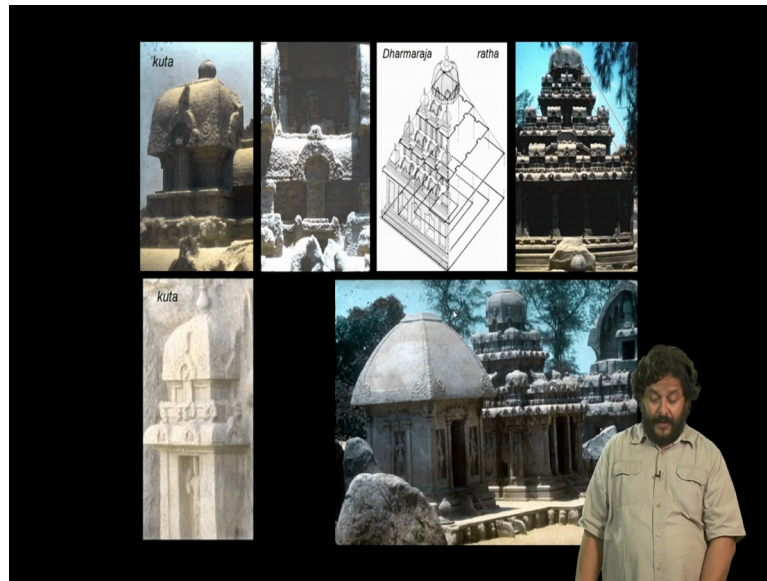
This is the kuta, the simple square hut that is one of the aedicular modules of the South Indian temple.

(Refer Slide Time: 04:06)



And here you sit in the corners of the two storeys on top.

(Refer Slide Time: 04:12)



The kuta never really goes away from any of these temple forms.

(Refer Slide Time: 04:21)



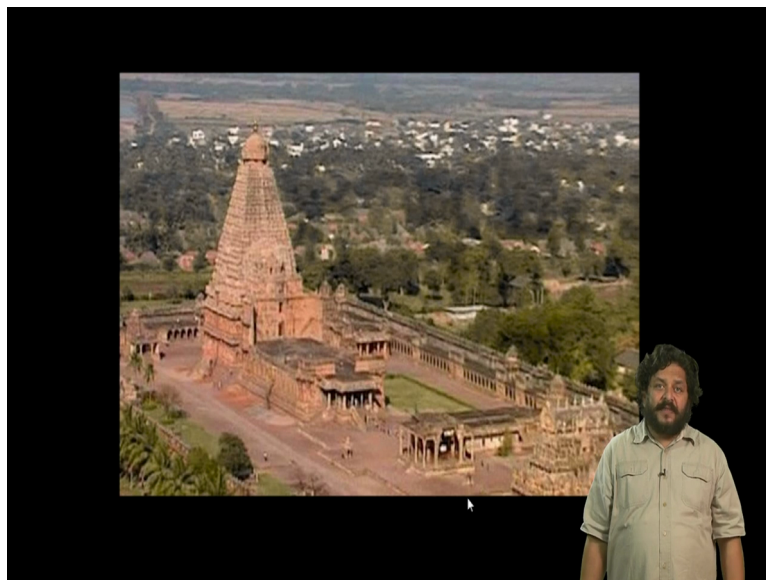
In fact the first free standing temple, so this is now a constructed temple at Mahabalipuram not carved out of a single boulder but made up of different stones. The short temple as it is called is made up of these long shalas and these square kutas at the ends. Note, there is no amalaka on the top but a big hut.

(Refer Slide Time: 04:47)



From there within 400 years you will get to a temple like the Brihadeshwara temple at Tanjavur built by Raja Rajachola in 1010 CE. Note the scale of this temple. Obvious when you notice that there are two people sitting right at the base. This is truly enormous but compositionally it is exactly the same as the short temple. A whole series of tiers made up of kutas and shalas till you have a hut right on top.

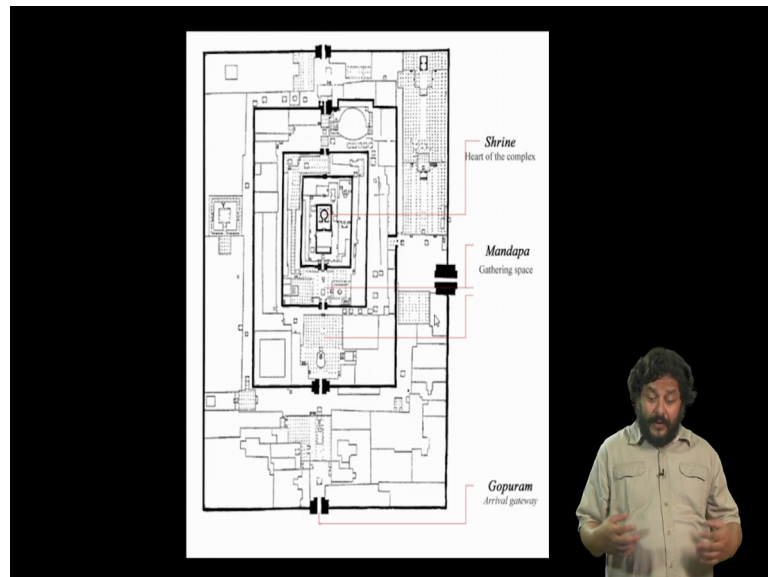
(Refer Slide Time: 05:17)



The Brihadeshwara temple is unusual. In that the temple sanctum reaches these enormous proportions, keeping in with the trend of the 11th century in India where everybody is building temples larger than the neighbours. But this trend is soon reversed and we shall see with South Indian temples that the sanctum of a temple actually remains quite small in later

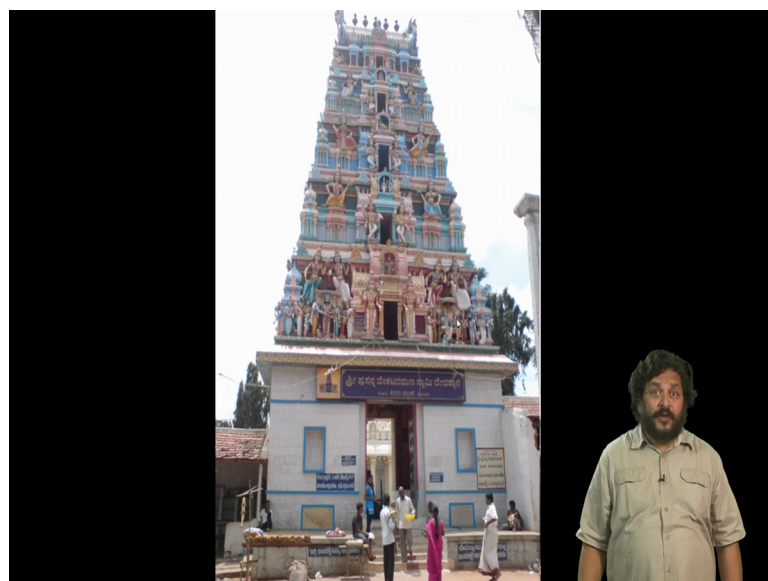
years and it is the gateways that grow in size. Notice the two gopuras at the extreme right, the two gateways to these temples. They are quite small in size.

(Refer Slide Time: 05:54)



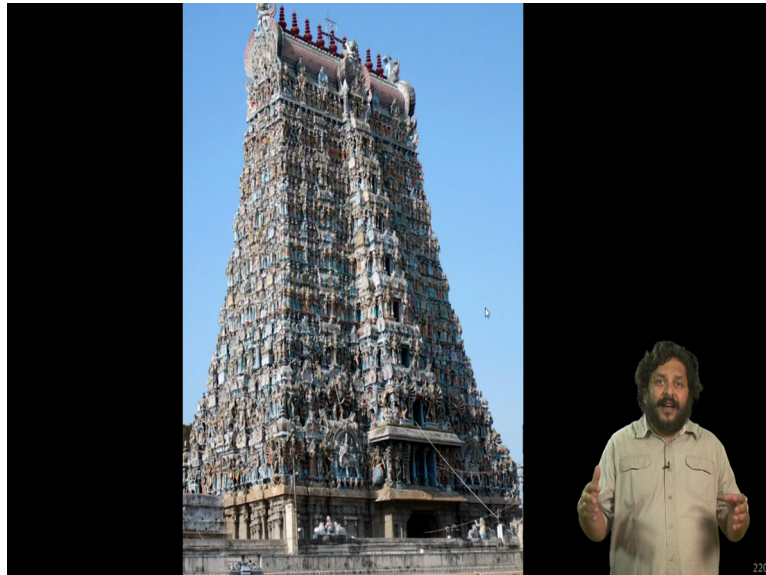
The Brihadishwara temple like a lot of temples in South India is made up of a number of enclosure walls. As temple grew prosperous and cities around them grew prosperous there was a whole economic and social order in which temples were at the centre. Temple became more important than ruling dynasties. Sometimes temples would patronize kings as opposed to kings patronising temples. Temples in fact became the centres of cities.

(Refer Slide Time: 06:28)



As you can see with the Meenakshi temple enlarged through successive centuries till in the 17th century it becomes a whole series of enclosure walls encompassing multiple cities that have grown up around it. The sanctum at the middle is quite small but with each successive enlargement of the settlement the gateways rise and become larger than ever before.

(Refer Slide Time: 06:56)



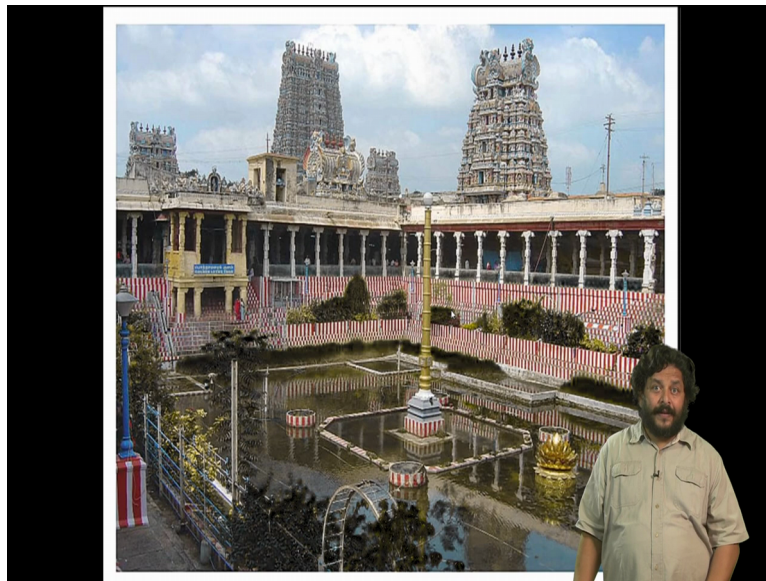
And so what start off at the inner circle being small gateways, by the time you get to the outer gateways have grown in size.

(Refer Slide Time: 07:07)



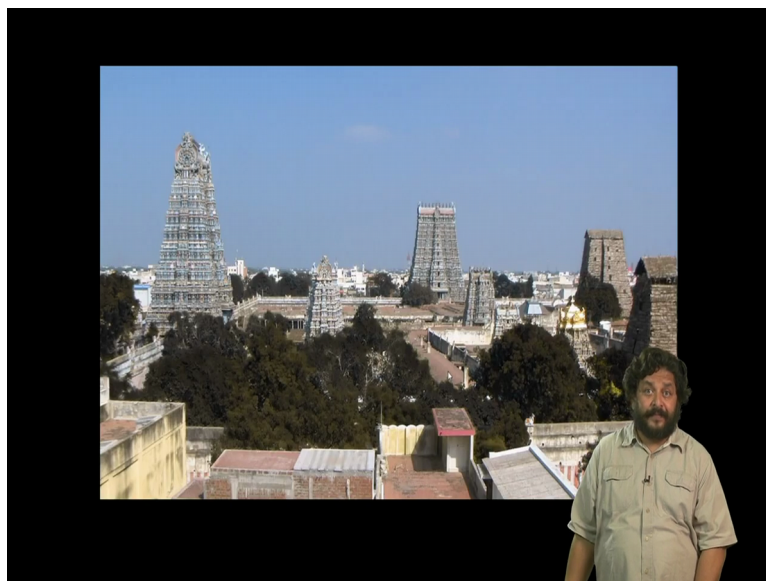
The enlargement of a city is a marker of its prosperity and as the temple city grows and becomes more prosperous, the gateways get larger and larger.

(Refer Slide Time: 07:26)



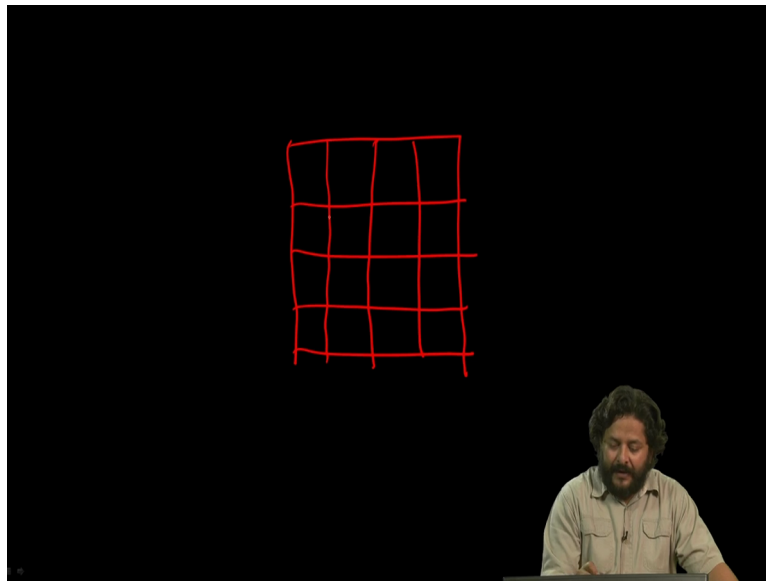
These gateways, as they are on the outsides of the sanctum display more and more creatures that are not necessarily directly divine but sometimes semi divine, belonging to worlds that are beyond the Devloka.

(Refer Slide Time: 07:40)



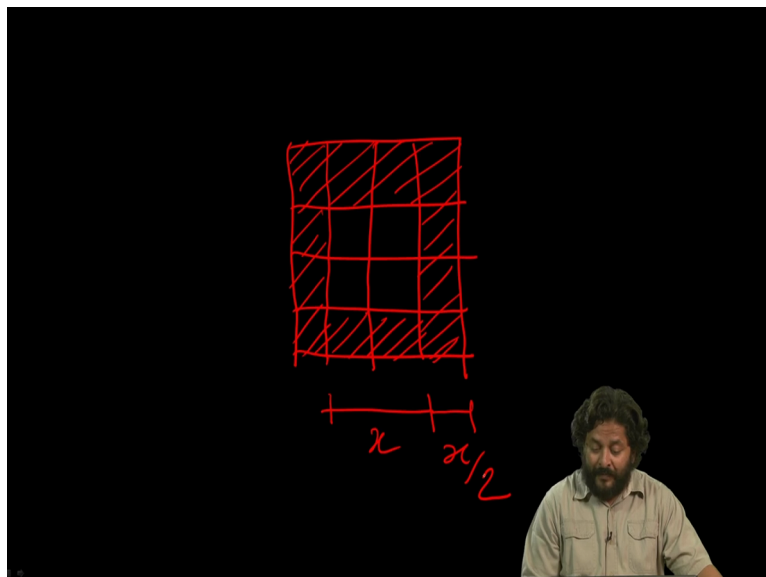
Here you see a South Indian temple where the central shrine is modest. You might have a small kunda, but it is the outermost gateways that are the most massive.

(Refer Slide Time: 07:55)



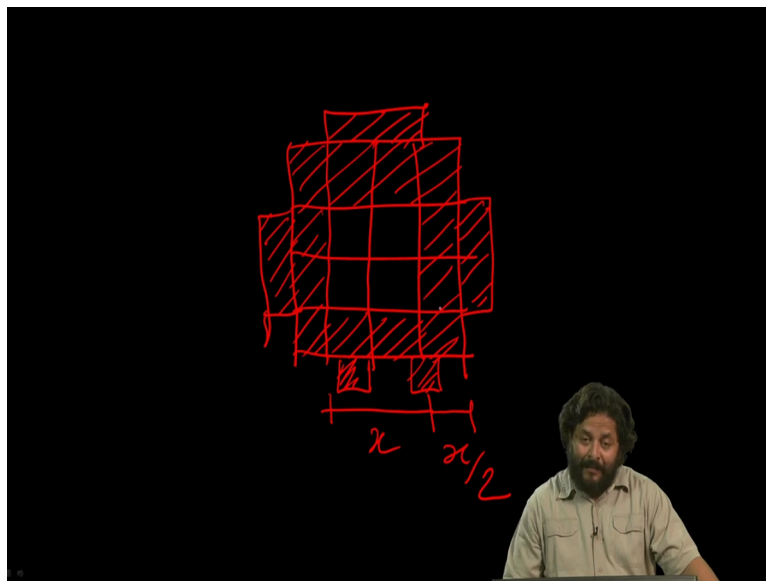
Here what you see at of the bottom right that small shrine with a golden hut on top is the main shrine and successive enclosure walls as they grow outwards have gateways that grow in size. The earliest prescription for a temple plan suggested that a temple had to be constructed. That is to say the sanctum of a temple has to be constructed in a way that you had 16 equal squares arranged in a grid like this.

(Refer Slide Time: 08:30)



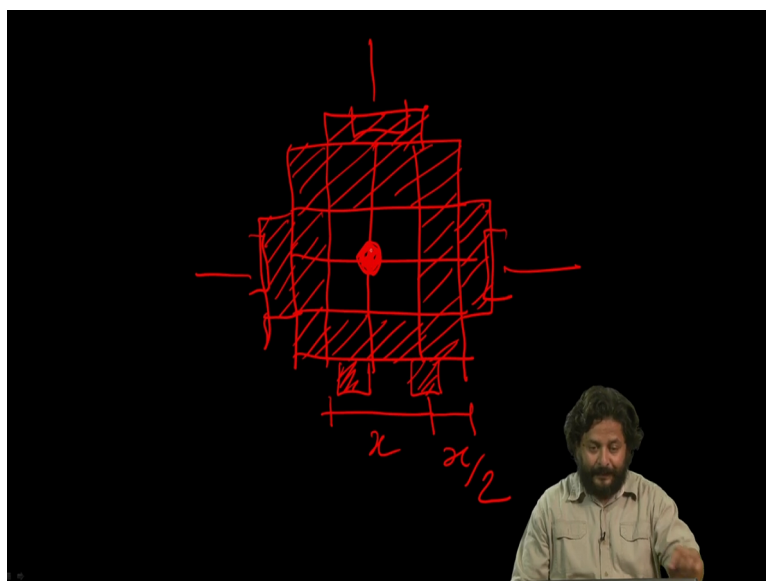
The wall thicknesses of the sanctum would be exactly half the open space left for the sanctum and so the area that is being shaded are the wall thicknesses and what you have in between is the sanctum of the temple. Naturally if the sanctum is x wide, the wall thicknesses are x by 2.

(Refer Slide Time: 08:55)



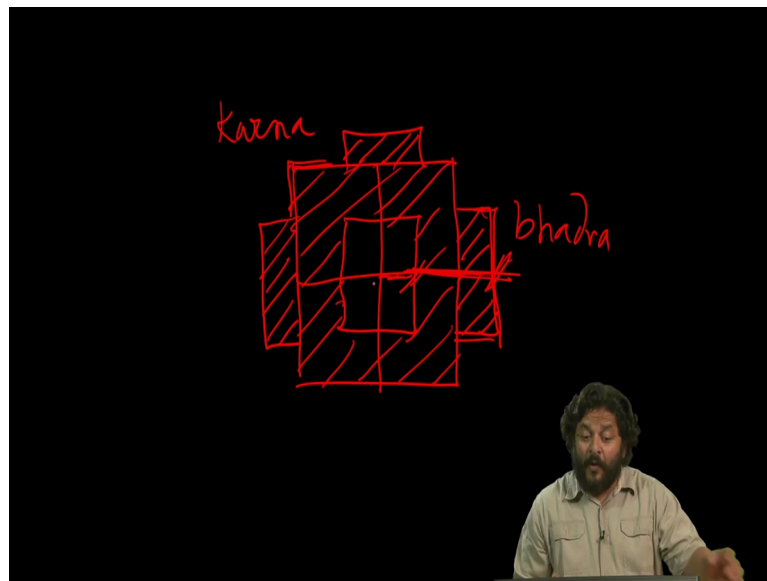
So they are half the width of the open space. Now as the temple plans become complicated you have projections on all sides like this and these projections will have on them statues, relieves, idols of various kinds of deities who are inside the sanctum.

(Refer Slide Time: 09:22)



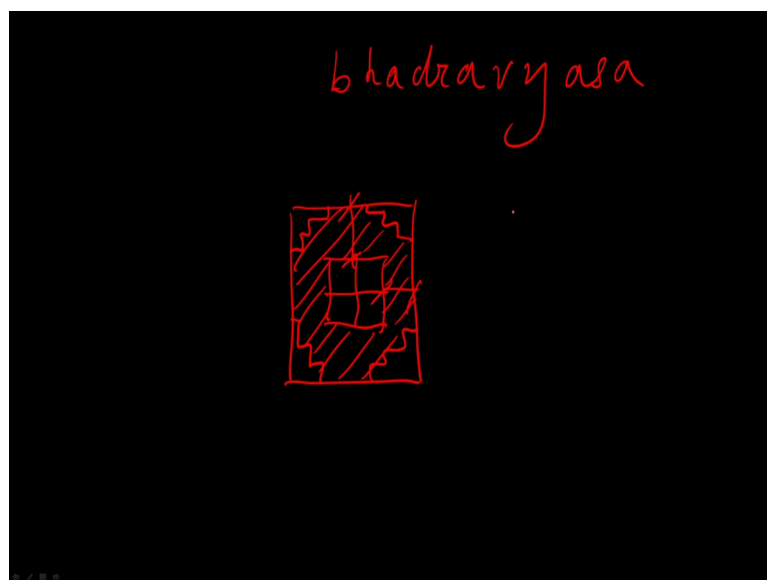
So for example if this is a temple of Vishnu, on these three sides you will have relieves sculptures that show various avatars of Vishnu. In the inside you will have the main icon or statue or idol of Vishnu. This part will be marked by a vertical axis and it this vertical axis is manifest in the form of a spire.

(Refer Slide Time: 09:47)



Now the question that arose was if the prescription of wall thicknesses to the area of the sanctum was to be maintained, which is to say if that ratio of the walls being half the width of the area in between was to be maintained, how do you accommodate these kinds of projections? Because if you have these projections, the thickness of the wall has changed, this is not half the open space. This projection on the main side is called a bhadra. The corner of a temple is called a karna.

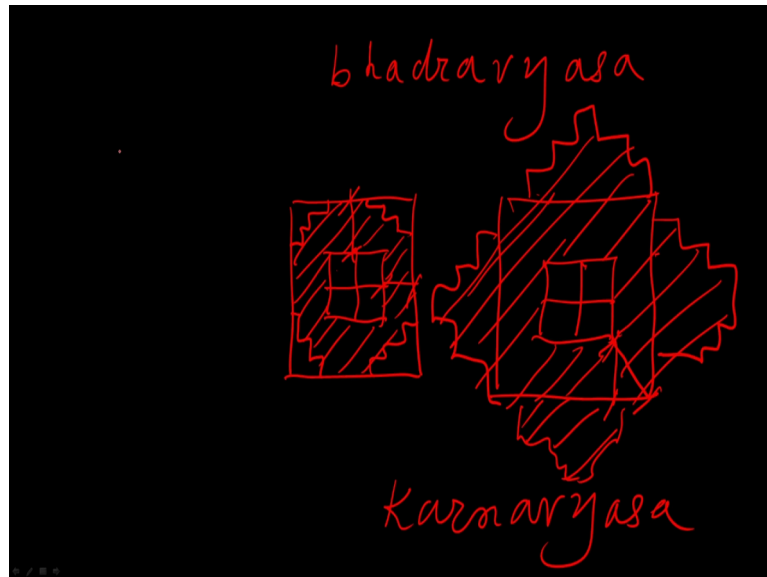
(Refer Slide Time: 10:43)



And so you had two opposing schools of thought, one of which was that if you have a temple sanctum you could measure things by a system called bhadravyasa which means you hold this proportion to be sacrosanct if this is twice the thickness of the wall. And use coup out

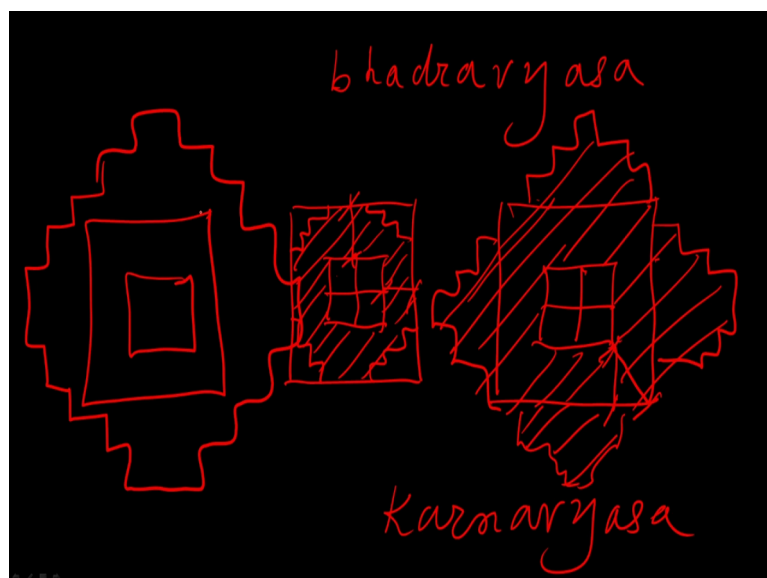
elements from the corners in order to maintain a proportion. So this becomes your wall thickness, this is called bhadrayasa because the bhadra is the measure that is held to be sacred.

(Refer Slide Time: 11:30)



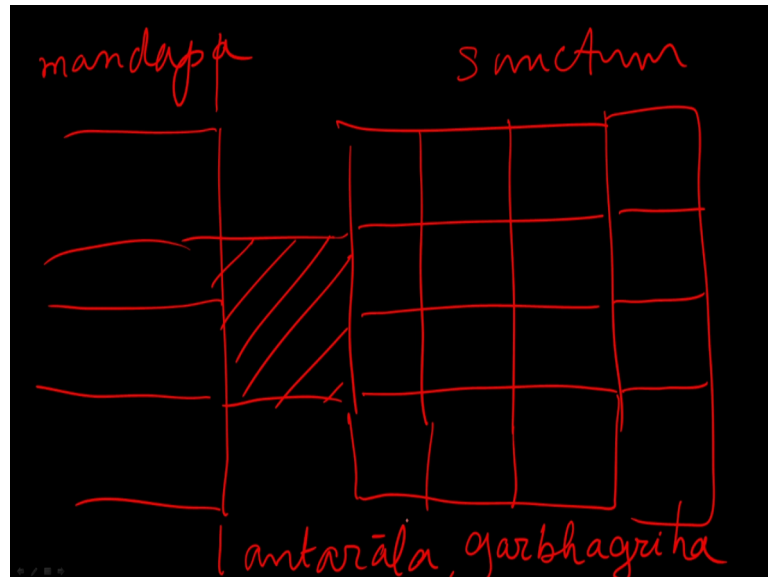
The other system you have is of course the karnavyasa in which if you have a sanctum like this and if you want to have projections, the sizes really do not matter, you can have projection like this as long as the proportion is maintained at the corners. So the karna maintains this proportion of being half the size of the sanctum and you can build up many kinds of projections on the outside and therefore these temples are naturally much larger as you have these projections. And they lead to very interesting kinds of building forms.

(Refer Slide Time: 12:20)



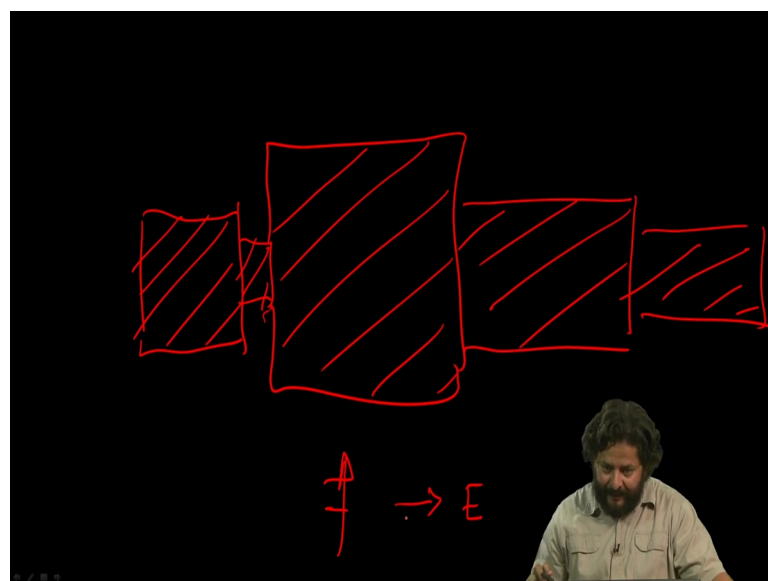
In principle all these temples will start becoming diamond shaped in overall form. But what will vary is if the temple is karnavyasa, the sanctum will be small. If it is bhadraavyasa, the sanctum will be much larger.

(Refer Slide Time: 12:43)



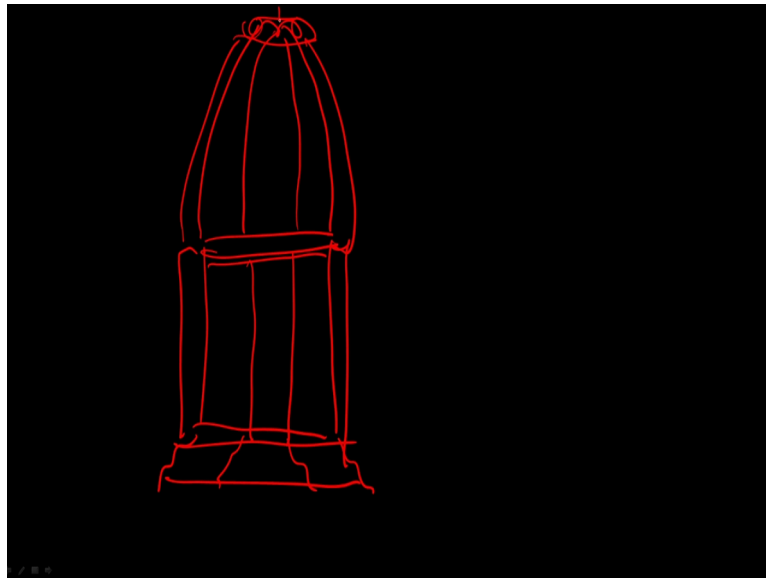
These proportioning grids which are used to mark the proportions of the sanctum of a temple are very often extended outwards to also extend to the sabhamandapa which is much larger. But the same proportioning system is very often used. This is the sanctum called the garbhagriha. This is the mandapa or the assembly hall which is in front. This transitional zone which is also very important in temples is called the antarala.

(Refer Slide Time: 13:35)



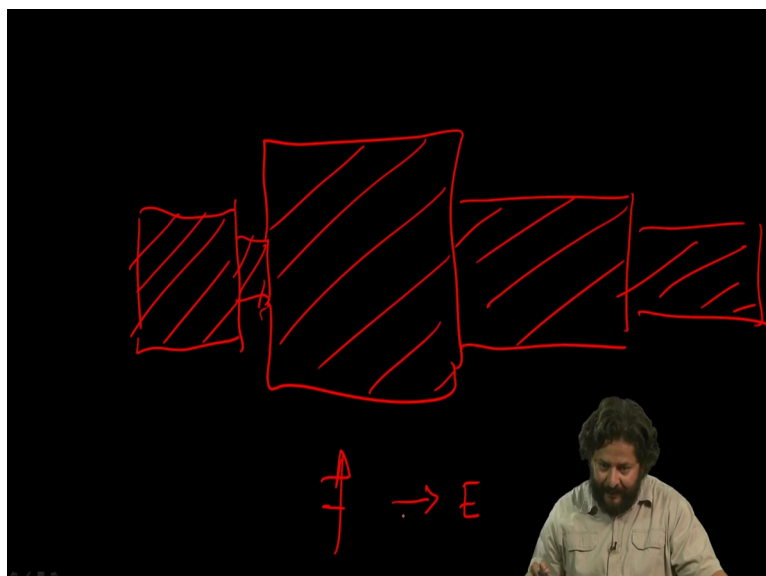
And so a typical temple plan by the 10th-11th century will be a garbagriha or a sanctum, a small antarala, a big sabhamandapa and sometimes if this is not adequate you will have a whole series of mandapas in front, each one of them meant for a specific different purpose. Most temples will face east, but in exceptional circumstances depending on the deity and other factors temples might face north, west or south, south being quite rare.

(Refer Slide Time: 14:16)



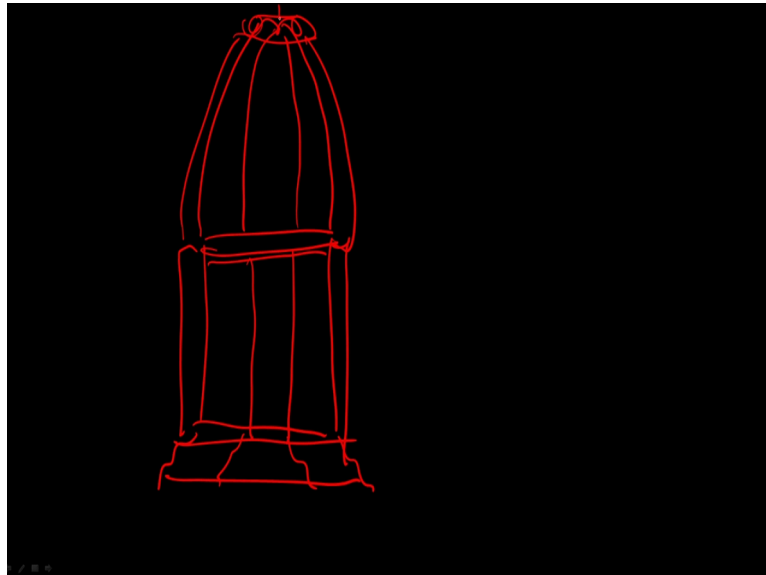
A temple as we saw the walls of which the bhadrakas become more and more complicated. They start having a lot of folds in plan. The shikharas also start getting more and more complicated as you have more projections on the outside. And so complication in plan also means complication in section and in elevation.

(Refer Slide Time: 14:51)



The two main types of temples that we talked about, the latina temple will have a number of storeys each of which represents a set of houses with a small griva or neck above an uttarvedi and an amalaka on top. These will be shaped as curvilinear spires and these vertical bands which are called latas give this temple type the name latina.

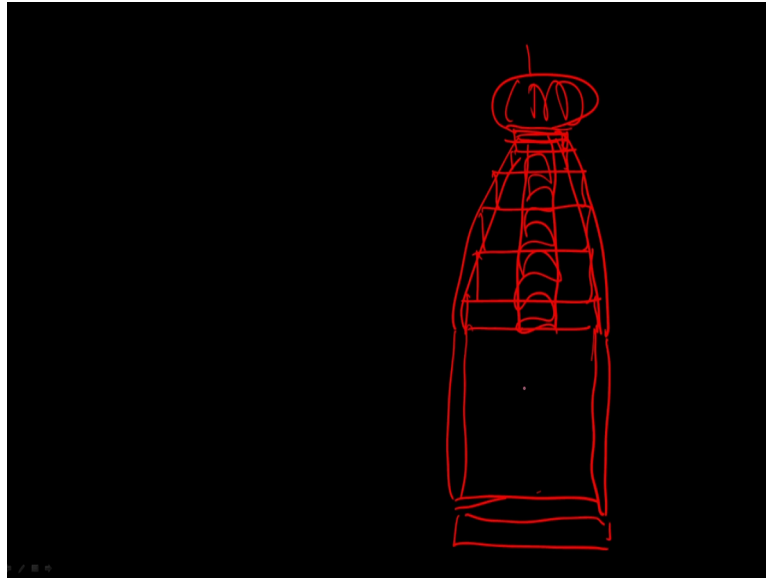
(Refer Slide Time: 15:30)



In the kutina temple which we have not seen yet but which we will see now, what you have are all these storeys are actually marked as horizontal bands and instead of having an amalaka on top, you actually have a kuta or a hut placed right on top. These bands are composed of alternating aedicula called kutas and shalas. And what these kutas and shalas are we shall look at in just a minute.

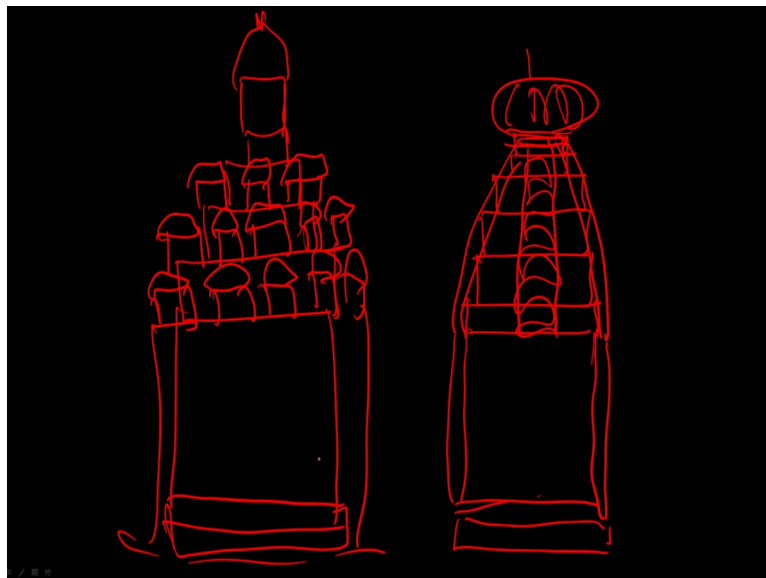
But here the idea that this is a multi-storeyed palace composed of many hut like buildings becomes very obvious and this is the kind of temple you will more commonly see in South India.

(Refer Slide Time: 16:20)



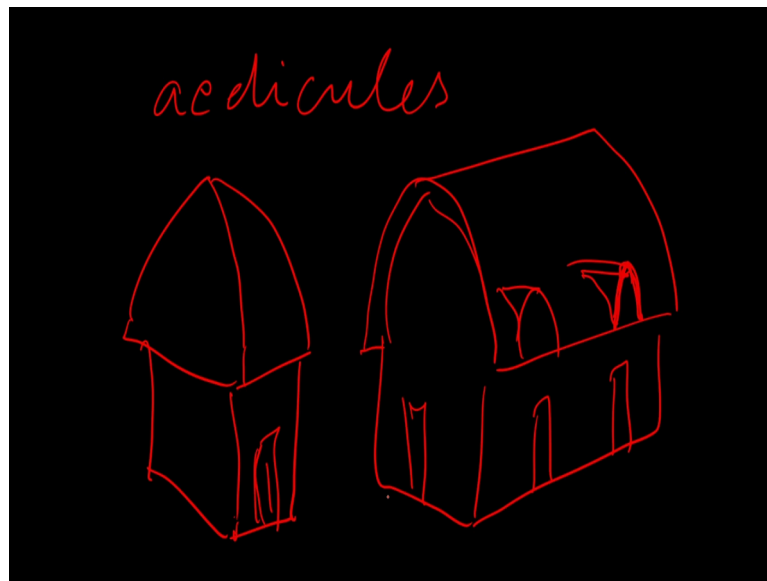
A kuta is a small square hut like this and we shall see examples of this at Mahabalipuram whereas a shala is a longitudinal hut shaped like this. When these are made in miniature they are called aedicules. Very often you will have dormer windows or windows in the roof depicted on the shalas.

(Refer Slide Time: 17:01)



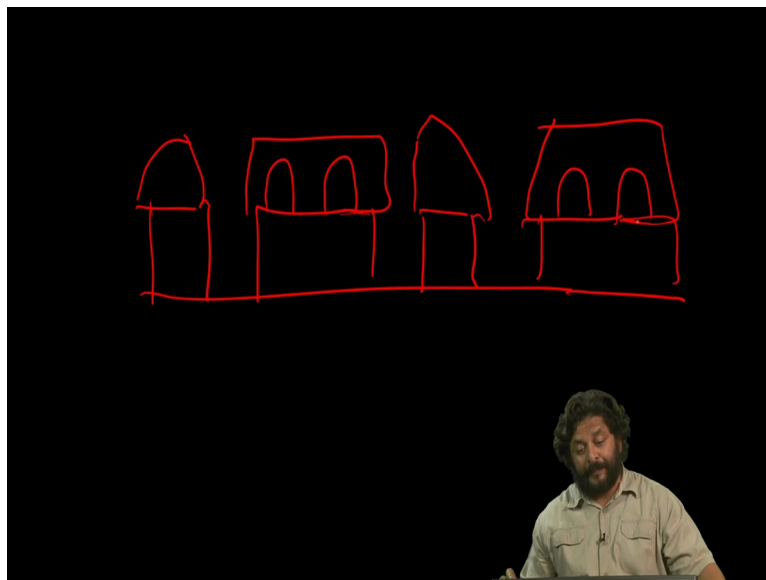
In South Indian temples you will often have a kuta, a shala, a kuta, a shala in alternating bands. The shalas will be marked by these dormer windows which you see from the side.

(Refer Slide Time: 17:24)



The two types of latina temples that are commonly found are called the shekhari and the bhumija. The bhumija is primarily found only in Western India, in Southern Rajasthan, Western Madhya Pradesh, Gujarat and Maharashtra. Remember that the sanctum has a number of projections on all sides because of which the plan becomes complicated. This whole thing will be set on a basement storey or a plinth.

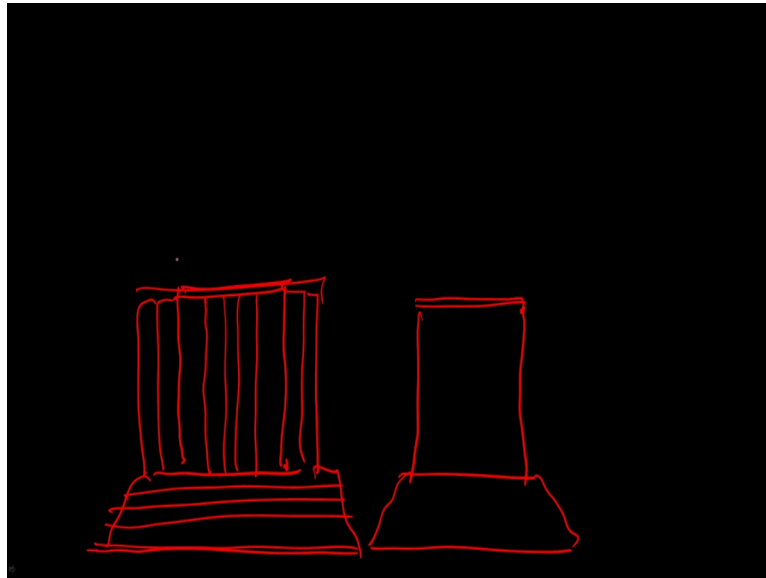
(Refer Slide Time: 18:14)



So when you have a spire with your amalaka on top, one way to accommodate this is to have a simple spire and corresponding with all the projections you have lesser spires. And as you project down the middle you have smaller and smaller spires, each one of them capped by an amalaka till you end up with a cascade of spires. This is called shekhari because of all the

shikharas from large to small as you go down the temple. In front of the temple separated by an antarala will of course be a large mandapa and the roof of the mandapa can be built in any way.

(Refer Slide Time: 19:20)



The other type that you commonly find, the bhumija type is again a temple on a plinth with lots of projections in plan. A cornice band over here and with the amalaka on top and here what you have instead are the central bands are marked by elaborate carving on all sides. And in between as you have a star shaped plan you have a number of small storeys with aedicules of the shikhara built up like this.

And of course you will have a mandapa in front with a roof perhaps of a completely different type. This where you have these horizontal bands which are marked off by these vertical latas, this is called the bhumija type. Bhumija means being born of the ground and these represent different bhumis or different grounds on which you have a multiplicity of shikharas.

(Refer Slide Time: 20:49)



The dravida temple is completely different because the dravida temple being the kutina temple because the sanctum itself is quite simple and square. You might have a few projections but what the temple is marked by are really a number of kutas and shalas that make up horizontal storeys.

Very often these kutas and shalas will diminish in scale as you go higher lending a sense of being taller than they actually are. And right on top you will have one large hut, sometimes multi-sided which is capped by a roof. This hut might be square, eight sided or twelve sided. This makes your South Indian kutina style temple.

(Refer Slide Time: 21:58)



Unlike South Indian temples, North Indian temples do not have concentric rings of enclosure walls.

(Refer Slide Time: 22:10)



These temples instead chose to go upwards. The temple sanctum, the garbagriha in these temples became taller through time. Somewhere the idea that this was a multi-storeyed mansion that represented a vertical axis of divinity was not lost. But these vertical forms took on many regional variations. The commonest of them in North India was what is called the shekhari which is what you see in the Kandariya Mahadeva temple at Khajuraho built in 1025 CE. It is the temple on your right.

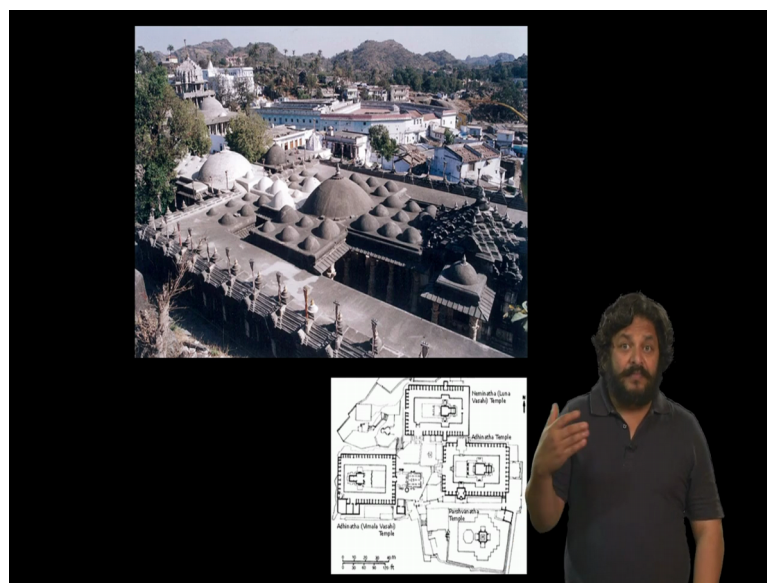
(Refer Slide Time: 22:49)



This kind of temple is on a very high platform. In the middle is the main shrine and at the four corners are subsidiary or smaller shrines. This kind of temple is called panchayatana temple or the temple with five bodies or five parts. On the very high plinth, one enters the main temple through a set of stairs that lead you to the sabhamandapa in front.

The mandapa usually has a corbelled roof behind which is the main shrine with the tall pyramidal shikhara. This kind of temple called the shekhari is very prominent because the main shikhara has on the sides a set of cascading and diminishing shikaras decreasing in size as you go downwards.

(Refer Slide Time: 23:45)



Another completely different variant on the North Indian temple is what you find in western India such as the temples at Dilwara. These important Jain temples built in the 10th, 11th and 12th centuries are finished completely in marble on the inside, set as a cluster of temples. From the outside it looks like a set of very uninspiring low domes. But these domes conceal on the inside the most lavish of marble decorations.

(Refer Slide Time: 24:17)



All kinds of suspended ceilings, corbelled domes, brackets and columns create the composite, intricate, carved marble that these temples are really famous for. Many of these designs are replicated in Jain temples after this period all across the country.

The apocryphal story about these temples because of their fine carving is that the king or the patron who patronised the artisans who carved the marble promised the artisans that whatever they could drill out, scoop out or excavate out of the marble would be weighed and an equal amount of gold would be paid to the artisans, a story that is quite obviously fabricated but is one way to explain the absolutely gorgeous marble carving everywhere.

(Refer Slide Time: 25:16)



But on the eastern side of the country in Bengal what you have is a completely different temple style, not like the shekhari of North and Central India, not like the Jain temples in Western India, but this is what you find in Eastern India, a style called kalinga. And it varies from the other temple styles largely because of its profile. This is the sabhamandapa or actually the lesser sabhamandapa of the famous sun temple at Konark.

(Refer Slide Time: 25:51)



Where the actual sign would have been is completely lost. It would have been behind what you see here which is just the small entrance hall.

(Refer Slide Time: 26:03)



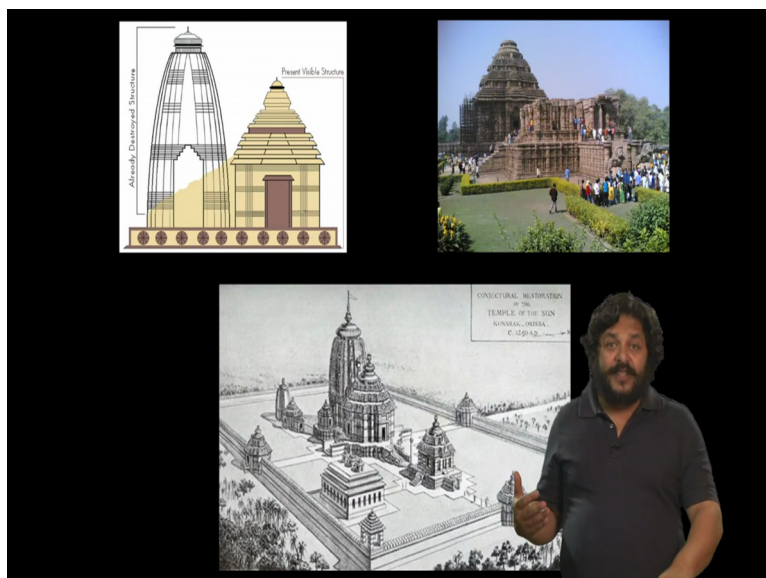
The whole plinth which is high and raised is set on wheels that are supposed to be chariot wheels for the sun. The sun is the major deity who was worshipped in this temple and these wheels would put his chariot along. The whole temple is likened to a chariot.

(Refer Slide Time: 26:25)



The wheels have almost become a state emblem of the state of Odisha now.

(Refer Slide Time: 26:31)



What survives is what you see in the picture on the top left is just the portion in front. The massive superstructure that would have been behind is completely gone. So what you see in the picture on the right is just the sabhamandapa that you see in the drawing on the left. The

actual shrine which is not shekhari because it does not have those cascading spires is built in the kalinga style. A reconstruction from Percy Brown is given below.

(Refer Slide Time: 27:07)



A typical kalinga temple looks like this. While the overall composition might be linked to the shekhari, the melon shaped curvilinear spires are very distinct for this kind of temple.

(Refer Slide Time: 27:21)



The Lingaraj temple in Bhubaneswar is probably the most famous standing extent temple of the kalinga style where the blocky curvilinear profile of the shrine can clearly be seen. As opposed to the narrow pyramidal scheme of the shekhari, this kind of style articulated by the

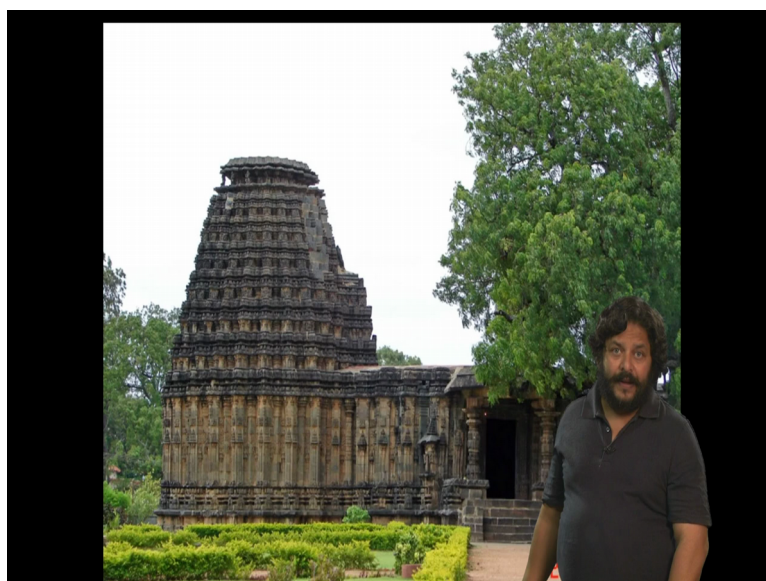
vertical bands also has horizontal striations that mark horizontal storeys. The amalaka on top is enlarged to almost be the width of the temple spire.

(Refer Slide Time: 28:01)



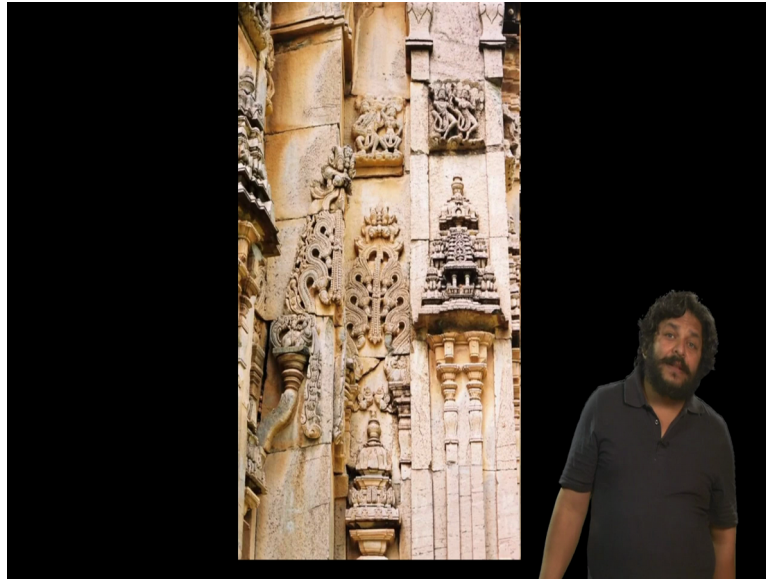
A third kind of temple spire that you see is the vesara which is a hybrid between the north and the south, the latina and the kutina. Vesara literally means mule and this style is called vesara because it has attributes from both styles. So while you have an arrangement of horizontal bands like a South Indian temple, the little aedicules are firmly of the North Indian type. Such temples are largely found in Northern Karnataka.

(Refer Slide Time: 28:37)



You then have other variants like the bhumija where everything is reduced to horizontal storeys. This is a temple called Tambdi Surli in Goa but this is not purely bhumija because in the bhumija you have strong vertical bands and we will see an example of that. This is much closer. This is a vesara style temple with a logic of articulation that is like the South Indian temple but yet maintaining the profile of a North Indian temple.

(Refer Slide Time: 29:16)



And it is on temples like that that you very commonly have small representations of other kinds of temple spires showing the audience that yes we are aware of other kinds of temples being built but this is the regional idiom in which we build our temples.

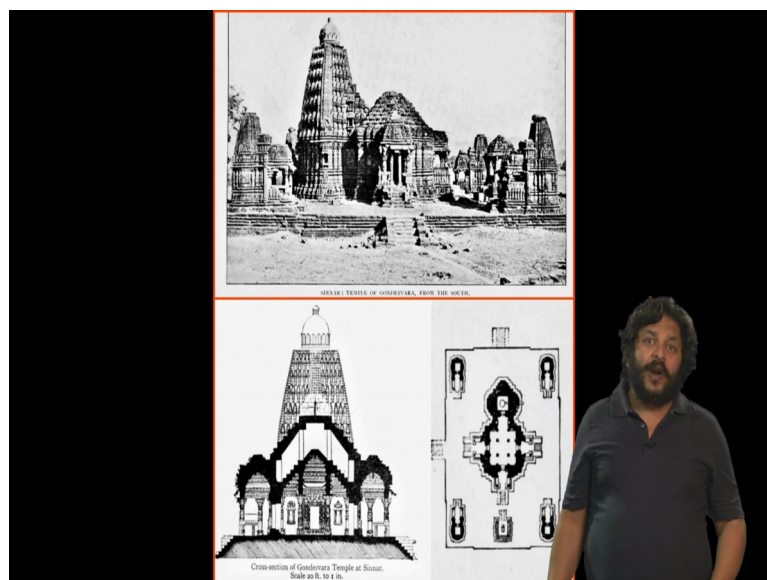
(Refer Slide Time: 29:35)



The pure bhumija style is something that you see in Rajasthan in the south that is to say Southern Rajasthan, in Gujarat, in Western Madhya Pradesh and in Western Maharashtra. A style that is intimately associated with the Yadavas of Devgiri. This is the famous Gondeshwar temple at Sinnar near Nashik. Built in the 11th century this is a fine example of a bhumija temple. Again a panchayatana temple built on a high plinth with four subsidiary shrines at the four corners and the mandapa that is bang in the middle of the platform.

The temple is characterized by the spire which rises in the corner on the left and what you notice about the spire is there a vertical bands on all four sides that make it a latina temple. These bands representing vines, creepers or verticals and in between them you have horizontal tiers of aedicular modules and it is this arrangement, these vertical bands connected by horizontal stepped tiers that is called bhumija.

(Refer Slide Time: 30:52)



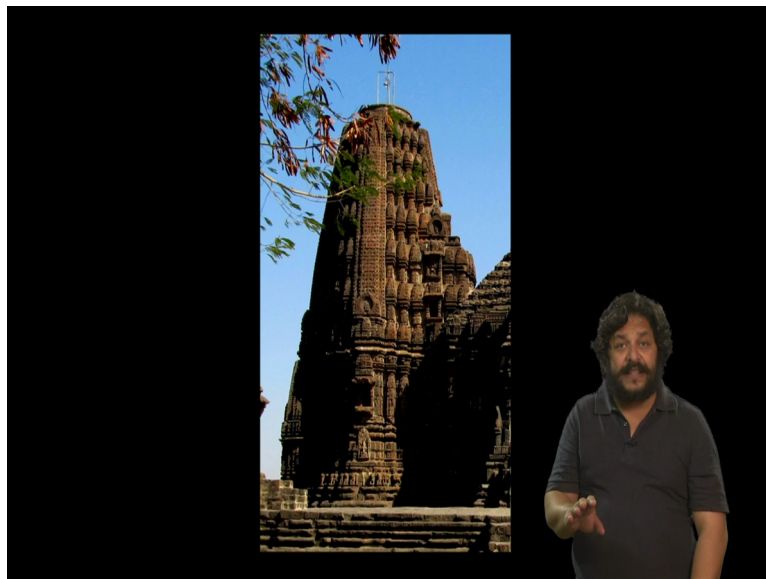
It is this kind of temple that you find built under the Yadavas more than any other dynasty.

(Refer Slide Time: 31:00)



And so to quickly recap you have the shekhari kind of temple on your left, the kalinga type of temple on your right and the bhumija temple in this slide.

(Refer Slide Time: 31:14)



Notice how all the spires have minor changes and these changes are very much dependent on the plans of these temples because Yadavas style temples tended to favour plans in which there were lots of small offsets. The plan of the temple became almost lozenge diamond shaped and in order to accommodate that planning, the shikhara had to be of the bhumija type.

(Refer Slide Time: 31:46)



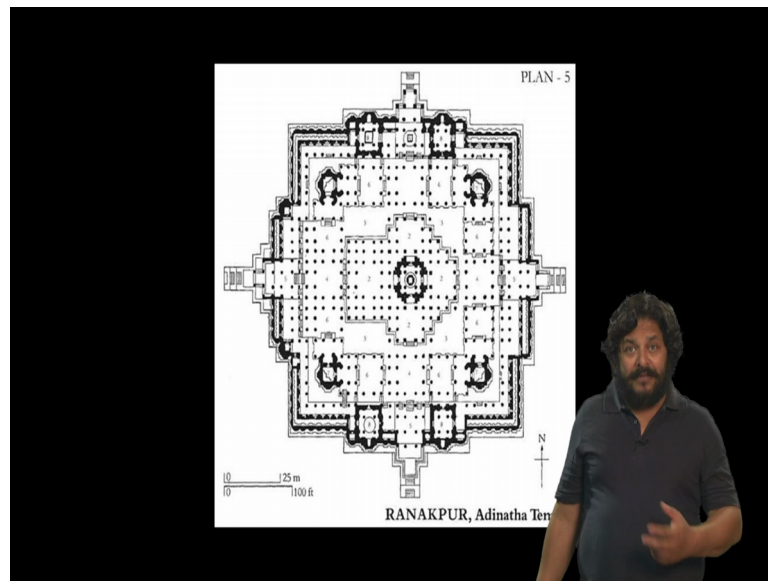
In Ranakpur in the 14th and 15th century, this is close to mount Abu in Rajasthan, you have another set of Jain temples but here the temples look more fortified than they have looked in previous times. When you look at the temple it looks like a cluster of temples but it is in fact just a single temple on a high plinth approached by a big staircase reminiscent more of military architecture than of temple architecture.

(Refer Slide Time: 32:15)



The cloisters around the periphery of the temple platform all have shikharas which makes it look not like one temple but multiple temples. In the finest of Jain carving traditions the temple is carved with exquisite carvings in marble.

(Refer Slide Time: 32:36)



And the plan of the temple looks like this where again it is a panchayatana shrine with four subsidiaries shrines on the four corners, one major shrine in the middle but it is not just the actual temple which has offsets now. It is the whole platform on which the temple has been built that is unfolding and manifesting itself in all directions like a mandala.