

History of Architecture and Culture – II

Unit 1

Lecture 1

Ancient India

History of India Architecture

In order to understand the history of Indian Architecture, the necessary to understand the various timeline during which the architecture evolved. If you see the history of Indian architecture, the timeline is from around 20th century B.C. It starts almost so early as 20th century BC to 20th century A.D. So along this timespan, we have divided the architecture into three stages. So the first stage is ancient and early India and then the medieval India and during the early parts of the 20th century after the arrival of the British. It is the British India. So during the ancient and early Indian architecture, the main civilisation that flourished was the Indus valley civilisation. There were other important dynasties like the Aryan and Mauryan culture and then came the Buddhist period. And then the Dravidian culture. So these four were some of the most important architecture that flourished during the ancient and early India. And then during the medieval Indian period. The Chola, the Nayak style and then after Islamic invasion. The Islamic people also contributed various styles of architecture. And then the Provisional style evolved. And then later the Mughal style. During the early stages of 20th century, after the arrival of British. Indian architecture was also influenced by their architectural characteristics that demarcates the colonial period in Indian architecture which also gave birth to a new style called Indo-Saracenic style. So it is important to understand the history of our country in these three stages.

So to begin with we will start with the ancient Indian architecture. Let us see how it's started or originated and later evolved into various stages. In order to understand any architecture or about a civilisation. It is important to know how a civilisation evolves.

As you can see from this map. These are the names of various civilisation that flourished in the world. The Egyptian civilisation, the Mesopotamian civilisation, the Indus valley civilisation and the china civilisation. As you can see all these major civilisation were all started along a major river. The river was the lifeline of any major civilisations. The Egyptian civilisations was built around the river Nile. The Mesopotamian flourished around Tigris and Euphrates River. The Indus valley around the Indus River. And the Chinese civilisation around the yellow river. As you can see from the map, Indus valley civilisation which formed around the north western part of India is one of the biggest civilisation in the world.

Let us have a closer look at the Indus valley civilisation. How it originated? So as you can see in the map, the Indus valley float into the Arabian Sea, which flows through India and parts of Pakistan current a Pakistan. For a major Indus valley civilisation flourished around this belt. The river that you see in the dotted line. The Ghaggar-Hakra River is now diminished. But it flourished during the ancient times and there were many sites that have been found along this river belt.

The Mohenjo-Daro and Harappa are the two important sites that have been excavated from the Indus valley civilisation belt. There are other sites call the Dholavira, lothal which are parts of present day Gujarat.

Harappan Civilisation

Now let us have look at the city planning that existed in the Harappan civilisation. The Harappan civilisation is well known for city planning methods that they employed. A Harappan city was divided into two parts. The citadel and the lower town. The citadel was usually located at the higher level and along the western side. The lower town was located on the eastern side and was at the slightly lower level. The citadel usually consisted of public buildings like bath and granary. While the lower town consisted of residential areas and workshops. These residentials were constructed on rectangular plots with well laid roads. The houses were usually single or two storey structures and were usually built around the courtyard. The well baked bricks of uniform

sizes were used. These houses all were connected to a public drain individually. These drains were laid with the gentle slope and connected to another main drain. And these were formed a grid iron pattern. It is assumed that these drains and streets were well planned and built around the city. In the city of Mohenjo-Daro, one of the most important public structure existed called the Great Bath. The Great Bath was a large tank used to store water and probably used for religious purposes. It had walls lined with bitumen and plaster to avoid seepage. It had rooms all rounded. The city of Lothal had bead factory and a huge tank with a store house. The presence of the bead factory in the city indicated that the business flourished with various beads artifacts like stone, shell and metal. The tank was probably a dockyard for boats that came from the sea and from the docked for goods to be stored in the store house that was located near the tank. In the city of Dholavira, unlike the other Harappan cities it had three parts. The citadel, the middle town and the lower town. The citadel was all built with heavy fortification with entrance gate ways. So now we saw about the basic planning aspects of the Harappan architecture. These are some of the artifacts that were found during the excavation of the Indus valley civilisation. As you can see, these are some seals and tablets that we are found from the excavation. The image on the screen shows a typical Harappan structure. Bricks were baked a uniform sizes and rooms were usually built around the courtyard. They are mostly single or double storey structures. This map shows the approximate layout of Mohenjo-Daro city.

As you can see the planning was one of the most renowned for grid iron pattern of planning of streets. It is one of the earliest examples of city planning in the world. As you saw in the animation. This is a great bath. The huge tank used for storing water and probably to conduct some rituals or religious purposes. The tank measures 7m by 12m and has a depth of 2.4m. Two staircases from the north and south directions lead down to the tank. There is a small ledge at the foot of the staircase which runs all around the pool. This was probably meant for people to walk all around it without having to enter inside the pool. The inner

walls and the flooring was made water tight by using brick laid on edge pattern. The bricks were laid on edge so that it was water tight and it was also plastered with thick layer of bitumen. So that sewage is avoided. This suggests very advanced technology and construction at such an early time. These measurements and facts are important for us to understand the scale and the size of the structures that existed during those days. This is the remains of the granary that existed. As you can see from the image. The entire structure looks very massive. The entire granary was built on a very massive foundation of 45m by 45 m and there were 2 rows of six rooms. As you can see in the image. These rooms were arranged along the central passage which was 7 metres wide. And each room measured 15m by 6m. The rooms were built such that there were three sleeper walls between them with an air space.

That could have been steps that might have led to upper levels and bridges connecting the two rows of rooms. After the decline of Indus valley civilisation. There comes the Aryan civilisation or the Vedic civilisation.

So who are the Aryans? They are not people who originated from India. Aryans were people who actually migrated from central Asia to India, to the north western part of India. So this Indo-Aryan migration into India began around 1750 B.C. So they came into India through the north western parts.

And during the early Vedic period, they started through the north western part and slowly migrated towards the Gangetic plains. So as you can see in the late Vedic period, the Aryans started establishing the Vedic civilisation around the Gangetic plains. But unlike the Indus valley civilisation, we do not have any remains or ruins of the Vedic civilisation. There was no excavation that we have done. We do not have any archaeological evidence of the Indo-Aryan civilisation. It is interesting to note that though the Vedic civilisation developed after the Indus valley civilisation. The Indo-Aryans who migrated from Iran into the north western part of India did not choose to settle down in the Indus valley basin. They did not settle down in the place where already an established civilisation was flourishing. But instead they chose another

location, they decided to settle down in the Gangetic plain. So they did not start from what was left over. They started entirely new place and a new civilisation. So Aryans had clear forest that were existed and they created their own space and settled in small villages.

Indus Civilisation and Vedic Culture

So let us have a small comparative study between the Indus civilisation and Vedic civilisation. As I mentioned earlier, the main source of the Indus valley civilisation is archaeological evidence. They were major excavation that were being carried out in various parts of north western India and many evidences like bricks, seals, tablets and the entire cities were being excavated. But where as in Vedic culture. The only source that is available to us for any information is literature. It is only from the Vedas that we learned about the Vedic culture, the way of life, architecture etc., As far as the origin of the people is concerned, the Indus valley civilisation people originated in India and the Vedic culture, the people origin from Central Asia. The basic character of Indus valley civilisation as we already seen is they are urban in nature. The way they planned the cities, the way they plan the public, drainage systems, the street layouts and housing layouts were all very urban in nature. Whereas if we take the Vedic culture, it has a very rural character. They were complete absence of towns and they were not very well planned, it was more kind of rudimentary or village like settlement. Very rural in nature. If you see the occupation of the Indus valley civilisation, it was mostly trade. As you saw in the previous images and visuals you had a dockyards, you had people travelling from the sea to the dockyards. You storing materials in the store houses. So there was a lot of trade links that were happening in the Indus valley civilisation. So that was a main occupation of the people and industries and craft industries were flourishing. But in the Vedic civilisation, the main occupation was agriculture and cattle rearing. None of the industrial activities that we saw in the Indus valley civilisation occurred in the Vedic civilisation. If we take agriculture, the only instance that you can see in the Indus valley civilisation is in Kalibangan. It is only in that place that you have traces of agriculture. But in the Vedic

culture, agriculture was the major occupation. As far as metal is concerned, mostly copper was used in Indus valley civilisation. There was no iron used. But the Vedic culture, there was a lot of references to iron from sources that we have got. The social structure in the Indus valley civilisation was not very kinship based. But whereas in Vedic culture, they were mostly kinship based. So if you take a settlement, mostly the settlement is formed based on the kinship. So based on their families and their relatives. So people started settling in such a form. And as far as religion and ritual is concerned, the Indus valley civilisation they worshipped animals and they practised earth burials. In the Vedic culture, they started worshipping different forms of nature and they practised cremation rather than burial. Indus valley civilisation were mostly peace loving people and if you find the various arms that were found in the excavation. They were very primitive in nature that might not have been used for any war purposes. So they were mostly peace loving people. Whereas in the Vedic culture, they were very conversant with arms and tools and in fact they even devised science or a technology on the art of war. Even in the physical appearance, you can see the Indus valley civilisation people they were mostly short stature, dark in complexion. Whereas in the Vedic culture, the Indo Aryans who migrated from Central Asia. They were tall and well-built and more fair in complexion. As far as language is concerned, the Indus script still remains undeciphered. Whereas in Vedic culture, Sanskrit was the main language from which mostly the non-Dravidian languages originated.

What are the main sources of information about the Vedic civilisation? So Vedas were the main scriptures for the Indo-Aryans. There are four important Vedas. Rig Veda, Yajur Veda, Sama Veda and Atharva Veda.

Rig Veda is the oldest one and Indo-Aryans they mostly considered these Vedas as their holy scripts and the entire civilisation were shaped around these Vedas which is why civilisation is called Vedic civilisation. Apart from these Vedas, the great epics like Mahabharatam and Ramayanam. Also picture the village, lifestyle and the culture of

the people in the Vedic civilisation. Also the later Buddhist style which evolved after the Vedic period, the Stupas, the Sanchi also depict the life of the Vedic civilisation through inscriptions and carvings.

Now let us see about the architectural features that existed during the Vedic civilisation. As you can see in the image. This is a typical Aryan hut. Initially the hut started in the very basic shape that is circular in plan with a thatched roof. And a roof cover was done with bamboo made like a network of ribs. Later this circular plan evolved into a rectangular plan and roof became a barrel shaped roof. Same the bamboo was used as ribs and thatched roof was laid over it. And then clusters of these huts were formed around a courtyard like how villages are formed even today. As you can see in this image, you have clusters of houses formed around a small courtyard. So how these clusters were formed as mentioned earlier again based on kinship. So people settled down in clusters like villages, they were not planned like the Indus valley civilisation. They were no public drainage systems or street networks that we are planned. They were just very organic clusters that were formed by cluster of huts. They were certain huts probably of well-off citizens who used baked bricks and even tiles for their roofing. Inorder to maintain this barrel shape for the roofs, they used animal hides so that it was stretched along the bamboo ribs. These are the three stages of Vedic house as you can see it was the single structure and then later and additional structure was added and very rarely you can see double storey structures. Most of the houses were just one floor. So after the cluster of houses were formed, they formed fencing around an entire neighbourhood a palisaded fence. This was done for protection against the wild animals. So the fence had an upright post and horizontal members like this. This are an upright post called a thabha and a horizontal members called the Suchi. This were inserted into holes made in the upright members. This later extended to form like a gate. This was a first rudimentary form of compound wall or gated community that existed 1000 years ago. As you can see in this image. Though these architectural features of Vedic culture were very rudimentary in nature. These form the important notice for the future

Indian architecture. These barrel shaped walls, the tie-cord, the palisade fence, the railing, the gate way like structure. All these very rudimentary in nature. But these later evolved the important features of Indian architecture. This was later imitated in stone and other material in Buddhist architecture and others tiles which formed the important parts of Indian architecture. Even today huts in Orissa carry the influence of this style of architecture. As I mentioned earlier, there are no architectural monuments that are surviving in Indo-Aryan civilisation. But the caves of Ajanta and Ellora, all show influences of this style. By 500 B.C. the important social structure that existed in the Vedic society was the caste system that exist even today. So the Indian society was divided into four classes. Brahmins, Kshatriyas, Vaishyas and Shudras. So the former caste Brahmins were considered as priestly class to form mediator between man and god. So at this point of time there needed social reform to counter this caste system which lead to alternate schools of thoughts like Buddhism and Jainism. So it was at this point of time that people started questioning this mediator system between man and god. The people started questioning this caste system that existed. So people like Buddha and Mahavira came into picture and started entirely new schools of thoughts which lead to the rise of Buddhism and Jainism.