

OLD BUILDINGS AND MONUMENTS

From Wood to Stone

The hunting-gathering people sought shelter in caves. With the beginning of agriculture there began to be built huts of stones, wood and mud. The people of the Indus valley towns lived in baked brick houses.

For a long time after the destruction of the Indus valley towns, people did not make brick buildings. At the time of the small *janapadas* people made their houses with wood and mud. Since these houses were made of wood they rotted away and decayed with time. Very few remains of these can be found today. Still from what has been found it appears that the wooden houses, fences and gates of the *janapadas* must have looked like figure 1.

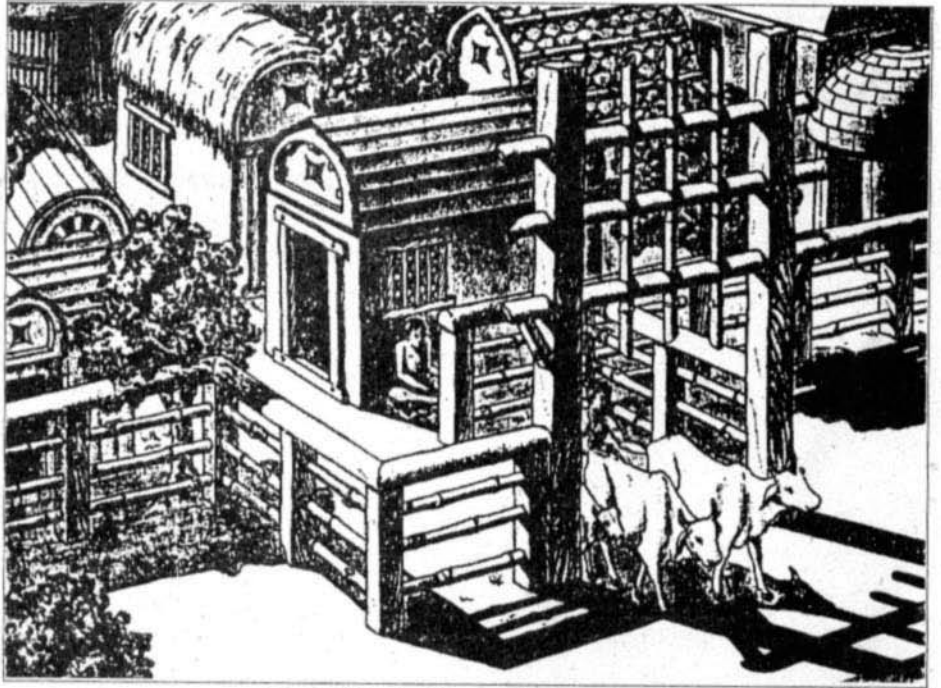


Fig. 1 Wooden house, fence and gate

Examine the picture and describe how the wood was joined to make the gate and fence. Find some sticks and twigs and try to make such a gate and fence.

Fig. 2 Sanchi Stupa



Stupa

After the death of the Buddha stupas or hemispheric mounds were built over his remains at many places. The stupas were made of unburnt earthen bricks or of pieces of stone. The Stupa at Sanchi in Madhya Pradesh was built at the time of Ashoka some 2300 years ago. It is one of the oldest monuments to be seen in India today.



Fig. 3 A wooden palace

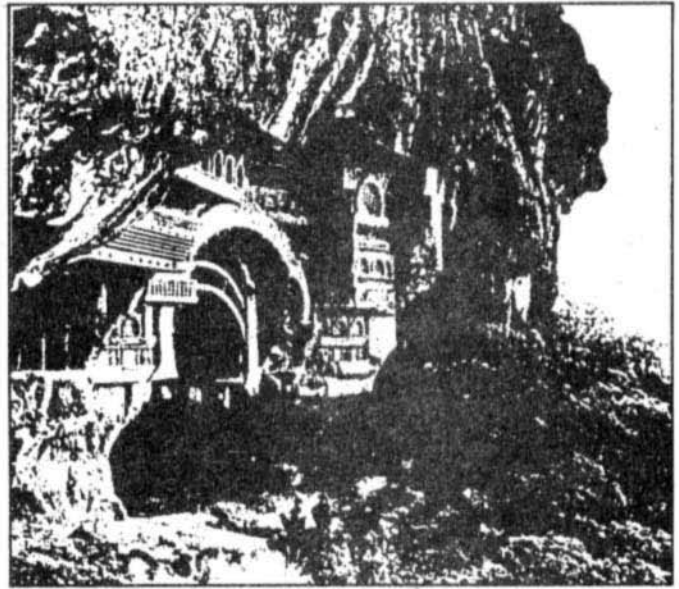


Fig. 4 Bhaja Caves

The Stupa is not hollow but solid inside. All around it is a stone railing with four ornate gateways, also of stone. When these were being made the artisans had begun trying to make buildings out of stone. They were used to making fences and gates of wood. Perhaps that is why even the stone fences and gates were built using the same designs as if they had been of wood.

Take a close look at the Sanchi gateway and fence and compare it with figure 1.

Cave Temples

In those days residential houses and even huge palaces were being built of wood (figure 3). But people continued to try to make buildings of stone, too. Religious structures, in particular, were sought to be made of stone so that they could last for a longer time.

But how were stone buildings to be made? Can anyone quarry and dress the stone and build huge buildings with it? These questions taxed the minds and imaginations of the artisans of those times. And what an answer they found! They simply carved up a hill! Caves were dug into the side of hills and mountains and there they carved rooms, doors and windows with their hammers and chisels. They tried to carve the rock to look like palaces of wood. Doesn't the picture of the cave in figure 4 look just like a wooden palace?

Hundreds of such caves were dug. Very beautiful caves, too. In some lived Buddhist monks, in some Jain monks and some others were home to Brahmins. These caves were called *Viharas*. Later when images of gods began to be made they were installed in these caves. Buddhist monks got large caves excavated and built *stupas* inside them. They would sit and pray before the *stupas* in the caves. These were called *chaitya*. Such cave temples, *chaityas* and *viharas* can be seen in

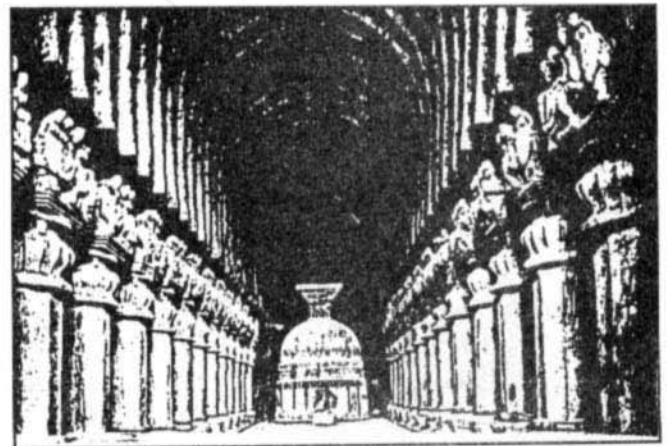


Fig. 5 The Chaitya at Karle

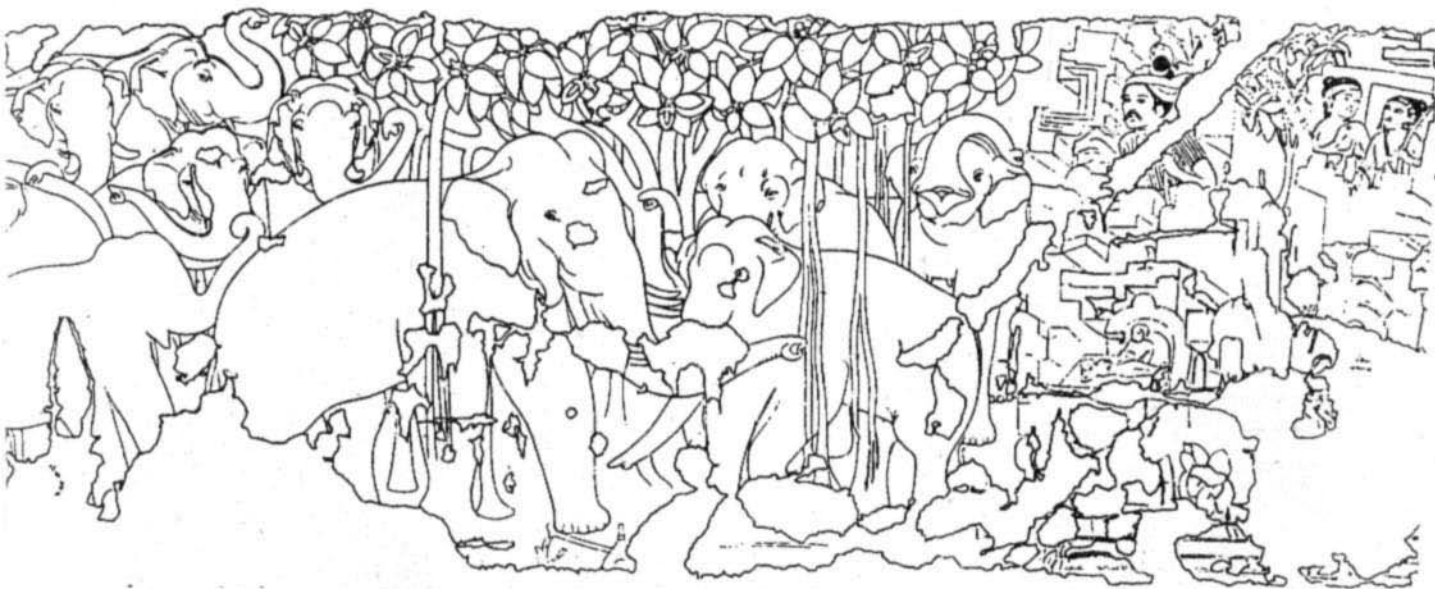


Fig. 6 A wall painting from the caves of Ajanta

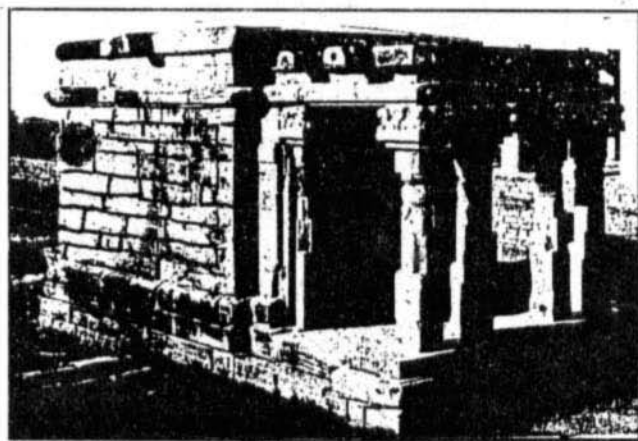
the following places - Udayagiri near Vidisha, Ajanta and Ellora near Aurangabad and Karle near Pune. Colourful paintings painted more than a thousand years ago can still be seen in the caves of Ajanta. The colour on them is in many cases still as vivid as on the day that they were painted. But, of course, you have already seen the paintings made by the early hunter-gatherers some ten thousand years ago. It is amazing how such ancient things manage to survive to tell us of their times!

You cannot find mountains and hills to carve them into temples and chaityas everywhere. Should places of worships be built only where there are mountains and hills? Can't stone be used to erect buildings at other places, too?

Different Kinds of Temples

These questions must have come to the minds of the artisans of those times as well. And it may have occurred to them to cut carved blocks of stone from hills and then carry them to new sites. But how to erect blocks one on top of the other? What if they fell over after some time? Whatever questions and fears may have come to their minds, these artisans did make efforts in these directions.

First small and simple buildings came up. Look at figure 7. This temple was built in Sanchi for an idol of the Buddha. This is how the first temples were built. Large blocks and columns of stone were cut and carefully assembled on top of each other. This ensured that the finished building



was not shaky and the stones did not easily topple over or slide away. The workmen of those days did not use any mortar or lime to join the blocks together. They would just pile the stone blocks one on top of the other and the buildings still lasted for many hundred years. It has been the weight of the stones on each other that has held them fast for so long. Even today you can see many such temples. Many huge monuments have been built like this by placing carefully cut blocks of stone on top of

Fig. 7 An early temple - near the Sanchi stupa

each other. The temple at Sanchi consists of just one cell for the idol and a covered and pillared veranda for the devotees to stand in.

That is not all that is so amazing and wonderful about these buildings. The beautiful figures of people, animals, fruits, trees and creepers carved on the stone tell us what skilled artists their builders must have been.

Later Temples

Now that people had learnt how to build temples anywhere, beautiful temples came up in each and every part of India. The artisans, kings and *samantas* of each part of India built temples in their own unique styles.

Here you can see the differences in the design of temples in Orissa, Tamil Nadu and Khajuraho. You can also see how with time artisans began to build more beautiful and complex structures.

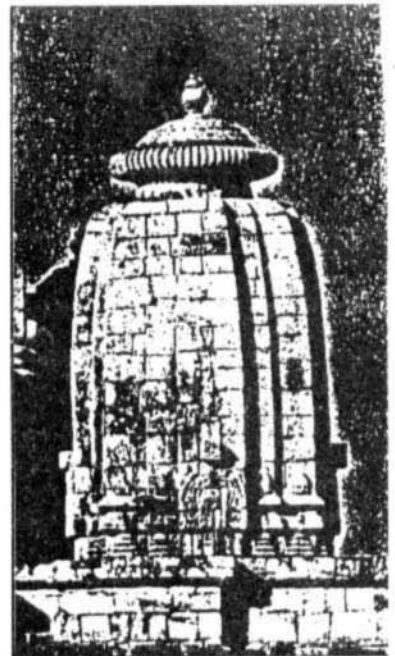


Fig. 8 A temple in Orissa



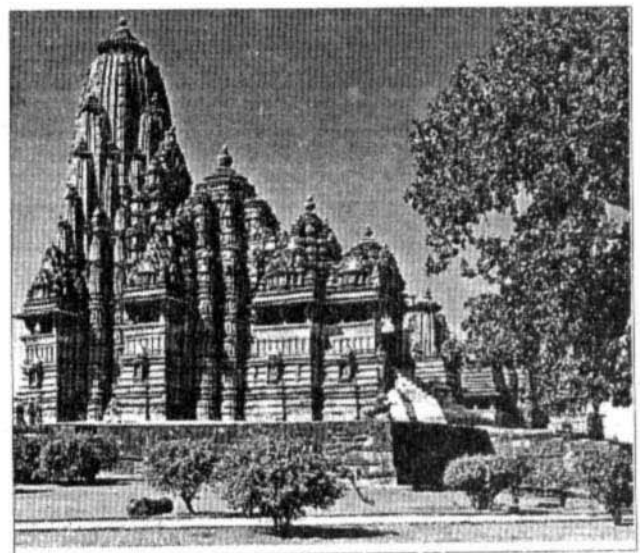
Fig. 9 A Shiva temple in Tamil Nadu

had flat roofs.

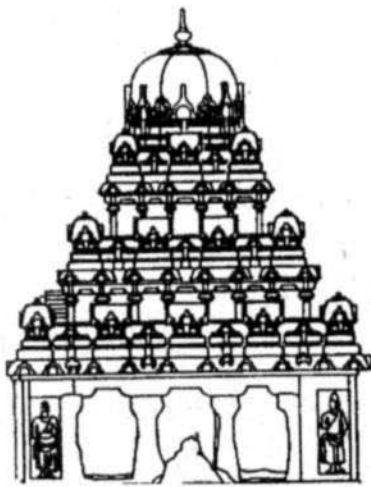
Skilled and courageous artisans found ways of laying the carved stones one on top of the other in such a way that a crest began to rise above the roof. It was a very risky affair to build such a high crest without the use of any mortar or cement. These artisans not only took that risk, but also carved those stones into beautiful *shikharas* or pinnacles.

Look carefully at the *shikharas* of the temples of Orissa, Tamil Nadu and Khajuraho. The styles of each are different.

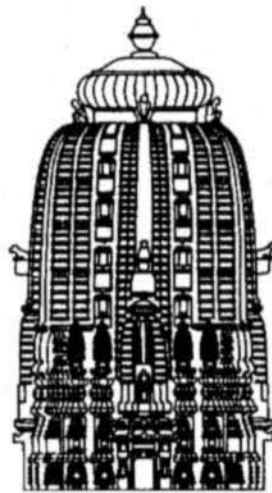
Fig. 10 The Kandaria Mahadev temple in Khajuraho



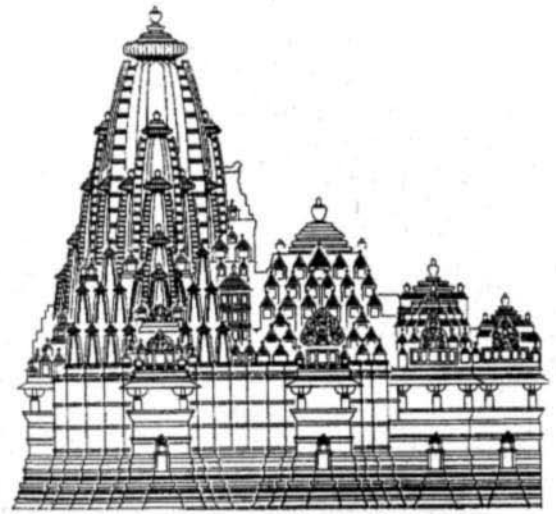
In contrast with the early simple and small temples the later ones had more cells, halls, corridors and verandas. The early temples had just one cell in which the idol was kept and it was called the *garbhagriha*. In front of it there would be a pillared, open verandah. The roof of the temple used to be flat. Look carefully at these features in the pictures. In the later temples another room began to be built in front of the *garbhagriha*, which was called the *mandapa*, after which came the pillared, open verandah. The verandah began to be called the *ardhamandapa*. The later temples no longer



A



B



C

Can you recognize the pictures of each of these styles above? Do these temples have all three parts - the garbhagriha, the mandapa and the ardhamandapa?

IRANIAN AND IRAQI INFLUENCE ON INDIAN ARCHITECTURE

When Irani and Iraqi artisans came to India they brought with them a new set of techniques. You have already seen in the previous chapters the kind of buildings they used to make.

Did you see anything which you had not seen in the stupas or temples?

Islamic architecture had three characteristics: the dome or *gumbad*, the arch or *mehrab* and the tower or *minar*. At least one of these can be seen in most Islamic buildings.

What is the minar used for in a mosque?

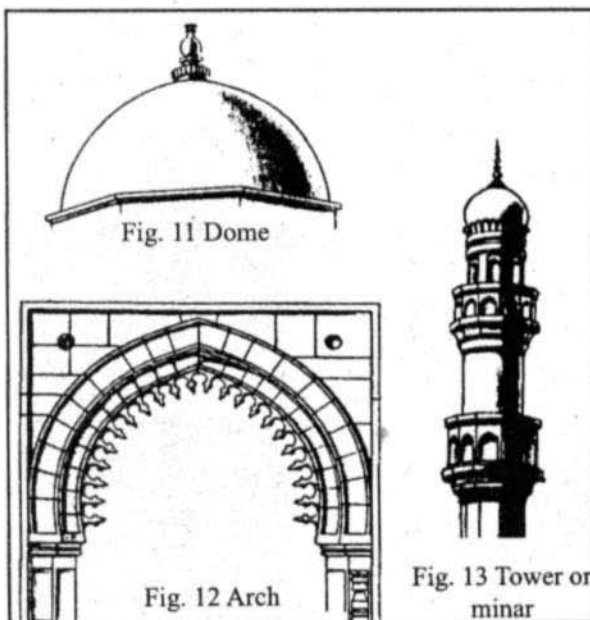


Fig. 11 Dome

Fig. 12 Arch

Fig. 13 Tower or minar

The *mehrab* or arch: The *mehrab* is curved and pretty to look at, but it is a very useful thing, too. To build a door or a window in a wall we have to make a jamb of a stone slab to take the weight of the wall above it. The weight is then shared by the entire frame of the door or window. But if the door is a large one then the weight on the stone slab becomes quite a lot. There is the danger of it breaking. Arches are stronger than flat frames and do a better job of supporting the roof. If they are used there can be more windows and doors in a wall without fear of weakening it.

Domes: Most of the domes you will see today are not solid like the stupa. They are hollow from inside.

The use of lime mortar had also begun by

now. These led to the construction of very strong and long-lasting monuments.

The Mixing of Styles

Indian artisans soon learnt these techniques from the Iranian and Iraqi workmen. The latter, too, learnt from the local styles of architecture. Arches and domes began to be built in temples. Carved stones piled one on top of the other began to be used to build columns in mosques. In the previous chapters you have seen the mosques, etc. built after the coming of Turks to India. Identify the minars, domes and arches in them.

Identify these elements in mosques and temples near your locality.

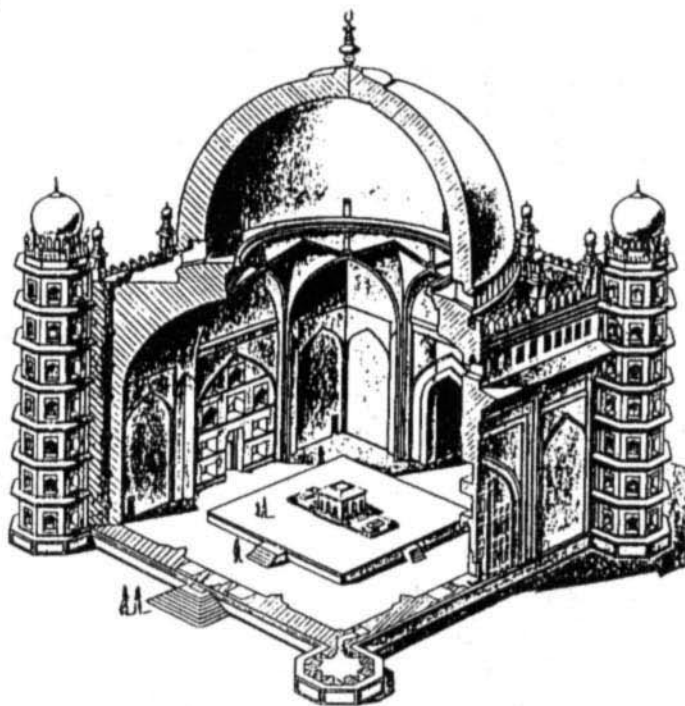


Fig. 14 Take a look at the inside of a dome

EXERCISE

1. Make correct pairs
 First of all - Domes, arches and minars cemented with lime mortar
 Then - Wooden houses
 After that - Cave buildings
 After that - Buildings made out of blocks of stone
3. In the shift from wooden temples to cave temples one thing changed, but another remained the same. Do you know what? Choose the correct option - building techniques / the design of the building.
4. Identify the following things in the temple shown in the chapter "Siyadoni - An Old Town" - the *shikhara*, *garbhagraha*, *mandapa*, *ardhamandapa*.

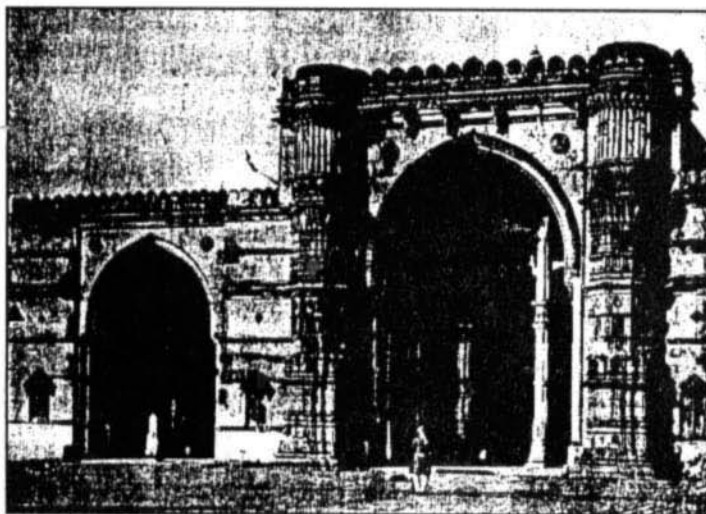


Fig. 15 The temples of Songarh: locate the minars, domes and arches in them



Fig. 16 Columns in the mosque at Ahmedabad