

History of Architecture and Culture – II
Unit 3
Evolution of Hindu Temple Architecture
Lecture 1

Hindu Temple Architecture

Let us have a small recap from what we have learnt so far. Initially if you take the history of Indian architecture, we began with the Indus Valley civilization, from which Vedic culture evolved and then towards the end began the Rise of Buddhism. Till now we have seen till this period, now what happened after this, the rise of Gupta and Chalukyas took place. The Guptas ruled the north of India, while the Chalukyas ruled the south of India. It was during this period that Hinduism came about. Basically, Hinduism came about in the Vedic period itself, however with the rise of Buddhism it lost its prominence for a very short time period. After Buddhism began to spread to different parts of Asia, its significance of India began to drop down, which is how it paved way for Hinduism to crop about once again. So, it was during this point that Buddhism and Jainism were actually thriving, there were efforts taken to revive Hinduism. So, how did this impact Architecture?

It was during this time, as we saw in our previous lectures, the Artisans and Masons tried to replicate the style of construction they practiced with wood onto stone as well. Stone was basically a new material from them. During which, they began to develop the Hindu temple architecture. As a result of this, a new type of architecture started evolving. That we call it as the, Hindu temple architecture. If you see in this image, this is a plan of a very early temple. This is where the idol or idol was placed, before that there was just a verandah or a porch, with four columns, this was a very rudimentary form of a temple. This is

when temple form started evolving. Why did they have this room like structure?

If you remember, during the Vedic civilization, people don't worship idols or idols, rather living creatures or nature. But after revival of Buddhism happened, Hinduism began to worship idols. So once the idol was given a human form, they need a place to house the idol, an enclosure for the idol was developed. This temple was actually a house that was meant to place the idol and slowly, it started evolving into different stages. In this image, you see a single room and a small porch. The place where the idol was placed was considered as the womb chamber or the Garbhagriha, it was usually very dark, a cuboid cell adorned with no decorations, a single doorway and it faced east. It was mostly squarish in nature.

Here you can see one of the early Hindu temple. As you saw in the plan, this is the garbha-griha and a small pillared porch or a verandah and if you notice the roof, they were mostly flat. During the early stages, there were only flat roof temples. After this, the next stage of evolution was that, there was the garbhagriha and usually all the garbha grihas face the east. So, there was the need to worship around the garba-griha, so a circulatory passage was built around this garbha-griha. Another layer of a concentric square was added and then the porch was made even more elaborate. They were made to sit on a very high pedestal, so they were steps leading to it and there was a circulatory passage and then there was the Garbha-griha. So, you can see the remains of the temple, this is 'Parvati' temple located in Madhya Pradesh. Here you can see how it is located on a raised pedestal with steps leading to it and you have a very small Garbhagriha with a very small circulatory passage. Again if you notice the roof, it is a flat roof structure.

So, this is the next stage of evolution, Once the Garbhagriha and the circumambulatory passage was added, the rituals started developing even more. So, the need for another hall/ mandapa came into picture. If you see the plan, earlier temples which were squarer in nature started becoming more elongated, so a mandapa was added in front of it again with steps leading towards it.

The basic concept or symbolism in temple architectures has basically evolved from the human body. This is the basic underlying symbolism that is believed to exist in the planning of a Hindu temple. If you see the image, the place where the head is located is called the garbha-griha and on top of it, there is a tower, the Vimana. This entire structure with the Mandapa; The Bali Peetam and Dwaja Stambham, it all relates to the parts of a human body and finally, the Gopuram which marks as the entry is considered to be the feet. This is one symbolism that is involved in the concept of temple planning.

Elements of a Temple: Now we will see about the various elements in a typical Hindu temple. So you have the Garbha-griha, there is a mandapa in front. This is the Antrala i.e. an intermediate chamber between the Maha mandapa and the mandapa which is in front of the garbha-griha. The mandapa is usually the pillared hall which is located in front of the garba-griha. Then you have, this, Pradakshina patha i.e. a circulatory passage that is located all around the garbha-griha. So from what started as a very small square plan, started evolving into, such elaborate planning of temples and again these enclosing walls contain Numerous niches, recesses, alcoves and altars were provided inside the temple which possessed the image of the stone idols, so that the whole place is the assembly of the shrines. This is a typical planning involved in a

typical hindu temple and these are the various parts of a typical hindu temple.

Again if you see, the Vimanas were basically derived from various huts and low roof structures that existed in the villages. Basically it was a derivation from that and even in those Vimanas and Shikaras. Shikaras are nothing but towers which are placed on the top of the garbha-griha. Again, they have various niches in which different sculptures of idols were placed. Another interesting factor about this hindu temple architecture is that; this was the first time they were using stone masonry. So, what they did was, there was no mortar involved initially. They planned the construction technology in such a way that the weight of the stone itself balanced due to gravity. The downward motion of gravity helped the structure to stay in place. This kind of architecture was called as dry order. Usually, the materials used for this stone were quarried from a site that was usually located far away and they taken to the site.

So now let us see some early shrines of Gupta in Chalukyan periods. There are three main dynasties that were responsible for the development of temple architecture in India. The Guptas from the north, the Chalukyas from the central parts of India and the Pallavas from the South. If you take a look at the map, you can see clearly where the Gupta dynasty ruled. The Chalukyan dynasty existed in Central India, part of Andhra Pradesh, Karnataka and even up till Maharashtra. This is the deccan area and the Pallava territories were parts of Tamil Nadu, Andhra and Karnataka as well. The south most part was ruled by the Pallavas. The Chola dynasties, the Nayakas etc were later rulers that developed from what these rulers left behind. These three dynasties were majorly responsible for the development of Hindu temple architecture;

the Chola dynasties, the Pandyan dynasties, the Vijayanagar kings, the Nayaks; they were later rulers from what these people started as the main temple architecture.

Types of Temples

So now let us see, the types of temples that existed. Categories of Temple Architecture: Let us see one by one:

The first type, Square building with flat roof and shallow pillared porch; this is a typical example like we saw in our initial stages. Just a square garbhagriha with a porch in front. This image that you see is a temple in Madhya Pradesh, it is called the Kankali Devi temple at Tigawa and the Vishnu and Varaha temples at Eran. You can see the garbha-griha, it is just 12 feet by 12 feet square and a 7 feet porch extends outside. This is the plan of the temple. You can see the orientation, the garbha-griha always faces the eastern side, the square garbhagriha with an extended porch.

The second type, An Elaboration of the first type with the addition of an ambulatory. Here they have just added an ambulatory or a pradakshina patha around the garbhagriha. Sometimes, this type also has, a two storey structure as you see in this image. The image you see is the Lad-Khan temple at Aihole, it is located in Karnataka. You can see steps leading to it. You have the circumambulatory passage and then it also has another storey. However, the roof of the temple is still flat. It still hasn't evolved into the Shikara type. Here you can have a better look at the plan, this is an entry porch, to enter into the temple. This is the garbhagriha, here you have an edifice of a bull which is also called as Nandi. You have another pillared corridor around it and again, another pradakshina patha. As you see in this image, it is very low roof structure

and on all the three sides it is enclosed by walls, these two sides, there are have perforated stone grills and eastern side has a projected porch. A group of square columns are located in the middle, which supports the roof and this provides the aisle around which you circumambulate the idol.

What you see in temple these days, you see long slender columns with very intricate capitals, however in the image below, you can see the columns are kind of out of proportion, were very short and stout. This shows that they were not sure of how the material can be used. So, this is the very early stage of columns, they are trying to experiment with proportion and scale using this, new material.

So they did not have any intricate design/ no elaborate capital or base, they were very short and also stout and it had a very simple capital. You can see the kind of capital that existed in the Ladkhan temple, they were mainly just grooves that were made in stone below the capital. This was the bracket like structure which supported the roof and this was the first time, the stone Asana - meaning stone seating in the portico, at the front porch of the temple. So, this was the first time, added in a temple structure.

Now we are coming to the third type, Square Temple with a low and squat tower (shikhara) above; this was the first time a tower was being built. You can see in this image. This is a Dasavatara temple (built in stone at Deogarh, Jhansi district) located in Uttar Pradesh. So, what they did was, they raised the squarish garbhagriha on a squarish pedestal again and this had an entry from all four sides. You can see in this image, steps leading to it from all four sides. Then, above the garbhagriha, they have a very low tower. Still, they haven't built into the

main shikaras that we see today. So, this was the first time a tower like structure was built over the garbhagriha and this only later evolved into the different styles of shikara that we see today.

The fourth kind of temple, is a very simple one, it is a Rectangular temple with an apsidal back and barrel - vaulted roof above. As I mentioned earlier, an apsidal back is the one which ends with a curve. A rectangle which ends with a curve, is called an apsidal ending. This is a temple in Andhra Pradesh. You can see in the plan, it terminates with a curve and similarly the roof is not a flat roof but an altered roof structure.

Another example of an Apsidal temple is the Durga temple located in Aihole.

If you take a look at the plan, you would notice that it is an elongated structure with 60 ft in length by 36 ft. There are two sets of staircase that lead you to the building. At first you enter a small porch like structure which is called the Mukha mandapa that constitutes 4 square pillars that help support the ceiling of the Mukha Mandapa, from which you then move on to enter the Sabha Mandapa and this leads to the Garbhagriha which is an apsidal structure as well. You will have the circumambulatory passage one and another circumambulatory passage around it. This is the first time, these two concentric corridors started connecting in the temple. You can see in the Sabha Mandapa and the Mukha Mandapa, these squarish columns support the roofing.

The section you can see the approach, this is how you enter, this is the Mukha mandapa, the sabha mandapa, this is the garbhagriha and with this apsidal ending of the garbhagriha, there was a tower that was placed above it which you can see in the elevation.

This gives you a clear idea of an approach within the temple.

You can see in the image, these various niches or recesses were created in these surfaces, for enclosing bold idols that adorned the walls of the Sabha mandapa and the Garbha griha along the pillared corridor. Even the base of the entire temple was done with grooves and each groove had small sculptures. Again you see that the tower or the shikara looks kind of out of proportion as compared to the scale of the structure. Another, notable feature in the design of the durga temple is the peripteral or pteroma, a passage formed by the colonnade of a verandah, the main cella is surrounded by this temora which is connected with pillared portico.

You can see how intricately carved, this is how you enter from the Mukha mandapa from the Sabha mandapa. So now, they have started getting used to the materials. So, they started doing more intricate and elaborate structures with stone. As, a result it was very richly carved and decorated. But still, the columns are still short and stout but you can see the ornamentation was increased. Even by the doorway you can see the bangs that are created, the roof and the columns.

The Circular temple; with rectangular projections at the four cardinal faces; the only monument exemplifying the style is the, Maniyar matha shrine at Rajgir, Bihar. (The fourth and fifth types appear to be survivals/ adaptations of the earlier forms and do not appear to have much influence subsequent development). It is a circular temple which has rectangular projections in four directions i.e north, south, east and west. So, this is a very rare kind of temple that exists only in one place, and no other place. This is also a type of temple that came into picture.

This was probably inspired by the Buddhist stupa but it did not evolve into later stages. Now, let us see two more examples of the temples;

Virupaksha Temple: You can see the plan, this is the north, this is where the garbha griha is located. This is a huge sanctuary or mandapa, in front of the garbha griha. So, you have two entries here and the entry is marked by a Gopurams or a tower. Entry Gopurams. And then the structure that you see in the middle, is a statue of a bull or a Nandi again which is covered by an enclosure. Even this pillared mandapa is approached on all the three sides except the side where the garbhagriha is placed. You can see in the plan, how these intricate niches are created. You can see the recessions and projections on the surface. These vimanas that are located were very tall and raised up to four storeys. You can see in the image. The recessions you saw in the plan are these. It alternated between niches and perforated windows. So, wherever there were recess, they had a perforated window and in the projection they created niches which had sculptures and Pilasters. Pilasters are nothing but, this is a pilaster. Pilaster means it is a half column. It is not meant for structural purposes but it looks like a structural column only on the surface. Again you can see, the kind of carving that is done on the roof, bands of sculptures and again they have done coping for rainwater purposes. So, this temple shows us that not only architects of those times, did not only start conceiving the temple structure as whole, but they also started looking into every detail of the structure; how the base has to be decorated, how the plinth has to be treated, how the base of the column has to be treated. So, they started looking at the temple structure both as a whole and every minute detail.

This is another view of the temple. This is another temple, located in Pattadakal, called the Papanatha temple. This temple is an interesting

temple since the proportion and scale used here is very unique, unlike the kind of structures we see today or the later temples that were developed. The proportions used here are very different, if you see the plan, it is a very elongated plan; again you approach and you have this large pillared hall with the edifice of the bull and then there is another hall which leads to the garbhagriha. So, it is a very elongated plan. But if you see the tower that sits on the garbhagriha it seems very short for the scale of the building. This is a very squarish assembly and this is another mandapa.

So, it feels like the plan and elevation did not harmonize perfectly like how the later temples did. If you see the carvings again, lot of influences from the architecture started evolving, again these string courses were replicated from the rock cut architecture. Slowly, what happened was from the rock cut architecture. From rock cut architecture, slowly we started evolving and started using stone to build Hindu temples. So we can say that, they started detaching from the rock architecture into proper, monolithic structures.