

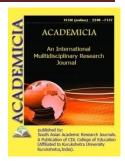
ISSN: 2249-7137 Vol. 11, Issue 7, July 2021 Impact Factor: SJIF 2021 = 7.492



ACADEMICIA

An International Multidisciplinary Research Journal

(Double Blind Refereed & Peer Reviewed Journal)



DOI: 10.5958/2249-7137.2021.01740.7

STUDY OF INDIAN ROCK-CUT ARCHITECTURE

Virender Singh*

INDIA

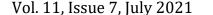
ABSTRACT

The rock-cut structures are the most magnificent item of Indian art. Most rock-cut monuments were intimately linked to different faiths and religious activities. At the start, magnificent Buddhist and Jain rock-cut monuments were constructed in places such as Bihar to the east and Maharashtra to the west. The Buddhist monks dug many caverns for worship and housing reasons. Chaityas (Prayer Halls) and Viharas are the finest examples (monasteries). The windows, balconies and portals were sculpted in these rock-cut buildings as enormous arch shaped apertures.

KEYWORDS: Architecture, Rock, Native Indian, etc.

INTRODUCTION

The Indian rock-cut architecture is more diverse and more abundant than any other rock-cut kind in the world. "Rock cut architecture is the technique to create a building from solid natural rock. Unless the left rock is made up of the architectural components of the excavated interior, rock that is not part of the building is removed. Indian rock cut architecture in nature is mostly religious. In India there are more than 1,500 documented constructions for rock cutting. Many of those buildings include works of art of worldwide significance and most of them are decorated with beautiful stone carvings. These old and mediaeval buildings are important accomplishments in structural engineering and workmanship. Often the effort has surprised visitors, but viewed from one perspective, a rock-cut building is a decorative rock quarry; most of the excavated stone is usually used for commercial use elsewhere. In India, caverns were seen as holy sites for a long time. Caves enlarged or made entirely by men were considered as sacred as natural caves. In all Indian religious buildings, even independent ones, the sanctuary has been built to have the same grotto-like atmosphere, because it is usually tiny and gloomy and without natural light. The earliest rock-cut building is located in the Barabar caves, Bihar, which were constructed about the 3rd century BC. The Western Deccan has other early grotto temples, mostly Buddhist shrines





ISSN: 2249-7137

and monasteries, ranging from 100 BC to 170 AD. Initially, wooden buildings were presumably connected with them, which would have decayed with time.

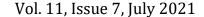
The artists have historically carried in their rock-cut temples design aspects from wood: expert craftsmen carved rock to mimic timber texture, grain, and structure. The Bhaja Caves, the Karla Caves, the Bedse Casas, the Kanheri Caves and parts of the Ajanta Caves were some of the oldest caves. Relics discovered in these caverns indicate that the sacred and the commercial are linked. Buddhist missionaries are known to have merchants escorted across India on major international routes. Some of the most magnificent cellar temples, commissioned by rich merchants, featured pillars, arches and ornate façades. They were produced during the era in which the Roman Empire and Southeast Asia flourished in sea commerce.

Though the 5th century produced self-standing structure temples, rock-cut cave temples were being erected in parallel. Later rock-cut cave construction, like in the Ellora caves, grew increasingly complex. The monolithic temple of Kailash is considered the highest point of this kind of building. While cave temples were still constructed until the 12th century, rock cut architecture became nearly entirely structural in character. In other words, rocks have been chopped into bricks and built independent buildings. Kailash was the final magnificent temple excavated using amazing rocks". Many rock reliefs, relief sculptures cut into rock faces and located outdoors or elsewhere.



The earliest human caves were natural caves that they used or occupied for a variety of purposes, for example for shrines and shelters. "Evidence shows that throughout the Paleolithic and Mesolithic eras, until approximately 6000 BC the caverns were initially inhabited and somewhat changed. These modifications are not architecturally categorised. Early examples featured rock overhanging decoration with rock cut patterns. The Rock Shelters of Bhimbetka, now recognised as a UNESCO World Heritage Site, are situated on the border of the Deccan Plateau, where severe erosion has created enormous sandstone outcrops. Researchers discovered rudimentary tools and beautiful human-made rock drawings at numerous caverns and caves in the region, the oldest of which date from around 8,000 BCE. During the Buddha era (about 563/480 or c. 483/400 BCE) it was also the custom of the Buddhist monks to use natural caves such as the Saptaparni Cave south-west of Rajgir, Bihar. Many consider it to be the location in which Buddha spent some time before his death, and where the first Buddhist council was convened

after the Buddha died (paranirvana) (paranirvana). The Buddha himself had also utilised the



Impact Factor: SJIF 2021 = 7.492



ISSN: 2249-7137

Indrasala Cave for meditation, beginning a practise of utilising caves, natural or man-made, as religious retreats, that would continue for over a century





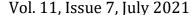
Lomas Rishi's famous carved door, one of the Barabar caves, dates back to around 250 BCE and displays the first Maurya reliefs. The near-perfect walls of the Barabar Caves were excavated into the rock and glued to about 250 BCE, the date on which Ashoka was inscribed. Indian rock cut architecture started to evolve in the third century BCE beginning with the previously complex and state-sponsored caves of Barabar in Bihar, personally dedicated to Ashoka around 250 BCE. These manmade caverns show an incredible degree of technical skill, the very hard granite rock being carved in geometrical form and polished to a mirror-like perfection.

The construction and polishing characteristics of the Barabar caves, but without any writing, exist in another cave. Sitamarhi Cave, 20 kilometres from Rajgir, 10 kilometres south-west of Hisua, also known as the Maurya. It is smaller than the Barabar caves and measures just 4,91x3,43 metres and a height of 2.01 metres above the ceiling. The entrance to the Barabar grotto is similarly trapezoidal.

Lastly, in Rajgir, generally from the 2nd to the 4th century, the Jain Son Bhandar caves have a wide structural feature which recalls the caves of Barabar and certain small areas with irregular polish, leading to the suggestion by some authors that they can be contemporary and even earlier than the caves of Barabar and create a precedent and evolutionary stage for it.

Western India's artificial caverns

Following the Barabar caves, enormous efforts were undertaken until the sixth century CE in the construction of holy caverns in West India. The cleaning of the cave walls, however, has been abandoned and never resumed. Nor are there any polishing in magnificent groves such as Karla Caves (1st century CE) or Ajanta Caves (5th century CE). The reason could be that the Mauryan cellars were dedicated and sponsored by the imperial government, which allowed huge resources and effort to be spent. Later cellars were most often the result of donations by ordinary people, who could not afford to spend as much money.



ACADEMICIA

ISSN: 2249-7137 Impact Factor: SIIF 2021 = 7.492

Second wave of cave building (5th to 6th centuries CE)



The buildings of the cellars were supposed to diminish after the 2nd century CE, perhaps because of the Mahayana Buddhism and the architectural and artistic output in Gandhara and Amaravati. The construction of rock cavities would resurface briefly in the 6th century CE with the great accomplishments of Ajanta and Ellora before eventually receding since the Hinduism supplanted the Buddhism in the subcontinent, and stand-alone temples became more popular.

The Ajanta Caves, a World Heritage site of Maharashtra, are 30 rock-coated Buddhist temples sculpted on the vertical wall of the canyon, next to a waterfall-fed lake, in the highlands of the Sahyadri ranges. Like other Buddhist cave sites, it is situated on major commercial routes and extends across six centuries starting in the 2nd or 1st century B.C. There was a period of intensive construction work at this location under King Vakataka Harisena between 460 and 478. An abundance of ornamental sculptures, sculptured columns and sculpted reliefs are discovered, including beautifully sculpted cornices and pilasters. Skilfully carved live rock in buildings, grains and complicated decorative gravure to resemble wood (like lintels), while such architectural components were aesthetic and not classically utilitarian.

Final cave building wave (6th–15th century CE)

In Ellora, on the hill northeasterly side of the main cave complex, is a temple of the Jain cave holding a 4.9 m (16 feet) rock sculptured picture of Lord Parshvanath, inscribed on 1234/5 CE. This beautifully maintained picture is still being worshipped by Dharaiendra and Padmavati. The inscription identifies the location as a sacred site, Charana Hill. This was Ellora's final excavation. The caverns of Ankai Fort are believed to have been from the same era.

Two hundred years after the Ellora Parshvanath Cave Temple, Gwalior was the last wave of Indian rock cavity building with five clusters of rock-cut monuments around Fort Gwalior.

Group South-West: Now called Trishalagiri. The party was the first to meet on the way to the Urvai Gate, just outside of the walls. There are Jain's earliest monuments from the post-Gupta era in Gwalior. L.B. Singh archaeologist dates them to AD 6th to 8th.

South-East Group: The Urvahi group (siddhachal caves, north-western group and northwestern group) were dug under Tomar domination from 1440-1473 AD (popularly known as Ek Patthar ki bawadi group or Gopachal Atishya kshetras).



ISSN: 2249-7137

Monolithic temples of rock-cut



In order to create monolithic replicas of structural temples, the builders of Pallava began to carve rock. One characteristic of the rock-cut cave temple distribution till early Pallavas is that, with the solo exception of the Tiruchitrapalli on the southern bank of the Kaveri River, they did not go farther south than Arakandanallur, traditional southern border between north and south. Good granite exposure was usually not available south of the river for rock-cut buildings. A temple cut from rock is graved from a huge rock and cut to resemble a temple of timber or steep stone with wall decorations and works of art. Panch Rat is an example of Indian rock-cut monolithic building dating back to the late seventh century in Mamallapuram, a UNESCO World Heritage Site".

CONCLUSION

The rock-cut structures show the most magnificent item of Indian art. Most rock-cut monuments were intimately linked to different faiths and religious activities. In the early days, magnificent Buddhist and Jain rock-cut monuments were constructed in regions like Bihar in the east and Maharashtra in the west. The Buddhist monks dug many caverns for worship and habitation. Chaityas (prayer halls) and Viharas are the finest example (monasteries). In these buildings, windows, balconies and doors were sculpted into enormous apertures formed by an arch. Rockcut architecture plays a key role in Indian Architecture history. The rock-cut architecture varies from conventional structures in numerous respects. The art of rock cutting is more like sculpting than architecture, because buildings were constructed via the cutting of solid rocks. Let's have a look at several specimens of ancient India's rock cut architecture. Some notable ancient Indian Rock-cut buildings include Chaityas, Viharas, temples etc. Temple 16 of Ellora cave, the Kailash temple, is unique since it has been dug from above rather than by the normal technique of cutting into a mountainside scarp. A single enormous top-down excavation 100 metres down into the Volcanic Basaltic Cliff Rock produced the Kailash Temple. It was commissioned by King Krishna I in the 8th century and lasted more than 100 years. The Kailash Temple, or Cave 16 known in Ellora Caves situated in the Deccan Plateau in Maharashtra, is a massive monolithic temple of Lord Shiva.



ISSN: 2249-7137 Vol. 11, Issue 7, July 2021 Impact Factor: SJIF 2021 = 7.492

REFERENCES

- 1. Fergusson, James (1864). The Rock-Cut Temples of India. John Murray, London.
- **2.** Dehejia, V. (1972). Early Buddhist Rock Temples. Thames and Hudson: London. ISBN 0-500-69001-4.
- **3.** Rajan, K.V. Soundara (1998). Rock-Cut Temple Styles. Somaiya Publications: Mumbai. ISBN 81-7039-218-7
- **4.** Rajan, K.V. Soundara (1998). Rock-cut Temple Styles'. Mumbai, India: Somaily Publications. pp. 9–10, 23, 160–161. ISBN 81-7039-218-7.
- **5.** "Prehistoric Rock Art". art-and-archaeology.com. Retrieved 2006-10-17.
- **6.** Mathpal, Yashodhar (1984). Prehistoric Painting Of Bhimbetka. Abhinav Publications. p. 220. ISBN 9788170171935.
- 7. Tiwari, Shiv Kumar (2000). Riddles of Indian Rockshelter Paintings. Sarup & Sons. p. 189. ISBN 9788176250863.
- **8.** Rock Shelters of Bhimbetka (PDF). UNESCO. 2003. p. 16.
- **9.** Mithen, Steven (2011). After the Ice: A Global Human History, 20,000 5000 BC. Orion. p. 524. ISBN 9781780222592.
- **10.** Javid, Ali; Jāvīd, 'Alī; Javeed, Tabassum (2008). World Heritage Monuments and Related Edifices in India. Algora Publishing. p. 19. ISBN 9780875864846.
- **11.** Paul Gwynne (30 May 2017). World Religions in Practice: A Comparative Introduction. Wiley. pp. 51–52. ISBN 978-1-118-97228-1.
- 12. Jules Barthélemy Saint-Hilaire (1914). The Buddha and His Religion. Trübner. pp. 376–377.
- **13.** Digha Nikaya 16, Maha-Parinibbana Sutta, Last Days of the Buddha, Buddhist Publication Society
- **14.** Kailash Chand Jain (1991). Lord Mahāvīra and His Times. Motilal Banarsidass. p. 66. ISBN 978-81-208-0805-8.