# Heritage Awareness for CAVES IN MMR

# Heritage Awareness for CAVES IN MMR Documentary Film

# Phase 1a: Archival Research

## **Prepared For**

## MMRDA

(Mumbai Metropolitan Region Development Authority)

**Prepared By** 

DESIGN PLUS 29, Kaushik, Shreenagar, Sector – 1 Thane (W) – 400 604 Tel.Nos. 022-65221152 / 09821 546417

## **Research Team**

In-charge

Dr. R. K. Mohanty

Research Team

Himanshu Kadam

Varad Sabnis

Shraddha Bhatawadekar

## Contents

CHAPTER 1	05
Aims And Objectives	
CHAPTER 2	10
Evolution of Cave Architecture in India	
CHAPTER 3	19
Rock-cut Activity in Maharashtra	
CHAPTER 4	28
Features of Cave Architecture	
CHAPTER 5	44
Mumbai: Historical-Geographical Context	
CHAPTER 6	59
Caves in Mumbai	
CHAPTER 7	186
Significance, Values and Efforts towards Conservation	
Bibliography	



# CHAPTER 1 AIMS AND OBJECTIVES

'Heritage is our legacy from the past, what we live with today and what we pass on to future generations'.

## **Understanding Heritage**

Heritage includes in itself both tangible and intangible remains of the past; manuscripts, coins, paintings, sculptures, palaces, caves, forts, tombs, gateways, natural landscapes like sanctuaries, national parks, and also beliefs, customs, ways of life, etc. Heritage is unique as it reflects the aspirations, motivations, customs and practices of the times when it was created and serves as a link to the past from which it has survived. It renders continuity as it is passed down from one generation to the next. It provides feelings of reverence and respect for the ancestors, identity, belongingness to the people of the place irrespective of the period to which it belongs. The cultural and natural heritage, thus, forms irreplaceable source of life and inspiration.

## Threat to Heritage

These rich remains of the past are in constant danger today, either at the hands of inexorable forces of nature or at the hands of human beings. Rapid changes in social, economic, political scenario have posed threat to the very existence of heritage and it is vanishing very fast. The situation is especially grave in a burgeoning city of Mumbai where the vast amount of heritage often stands neglected.

## Heritage of Mumbai

Mumbai boasts of vast heritage not only of the Portuguese and British times (as many still believe); but its antiquity dates back to the pre-historic period. The first major evidence of inhabitation in the historic period comes through the existence of caves, some of which can be safely dated to the periods before the beginning of Christian era. The cave architecture seems to have sown strong roots in the land of the islands, for the activity continued almost till 8<sup>th</sup>-9<sup>th</sup> century when we see the excavation of the Elephanta caves (then Gharapuri). This long period of almost ten centuries is remarkable in the history of city and also the whole country mainly because of socio-political, economic, religious and art-historical facets attached to it. This cave architecture along with other monumental remains belonging to the Shilaharas (e.g. Banaganga) and the Portuguese forts and establishments (e.g. Khotachi Wadi), the Victorian architecture is all that makes Mumbai a fascinating place and a likely tourist attraction.

## Heritage: Issues and Threats

Today, however, the rich heritage of Mumbai fails to evoke fascination of Mumbaikars who hardly afford a peep into the past, for Mumbai lives in the 'present'. Not many citizens know the importance and contribution of heritage to Mumbai and to India and to the world (Elephanta has been declared a World Heritage Site by the UNESCO). The ignorance of people has resulted in pacing up the deterioration of the caves and other valuable resources, which are already a prey to natural decay. This further invites malpractices near the heritage areas such as encroachments, etc. as has been seen in case of the Jogeshwari caves in the recent past. It has lost its significance in the urban landscape.

## **Creating Awareness**

Blaming masses at large or any particular authority or even any legislation would not solve the matter. Several efforts are undertaken by different bodies, conservationists, archaeologists, heritage managers and heritage and nature lovers. But these need to be substantiated by the 'responsible' citizens of the city. It is the need of the day to make every citizen 'responsible'. It is necessary that everyone understands 'value'– (aesthetic, economic, educational, etc.) and 'resourceness' of heritage – (local employment, earnings, development, etc.). Once this message reaches out the masses, they will surely promote the cause of heritage, be it consciously or unconsciously. This awareness will definitely help save fabric of heritage in Mumbai, and *Mumbaikars*, so also the tourists will be able to enjoy these places in a better manner than they ever have.



## Aims and Objectives

The aims of the documentary are:

- **§** To create an understanding amongst general public about the caves of Mumbai and generate their interest in rich heritage of Mumbai
- **§** To bring out the significance of the caves as unique identity and also understand their place and importance amidst overall setting and urban landscape.
- **§** To motivate young generation (school, colleges) to appreciate the heritage of Mumbai
- **§** To develop knowledge and understanding of the relationship between the heritage sector and the common people.
- **§** To make people aware of the issues related to the caves.
- § To promote efforts towards reducing the impact of urbanization and other pressures on the caves and ensure conservation and preservation of heritage through sustained efforts
- **§** To encourage public participation in the efforts towards conservation and preservation of heritage

CHAPTER 2 EVOLUTION OF CAVE ARCHITECTURE IN INDIA

## **CHAPTER 2**

## **EVOLUTION OF CAVE ARCHITECTURE IN INDIA**

Among the most significant, artistic and imaginative monuments of ancient India are an imposing series of rock-cut excavations. Most of these were initially created by the followers of Ajivika<sup>1</sup> sect and Buddhism<sup>2</sup> and later were followed by Hinduism and Jainism<sup>3</sup> as well.

## **Beginning of Rock-cut Architecture**

To early architecture, Ashoka, the emperor of Mauryan dynasty contributed a lot in the form of erection of Stambha (pillars), Stupa and also the excavation of rock cut chambers and cells. He got excavated eight rock cut chambers in the Barabar and Nagarjuni hills and one near Rajgir. He dedicated them to the Ajivika sect of the Jaina monks. The hard quartzite gneiss rocks were cut to produce such a great monument. These chambers resembled the wooden structures of that period. These chambers later became prototype for the sophisticated chaitygriha of the later times. Well known among them are Lomash Rishi, Sudama and Sita Marhi caves. Lomash Rishi and Sudama cave are located near to each other in Barabar hills while the Sita Marhi cave is in Nagarjuni hills. Interesting to note here is that the axes of the two caves at Barabar hills lie parallel to the rock face with entrance at the side; probably because these caves represent the first experimentation in rock cutting and also the imitation of wooden architecture in to the rock.

<sup>&</sup>lt;sup>1</sup> The Ajivika sect seems to have been very old. The central idea was that of niyati (fate), the principle that determined and controlled everything. Human efforts were of no consequences in this strictly deterministic philosophy. Karma and transmigration existed but human effort played no role in it, as the paths for souls over thousands of years had already been mapped out.

<sup>&</sup>lt;sup>2</sup> Buddhism: it is a religion and philosophy which includes the teachings of Buddha (the one who is enlightened or awakened). Gautam Buddha was historical figure who preached this philosophy in the 6th century B.C.E. this religion is based upon the idea of the removal of sufferig and achievement of Nirvana and also the escape from the cycle of birth nd re birth. this can be achieved through giving up the desires. Initially this religion was meant only for the monks (Bhikhkhu) but in later times women and other householders were also included in the religion.Buddha (enlightened), Dhamma (religion) and Sangha (community) are the three jewels of Buddhism.

<sup>&</sup>lt;sup>3</sup> Jainism is an ancient religion based uopn the principle of non violence to the living organisms. its philosophy and practice mainly rely upon self effort to progress the spiritual ladder to the divine. This religion was preached by Mahavira, he was the 24<sup>th</sup> Tirthankara of that times.

The façade of Lomash Rishi cave shows an imitation of construction in wood. The caves are simple in plan with plain but highly polished interior. The only sculptural ornamentation is a relief carved on the doorway of a cave. Over the entrance, framed within the earliest example of what art historian refers as Chaitya arch and also the gavaksha with a carved finial, are two bands of relief carving. The upper one has lattice work and the lower one has finely carved frieze showing a row of elephants approaching the stupa. Both ends of the frieze are carrying a makara (a mythical animal). The door has two vertical poles at the side they slope slightly inwards as if they resist an outward thrust of the arching beam above. Curved rafters join the upper ends of these jambs.





The interior of the Lomash Rishi cave consists of two connected chambers. The rectangular one leads in to a round, unfinished room which resembles a thatched hut. There is no inscribed record over here but the cave next to it, with an identical interior has one inscription stating that it was dedicated by Ashoka to the Ajivika 12 years after his abhisheka (coronation).

## Expansion of Rock-cut Activity in the Western India

After the excavations in Barabar hills the next activity can be traced out in the western parts of India especially in the Western Ghats. This was the extremely rapid extension of cave architecture in the Western India as compared to the east. Prior to the 3<sup>rd</sup> or 2<sup>nd</sup> century B.C.E. there are no evidences to show that the inhabitants of the western regions of India dwelled in caves or used the rock for any religious and monumental purpose. Immediately after the expansion of Buddhism they seem to have commenced excavation and continued to do so uninterruptedly for a long series of years.



Location of Caves in India Source: The Cave Temples of India Western Indian caves are located in various geographical pockets and are distributed very irregularly. These caves belong to three great sects - Buddhism in the beginning, and in the later period Jainism and Brahmanism.

Sr.	Name of the Locality	Brief Description
No.		
1	Kathiawar	The ancient Sourashtra, forming the peninsular portion of the state of Gujrat. There are about 6 groups of caves scattered along the hill range that runs parallel to the southern coast. In these groups there are about 140 separate excavations.
2	Mumbai	Various islands of Mumbai has about 200 excavations including the world heritage site of Elephanta, Kanheri, Jogeshwari, Kondivite, Jivdani etc. these caves include Buddhist and also Brahmanical excavations.
3	Junnar	Located in Pune district of Maharashtra. This is also an early historic site which once stood as a flourishing trade centre. This group contains more than 250 caves. Major groups in this locality include Tulja, Ganesh lena, Bhut lena, Junnar, Naneghat, Harishchandragad caves etc.
4	Karle	There are few groups inn the vicinity of Lonavla. These include caves at Bhaje, Karle, Shelarwadi, Bedsa, etc. many of these caves are of special interest because caves at Bhaje are of the early period, karle caves have preserved a wooden Chattravali of the early historic period. Bedsa has an apsidal shaped residential complex and many great characteristics.

The principal localities in which they exist may be put forward as follows:

5	Karad	Located towards the south of Pune in Maharashtra.	
		Various groups such as Karad, Jakhinwadi,	
		Chachegaon, Wai, Shirwal etc. are part of this locality.	
6	Konkan	Along the Konkan , on western side of the same range,	
		between the hills and the sea there are various	
		locations where rock cut caves exist. These include	
		caves at Gandhar Pale, Nadsur - Khadsamble, Kuda,	
		Mandad, Chiplun, Aravalem etc.	
7	Nasik	Caves are located in Nasik city of Maharashtra are	
		popularly known as Pandavlena. There are few	
		excavations at Ankai belonging to the Jaina faith.	
		Patura is also a cave site in this region.	
8	Ajanta	This group contains the world famous caves at Ajanta	
		and Ellora. At Ellora there also exist monolithic	
		shrines. This group of cave sites also includes	
		Pitalkhora, Aurangabad group of caves. Bhokardan	
		cave in this region is a Brahmanical cave.	
9	Dharashiv	This group is in the area nearby the district of Latur,	
		Usmanabad of Maharashtra. Kharosa and Dharashiv	
		are major cave excavation sites of this region. Caves at	
		Kalyana, the ancient capital city of the Chalukya	
		dynasty, are also from this region.	
10	Malwa	On the north of the Narmada in Malwa, are the groups	
		at Bagh, Dhamnar, and Kolvi.	
11	Badami	Badami and Aihole in Karnataka have few caves.	
		Architecturally these caves are considered amongst	
		the most interesting caves of the Brahmanical faith.	

Above mentioned caves are from Western India, especially the Deccan. These are more than 1000 excavations. Apart from these there are various other smaller cave groups which are scattered in the same area.

## **Religious Affinity of Caves**

The caves are divided primarily into three classes, according to the sects by whom or for whose use they were hewn out; Buddhists, Brahmanical and Jaina. The earliest examples we have are the Buddhist, and date from the middle of the third century B.C.E., but the excavations belonging to this sect, extend from that date down to near the end of the 7-8<sup>th</sup> century C.E. thus ranging over a period of thousand years. They are also the most numerous class, comprising of more than 75 % of the whole being Buddhist caves.

### **Buddhist Caves**

Buddhist caves can further be divided in to two great categories; first, those were excavated prior to the Common Era or a century after that. This group of caves belongs to the Hinayana sect of Buddhism. As the Hinayana Buddhism did not support image worship, these caves are generally plain and devoid of the images of the Buddha. Most of them had a Stupa as an object of worship.

The other group of Buddhist caves consists of the caves excavated after  $2^{nd}$  century C.E. These caves belong to the

Mahayana sect of Buddhism. Most of these caves are having images of Buddha and various other Bodhisattva<sup>4</sup>.





<sup>&</sup>lt;sup>4</sup> Bodhisattva means the enlightened existence or the enlightenment being. this concept wa developed the Mahayana phase of Buddhism, which encourages everyone to follow the path of the bodhisatva. According to the Theravada Buddhism Bodhisattva are someone on the path of Buddhahood. While the Mahayana Buddhism refers to it as compassionately refrains from entering Nirvana in order to save or help others.

### **Brahmanical Caves**

The next in order of the time, are those of the Brahmanical caves with various affinities; Shaivism, Vaishnavism, which range from about 4<sup>th</sup> to 8-9<sup>th</sup> century C.E. Of the whole about 18% excavations are Brahmanical, but a large number of them are of very considerable dimensions. Caves like Mandapeshwar, Jogeshwari or Elephanta (all from Mumbai Metropolitan Region) are generally thought to be of Pashupata sect<sup>5</sup>.

The early Brahmanical caves were largely similar in layout to the Buddhist excavations. This was probably intended for proving and pressing their candidature for a larger share of popular favor. Their works are very similar to the later Buddhist Vihara. The general plan of the cave temples included the shrine for a deity and also the hall, entrance porch, etc.



<sup>5</sup> Pashupata Sect is one of the important schools of Shaivism which focuses on the extreme devotion towards the Shiva. This was probably the earliest school of the Shaivism, which is also mentioned in the Mahabharata. It was more prominent in South India from 6<sup>th</sup> to 14<sup>th</sup> centuries C.E.

#### Jaina Caves

Apart from Buddhist and Brahmanical caves there various caves of the Jaina sect. although they are less in numbers as compared to the other sectarian affinities but these definitely display the contemporary art, architecture, socioreligious status of the times.

These caves generally have a similar plan as that of the Buddhists vihara, sometimes with cells in the walls, but more distinguished by numerous figures of their Tirthankara<sup>6</sup> and Jina who hold the central position in the sectarian philosophy.



All these excavations were for religious purposes, some being temples, Chaitya or vihara or halls devoted solely to the worship, sometimes with an inner shrine for worship and cells for monks. Some were Dharmashala with or without cells. The rock-cut architecture flourished the most in Western India, especially Maharashtra where more than 1000 such caves were hewn; the detailed evolution is explained in the next chapter.

<sup>&</sup>lt;sup>6</sup> Jainnism believes that the knowledge of the true living (Dharma) has declined and revived cyclically throughg history. those who preach and rediscover Dharma are called as Tithankaras. Mahavira himself wa the 24th Tirthankara. Adinath (Rishabhnath), Padmaprabhuu, Suparshwanth are few important Tirthankaras.

# CHAPTER 3 ROCK-CUT ACTIVITY IN MAHARASHTRA

HZASI

## CHAPTER 3

## **ROCK-CUT ACTIVITY IN MAHARASHTRA**

Rock cut architecture and especially the cave architecture flourished more in Maharashtra than any other state of India. It is very interesting to note that the flourishing rock cut activity in Maharashtra was not only due to the spread of the religion, but many other factors were equally involved in the spread of the rock cut activity in this area.

Various factors which influenced, and also to a larger extent shaped the flourishing tradition of rock cut caves in the Deccan and Western India included royal patronage, support from traders and other classes of the common people, the most important factor being the availability of the solid rock in the form of great Sahyadri or the Western Ghats.

The beginning of rock cut architecture in this region appears to coincide with the rule of the Satavahana dynasty in the Deccan and also the flourishing overseas trade. The flourishing coastal trade, both domestic and foreign, evidently brought great profits to the merchants and traders who were able to make generous donations towards the rock monasteries.

Significantly the period during which rock cutting in Maharashtra appears to have been suspended or was minimal (20 B.C.E. to 50 C.E.) coincides with the incomprehensible period of the Satavahana history. It suggests that the excavation of caves depended to some extent on political stability. Especially in this period the hold of the Satavahana rulers over their territories was weak and hence Kshaharata Dynasty was able to take over important portions of their dominions. It leads to the reasonable assumption that the political unrest caused recession in general prosperity which further lead to an adverse effect upon the patronage of religious establishments.

The study of rock cut architecture in this region is supplemented by the knowledge of the development of Brahmi script, the elaboration of the apsidal Chaitya, features of vihara, water cisterns and the progress in the sculptor's crafts and the reconstruction of the

historical facts can be done on the basis the information collected from these sources. Tentative chronology can also be established by the same way.

Palaeography constitutes a relative reliable benchmark for the early Buddhist caves and certainly provides a greater precision than has hitherto been allowed. During this period Brahmi was still in its infancy, having been recently freed from a strict imitation of the Mauryan pattern. In this early stage of development variations such as those that would result from the distinction in style between an older and a younger scribe, might have existed. However Palaeography provides us with stable and valuable tool during the historical period.

Early activities of rock cut excavations in Maharashtra started with the Buddhist tradition in the 2<sup>nd</sup> century B.C.E. This tradition in Maharashtra followed the earlier rock cut caves from the eastern parts of India especially from the Barabar hills of Bihar. The caves at Barabar hills are known Sudama and Lomash Rishi cave. These excavation followed by the rapid spread of Buddhist caves in the western India and especially in the state of Maharashtra.

Sr. No	Early phase (100 B.C.E. to 50 B.C.E. )	Late phase (1century C.E.to
		2 <sup>nd</sup> – 3 <sup>rd</sup> century C.E.)
1.	Bhaje	Additions made at Nasik
2.	Kondivite	Junnar
3.	Jivdani	Karle
4.	Nadsur	Kuda
5.	Tulja	Mahad
6.	Pitalkhora	Karad
7.	Kondane	Shelarwadi
8.	Ajanta 10	Additions at Kanheri
9.	Nasik	Bedsa
10.	Kanheri Cave no. 3	

Early group of rock cut caves in Maharashtra consists of Buddhist caves:

**Buddhist caves of Western India** 

Architectural details suggest that the Chaitya at Kondivite (Mahakali) and Bhaje are of the early date; probably excavated during 2<sup>nd</sup> century B.C.E. just after that the excavation of the Chaitya at Kondane might have taken place and this is indicated by the paleographic record which is present here in the form an inscription on the façade of the main Chaitya. Contemporary to the Chaitya at Kondane was probably the excavation of Nadsur (Raigad district) was being carried out. Vidya Dehejiya ascribes the cave at Nadsur to the phase in between Kondivite and Bhaje.

Kondivite has got the ground pan which is very similar to that of the Sudama and Lomas Rishi caves at Barabar hills in Bihar which are dated to about 3<sup>rd</sup> century B.C.E.

The simple apsidal plan of Bhaje Chaitya is divided in to nave and side aisles, its wooden frontage, slanting octagonal pillars indicate the early date of the cave. The rows of tiny pinholes on the façade suggest further wooden addition and would seems to attest its priority to the Chaitya at Kondane, Pitalkhora 3 and Ajanta 10, where this feature is absent.

Architecturally the Chaitya at Kondane is almost similar to that of Bhaje. The absence of pinholes on the façade and the more definite and stronger curve of the arch can be observed as a difference.

Pitalkhora stands next in the chronology of the rock cut caves of Maharashtra. Cave no. 12 and 10 are simple apsidal pillar less Chaitya. Cave no 11 has three stupas which are similar to that of the Bhaje. The most impressive sculpture associated with the Chaitya is the life size guardian Yaksha and also the dwarf Yaksha figure. Water management at the site of Ptalkhora is also a remarkable feature of the site.

Generally many cave sites consist of a single Chaitya with a number of viharas to house monks, but in case of Ajanta we find two big Chaitya immediately adjoin each other. On architectural ground cave no 10 cane be dated to be contemporary to Bhaje. The introduction of entirely rock cut façade seems to have taken place about this time at Nasik and Ajanta 9. Activity at Ajanta appears to have started around 80 or 70 B.C.E. with excavation of Chaitya and cave no. 30, a residential cell.

Aurangabad group of caves, on the basis of architectural features, especially its flat side aisles, ceilings and plain pillars suggest a contemporary period to that of the cave no 9 at Ajanta. The absence of sculptural and paleographic evidences forces us to rely totally upon the architectural details.

Excavations of rock cut caves at seem to have continued for a period of more than a century. The earliest excavation appears to be a VIhara (cave no 19) which contains an inscription, mentioning about the reign of Satavahana king Kanha, the second ruler of the dynasty. The pillars of the Nasik Chaitya have a base consist a Ghata standing on a stepped platform. One of the caves at Nasik is known as Nahapana Vihara, contains an inscription of king Nahapana of Western Kshatrap dynasty.

Caves at Bedsa depict the next developed stage in the chronology. The peculiar feature of this cave site is the apsidal vihara, which is only of its kind in the state. These caves are located in the vicinity of Bhaje and Karle caves.

Architectural advancement at Karle Chaitya indicates the little developed stage than that of the Bedsa. The Chaitya here has been further elaborated by the addition of an outer screen with free standing columns beyond this. The sculptures here are of highly advanced character and displays finest example of the sculptor's craft and workmanship of the Western Indian caves. Palaeographically the Chaitya can be ascribed to a period around 50-70 C.E.. Inscriptions of Nahapana, Gautamiputra Satkarni and Pulumavi are to be found in the verandah of the Chaitya, recounting the grants of villages and their produce to the monk community at Karle. The two storeyed vihara belongs to a later date than the Chaitya and contains an inscription reporting its dedication to the 24<sup>th</sup> year of Pulumavi's reign or 134 C.E.

Architectural features at Kuda give us few clues as to the date of the rectangular, flat roofed Chaitya. The pillars of Chaitya 9 have a bell capital, which suggest that the cave is later than the Bedsa and probably contemporary to the excavation at Karle. The extraordinary flourishes of the script to be seen at Kuda appear to have been a local variation. Mahayana occupation of the site is indicated by the panels depicting Buddha and Bodhisatvas sculpted on the side walls of the Chaitya 6 as well as on the façade.

The seven sets of caves around Junnar make it as a largest cave complex of India, consisting of more than 250 excavations within the area of 5 km radius from the modern town of Junnar. Caves at Naneghat are located on the trade route connecting Junnar to the early historic trade centre at Kalyan down the ghats. This cave contains the record of queen Naganika of the Satavahana reign. The cave also represented the sculpted figures of Simuka Satavahana, Satkarni and his queen Naganika, a general and tree princes. Unfortunately these sculpted figures are now damaged and almost gone except the feet and the names engraved on the top.

Tulja forms the other group of caves in the vicinity of Junnar. The pillared circular Chaitya at Tulja belongs to the early stage in the development of the Chaitya form. The presence of pillars to mark circumambulatory path suggests a date somewhat in advance of the Guntapalli Chaitya in Andhara Pradesh indicating that it may be a variant form belonging to the same phase as Bhaje.

Bhut Leni in the same region seems to have got its name because of the corruption of the Buddha Lena. Architecturally it is provided with apsidal plan without a verandah, but with a stone frontage belongs to an early phase. It can be regarded as contemporary with Nasik and Ajanta 9, and a little prior to the Bedsa Chaitya.

Chaitya 6 at Lenyadri is an apsidal cave with arched side aisles and a narrow pillared verandah in front. The bell shaped inverted Ghata on the pillars belong to the period later then the excavation of the cave at Karle.

Amaba- Ambika group and Bhimashankar group of caves are also part of the Junnar cave complex along with the Shivneri group.

Mahad, Karad and Shelarwadi caves followed the next stage of the expansion of the rock cut activities in Maharashtra.

Kanheri was another important monastery of the ancient times when the rock cut activity started somewhat during 1st century C.E. and continued up to almost 10<sup>th</sup> century C.E. there are more than 120 caves. These caves have inscriptions dating from almost 1<sup>st</sup> century C.E. to the 9<sup>th</sup>, 10<sup>th</sup>, and also in the 11<sup>th</sup> century C.E. suggesting a longer duration of occupation at the site. This was probably also an educational establishment during the ancient times.

Buddhist caves continue to be excavated and used even during the 5-6<sup>th</sup> century C.E. various cave site such as Ajanta, Kanheri were the flouring centers of Buddhism. This Mahayana and later Vajrayana phase of Buddhism added various caves to the earlier existing establishments.

It is a noteworthy fact that many of the caves were excavated with the help of traders, businessmen, royal dignitaries, and also small donations from common people from various parts of the country. This type of involvement of people in community activities and support to the ongoing public welfare projects was the main reason for such a great tradition and its spread over a larger area and a longer period as well.

Rock cut Buddhist caves in Maharashtra were followed by the Jain and Brahmanical caves excavations. This expansion and changing trend of rock cut caves in the western India; especially the Maharashtra can be better seen in the region around Mumbai. This region saw the excavations of Jogeshwari caves in the late historical period.

Cave at Jogeshwari is one of the largest single excavations in the whole of India. Sectarian affiliation of this cave can be attributed to the Pashupat sect. this sect seems to have been popular in this region in 6<sup>th</sup>-7<sup>th</sup> and 8<sup>th</sup> century C.E. this can be inferred on the basis of the contemporary excavations at Mandapeshwar and the great site of Elephanta.

Mandapeshwar caves are not far from the Kanheri group of Buddhist caves. This cave though belonged to the Pashupat sect of Brahamanism, but was thriving during the flourishing activities at Kanheri, Magathane, Kondivite etc. The cave at Mandapeshwar is in the form of a large mandapa (hall) as in the case of Jogeshwari.

Elephanta cave stands out as the most interesting example of the Brahmanical caves of the 8<sup>th</sup> 9<sup>th</sup> century C.E.. Various sculptural panels from Elephanta portray a high level of art and aesthetics. The sculpture of Sadashiva, Ravananugraha, Kalyansundara are some of the splendid examples of the Sculptural variations at Elephanta.

There is a close similarity between the main cave at Elephanta and Dhumar Lena at Ellora. This similarity in the layout of the caves and sculptural execution suggest some sort of influence of the Rashtrakuta art of the times.

Rashtrakuta rulers patronized the rock cut activities during their rule and this can be seen through various rock cut cave temples of Buddhist, Jain and Brahmanical caves at Ellora. Excavation of rock cut or monolithic shrine of the Kailash temple is a magnificent example of the times. The caves here are of extreme importance from the point of view of the excavation of a temple from a single rock. After Mahabalipuram, this site of Ellora has such great monuments cut in to the solid rock.

Brahmanical caves at Bhokardan were also excavated during the 9-10<sup>th</sup> century C.E. and it has got a partly mutilated but still a great sculpture of Sheshashyi Vishnu.

After Ellora and Kanheri the rock cut tradition seems to have declined. This could be the result of the decline in trade and commerce activities. But soon after the 1 or 2 centuries we find that the structural temples were given more prominence than the rock cut monuments. When we see general importance of the caves and rock cut monuments we will find that the cave excavation in India is dominated by various Buddhism and followed by Brahmanism and Jainism. Out of which most of the Buddhist caves are in the Western India. Maharashtra because geography and socio- economic conditions during the ancient period.

Junnar group of caves forms the largest of all cave complexes in India. Which is comprises of many groups of cave in the vicinity of the town of Junnar.

The next largest group of caves with many types of variety and occupation of different religions, sects and also longer duration of the occupation can be seen in and around Mumbai. This region which comes under the MMR has got many Buddhist as well as Brahmanical caves. These caves include the important caves and monastic establishment like Kanheri, which itself have more than 120 caves in a single cave complex. This region has early caves like Jivdani, Kondivite, Kondane and also Brahmanical caves such as Jogeshwari, Mandapeshwar and the most famous site of Elephanta, which is also a world heritage site, as declared by the UNESCO.

Thus the caves in Maharashtra provide an important evidence of the evolution of rock-cut architecture, which continues to exist even with the vicissitudes of nature and expanding human activity and impact.

CHAPTER 4 FEATURES OF CAVE ARCHITECTURE

## CHAPTER 4

## FEATURES OF CAVE ARCHITECTURE

The idea of unchangeable and immutable nature of the god and his abode is better expressed in a rock-hewn than in structural form which is considered the most durable form. Thus rock-cut architecture remained a characteristic mode of architectural expression for more than a thousand years. All religions, i.e. Buddhism, Jainism and Hinduism adopted this form of architecture.

## **Buddhist Caves**

Some important components of Buddhist caves were stupa, chaityagriha, vihara.

#### Stupa

The stupa evolved from the simple prehistoric burial heap or tumulus under which the ashes of the dead were buried. The word appears in Vedas and Brahmanas and thus is much earlier to the Buddha. In course of time, the Buddhists adapted stupa to their own use and stupa as an object of veneration in its own right, as a replacement of Buddha himself, became very popular with the Buddhists although Jainas also erected stupas.

At the death of the Buddha, his remains were enshrined under such artificial mound of earth and brick- the famous Eight Great Stupas mentioned in Buddhist texts but destroyed since then. There is a reference in Mahaparinibbana Suttana that Buddha enjoined Ananda to erect at the crossing and thus came to be associated with the Buddha himself. Initially, relics of the Buddha were enshrined in the solid core stupa, which became places of veneration and pilgrimage. Soon, relics of Buddha's disciples and famous monks were similarly enshrined. The stupa swiftly became the emblem of the Buddha's Dhamma and an important part of Buddhist monasteries. According to Avadana text Ashoka re distributed the portions of Buddha's relics to many important towns of the land and ordered the construction of stupa over them.

Stupa is thus in fact a sepulchral monument, i.e., burial in which the ashes of the cremated bodies of the saints were buried. The purpose was to enshrine sharirika (body relics, usually in the form of calcinated bone) of the Buddha or of Buddhist teachers or their paribhogika (personal belongings). Sometimes the stupas were built to commemorate uddeshika (some event) at places sacred to the Buddhists. Later on, donation of stupas was considered to be a meritorious act, thus giving rise to the votive stupas. Diminutive stupas were also built over the ashes of the sangha members.

There is a class of stupas called votive stupas, usually small in size, either built or carved in the round. These stupas had no funerary remains. These solid structures were meant for receiving offerings. When built they served as the subsidiary shrines to which offering were offered. Architecturally however they cannot be distinguished from one another.

Stupa was made of earth, brick or stone. It consisted of various components, which together form a stupa.

#### anda

It is a domical structure, a solid hemisphere, erected on a ground or a platform.

#### medhi

Stupa stands on a circular or square base, which is called medhi.

#### harmika

Generally the stupa has on the top of the anda a small square railing, called harmika. It is considered a bridge between the cosmos and the earth.

#### yashti

In the centre of harmika, there is a stick (yashti), the mast supporting the chhatravali.

#### Caves in MMR

#### chhatra and chhatravali

There is an umbrella firmly implanted over the dome over yashti, with a dwarf railing or vedika around it. There were usually three chhatras, in diminishing sizes, placed one above the other, together called chhatravali. It is the symbol of universal paramountcy.

#### pradakshinapatha

it is a path for circumambulation around the stupa.

#### vedika

It is an enclosure around the stupa. Adequate space was kept in between the stupa and the vedika, leaving in between sufficient patha for the devotees for circumambulation. It rested on an alambana (base) on which stood on thaba (upright posts), connected by suchi (horizontal bars), and an ushnisha (continuous rounded coping stone).

#### torana

It is a gateway, usually built at each of the cardinal sides of the vedika.

#### **Evolution of Stupa**

The earliest of the stupa represents a plain and simple structure consisting of a hemispherical dome, placed on a low circular medhi and surmounted by a harmika, chhatra. Dome was the principal element of the stupa and was surrounded by a pradakshinapatha, occasionally fenced off by a railing or a wall. Gradually, the vedika became an essential feature of the stupa and was also embellished with carvings and was also punctuated by richly carved gateways on the cardinal directions.

Gradual evolution is seen in the form of stupa and its various components as well. As the form evolved, there was a tendency towards excavating a tower-like form. Thus there was a provision of a long drum or a series of drums, raised over a square plinth of one or more terraces approached by stairways. Chhatravalis also become many tiered, made up of flat round discs rising one above the other in gradually diminishing sizes, the uppermost tapering to a point. The important change is the embellishment of the stupa with the sculptures of the Buddha which became the characteristic feature of stupa in the later period. In the last stage of development, the stupa attains a spire-like shape, in which the original hemispherical dome loses its importance, being cramped into an insignificant position between the lofty basement and drum on the one hand, and the series of tapering chhatravali.





Featurees of a Stupa Source: History of Fine Arts

#### Caves in MMR

There are regional variations as well. The stupa in the south was characterized by a lofty circular terrace, a rectangular projection on each cardinal face. the top of the projected offset, ending in a platform on a level with the upper terrace, supported five free-standing slender pillars, (ayaka-khambas) or worshipful columns, which are not seen in anywhere else. The stupas including the drum, dome and even ground balustrade surrounding the monument are richly decorated.





Sanchi has the best preserved remains of the large type of stupa and of a whole Buddhist settlement of the earliest period. Stupas of Barhut,

Amaravati, Nagarjunakonda are also noteworthy among the structural stupas, with ayaka columns at Amaravati, Nagarjunikonda, etc. The evolution of stupas was seen in Gandhara, while the last stage of development was seen in Burma and Indonesia.

Similar such development is to be seen in the monolithic rock-cut stupas. While the earlier ones were simple, the later type shows a likely tendency towards increasing the height of the finial, as in cave 19 at Ajanta, where it looks like a high ornamental tower and also has a figure of the Buddha carved on it.

### Chaityagriha

At first the Buddhists had gathered in the open air in groves and forest clearings. Soon after the founder's death they wanted shrines, not to enclose his image, but to enclose stupa, a symbol of his nirvana. The halls enshrining these stupas are usually called chaityas. On these they centred their devotion. Inscriptions often refer to chaitya ghara, thupa ghara, and rarely to gaha thupa (griha stupa).

Stupas having the character of sacred monuments are called chaityas, and the chaitya hall is a shrine in which the votive chaityas occupied the place of the altar.

The chaityagriha is an elongated building, a long hall, structural or rock-cut with apsidal end. It is divided internally into a nave, an apse and two side aisles. The aisles are separated from the nave by pillars, and the apse contains a solid stupa as the votive object, with or without Buddha image. The aisles are continued round the apse, thus providing for pradakshinapatha. The nave is covered with a barrel-shaped vault, and the two aisles also by vaults, each of which is half the section of that of the nave. The doorway is usually opposite the votive chaitya and over it appears a huge arched window, shaped like a horseshoe, dominating the entire scheme of the façade. The wondow, called gavakshas is in the form of ogee or pointed arches with flat ended base resting on the two inward tilted pillars of the entrance. On the sides of the window-arch are depicted series of small chaitya windows and other decorations filling up vacant spaces. The entrance with its rich carving is one of the most fascinating elements of the chaityagriha.

The chaityas seem to have existed from very early times and the ruined foundations of chaitya halls traced at sanchi, Sarnath might have belonged to the period of Ashoka. But the chaityagrihas now extant are hewn out of living rock.

The chaityagrihas are the copies of wooden structural buildings. The peculiarities of wooden construction, though redundant in cave excavations still persist as significant and distinctive characteristics.

### **Evolution of Chaitya**

There is a long process of evolution, not always connected with Buddhism. The early caves show experimentation.

The Sudama cave in Barabar consists of two apartments, the outer one rectangular and inner one empty circular chamber, with a solid wall and a passage separating the two. Lomas Rshi the most important cave, belonging to the Mauryan period, which has an oval inner chamber. There is a frieze of elephants in low relief with a lattice screen above, near the doorway. It represents the beginning of the elaborate scheme of ornamentation that characterized the decoration in chaitya halls in the later days.

It is possible that the earliest form of shrine consisted of a circular cella alone to which the Buddhists added a votive chaitya and outer hall was added to accommodate the gradually increasing congregation. This supposition gains some support from the circular chaityagriha at Junnar, in which a votive chaitya is surrounded by 12 pillars, the central area being domed and circular aisle half-domed. Gradually the wall between the two cells was eliminated and an apsidal plan of the chaitya hall became a familiar type.

A bold move is also indicated by the hall being driven axially into the depth of the rock instead of cutting it parallel to the face of the rock, as in case of Sudama and Lomasa Rshi caves.

There was a gradual movement seen from Barabar to Bhaja, Ajanta, Bedsa, Nasik and to Karle. The progress may be recognized in the gradual emancipation from wooden conventions, greater elaboration of the different elements and features, and richer and more variegated ornamentation of the façade.



Source: Early Buddhist Rock Temples-A Chronological Study




Source: History of Fine Arts



Source: History of Fine Arts

### **Construction of Chaitya**

A perpendicular rock wall was cut down and smoothened, and on this the outlines of the façade and entrance were indicated. Then a window was cut, through which tunneling could begin from the front to the rear. After completion, this window was covered with a wooden framework. The workmen began by tunneling into the cliff at the level of the height indicated for the interior vault. After completing the ceiling, the workmen continued quarrying downwards, removing the debris of rock though the open façade. In this way they required scaffolding since they worked from top to bottom, disengaging the columns and the carved stupa at the back of the cave. The debris served for erecting the courts outside.

People accustomed to wood and other perishable material became impressed by the permanency of the stone architecture and by the grand scale of the buildings. Unlike the structural method, the rock-cut architecture cost much less since it did not require a nearby quarry to supply the stone and necessary transport of material, nor the hewing and dressing of stone, nor the preparation of columns, slabs and corner-stones.

As few experimental specimens have been found, rock-cut architecture appears almost in its matured form with few signs of trial and error. Everywhere the walls are straight and angles true, with smooth and polished surfaces. Though the craftsmen nust have had a long period of apprenticeship, no traces of it remain. Rock-cut architecture represents sculpture on a large scale rather than the true building art. The imitation of wooden structural details such as ribs, pillars and decorative motifs resulted in irrelevant forms with no functional value.

### Vihara

It is another important form of early Indian architecture.

It was mainly built for the use of the parivrajakas (mendicants) during Varshavasa. It was designed much on the same lines as a private house, i.e. a square block formed by four rows of cells along the four sides of an inner quadrangle.

The first type of viharas were free-standing structures made of wood and later of stone. The structural viharas consisted of cells built around a central courtyard, which was entered through a doorway in the vestibule. In case of rock-cut viharas, there was no central courtyard, but an inner hall with surrounding cells, opening into it, each provided with raised stone beds. This change however, resulted in dearth of ventilation and light. A pillared verandah provided entrance, into the central hall through one or more doors.

### **Evolution of Viharas**

In the earlier period, they were built of wood on a stylobate of stone or brick. As the monastic organization developed, they became elaborate brick structures with many adjuncts. Often they consisted of several storeys, and along each side of the inner courtyard there usually ran a long corridor with the roof supported on pillars.

Rock-cut examples of monasteries have been found in abundance, and of these the first examples are Barabar and Nagarjuni groups of caves. They were simple rectangular chambers, cut out of rock, with a barrel vaulted roof above, and characterized by a lustrous polish on the interior walls resembling that on the Ashokan pillars. Some of the caves are provided with raised platforms at one end.

In western India, a continuous development of the rock-cut viharas is seen. In the earliest excavations the plan of the monastery is still irregular, the cells being diposed in one or two rows only, and often at erratic angles. The typical plan, however, soon took shape in the form of a square (or oblong in certain cases) central hall, preceded in front by a pillared verandah or vestibule, and opening out further into the rock. The halls are usually provided with raised benches and the cells with similar beds. By the beginning of Christian era, the type appears to have been well established. This is reflected in the viharas at Bhaja, Bedsa, Ajanta, Kondane, Pitalkhora, Nasik Junnar, Karle, which show gradual evolution in the form.

### **Excavation of Vihara**

The method of excavation, same as that used in the chaityas, shows that the workers had great skill in this specialised form of quarrying.



Source: Early Buddhist Rock Temples-A Chronological Study



Source: History of Fine Arts



Source: History of Fine Arts

CHAPTER FIVE MUMBAI: HISTORICAL-GEOGRAPHICAL CONTEXT

# **CHAPTER FIVE**

# MUMBAI: HISTORICAL-GEOGRAPHICAL CONTEXT

### Location, Size and Area

Greater Mumbai, the smallest of the districts of Maharashtra is entirely an urban district. The district extends between 18°53'N. and 19°20'N. and between 72°45'E. and 73°00'E. It has an east to west extent of about 12 km. where it is broadest, and a north-south extent of about 40 km. The district covers an area of 437.71 sq. km. that constitutes 0.14 per cent of the total area of the state of Maharashtra. The population of the city is about large, making it one of the most populous urban regions in the world.

## **Mumbai- Geographical Context**

Mumbai lies outside the mainland of Konkan in Maharashtra in a group of islands separated from the mainland by the narrow Thane creek and a somewhat wider Harbour Bay. The district at present occupies the original island group of Mumbai— now practically a southward protruding peninsula of the larger Salsette and most of the island of Salsette, with the former Trombay island appended to it in its south-east. A small part in the north of the Salsette island, however, lies in Thane district. The Salsette-Bombay (Mumbai) island complex lies off the mouth of the Ulhas river; the estuary in the Vasai creek and the Thane creek together



separate it from the mainland. Thus, the district of Greater Mumbai is surrounded on three sides by the seas— by the open Arabian sea to the west and the south and the Harbour Bay and the Thane creek in the east—but, in the north, the district of Thane stretches along its boundary across the northern parts of Salsette.

Caves in MMR



Location of Mumbai in the Maharashtra District Source: Maps of India

The land on which the present Greater Mumbai has been built lies on what formed formerly two groups of islands, stretching southward of the Ulhas estuary. These land masses made up of a succession of volcanic Java effusions, and possibly subject to local tilting of the earth crust and sea-level changes, were an archipelago of islands lust with coconut palms and other tropical green whose presence has been recorded in history almost since the beginning of the Christian era. Known to Ptolemy in A.D. 150 as Heptanesia on the Aparanta (North Konkan) coast of India, the Mumbai city group originally consisted of seven separate islands that remained practically unaltered in configuration until the eighteenth century. The northern island group—known as the Salsette group on which the present Suburban Bombay is situated—also consisted of a similar group of seven islands, the main and the largest island lending its name to the entire group. These islands remained separate till the beginning of the nineteenth century.



# Geography

## Islands of Mumbai



### Seven Islands of Bombay (Mumbai)

The cluster of Heptanesia had on its southern most end the island of Colabad. Northward of this island, and in close proximity to it was a small, almost triangular island, known in later Portuguese days as the Al Omanis, or in its anglicised corruption as the Old Woman's island. To the north of the Old Woman's island, and separated from it by a fairly wide strait of considerable width at high tide was the south-eastern part of the third island, which resembles to an extent the English alphabet H. This island, the largest in the group, later came to be known as Bombaim (Bombay), after which the group is also known as Bombay (Mumbai). The western part of this island was dominated by a single ridge running roughly north-south along the length of the island in its western prong and covered by rough tropical jungles. This ridge rims down to a point—the

modern Malabar Point—into the sea. The central part and the eastern part consisted of a low-lying ground, bearing tamarinds and other shrubs at intervals and menaced from the north by a rocky ridge, subsequently named as the Dongri or the hill tract. To the south of this island, adjoining the lowlands was the Back-bay, a stretch of reef guarded waters. Northward again, beyond a very narrow creek lay a smaller island, part hill, part dale whereon the *Cassia fistula* and the brab were found to flourish. This island practically uninhabited till late in history was known as Mazagaon island.

Three islands compose the northern part of this island group. The middle one, shaped like a parallelogram was a sandy desert; it was flanked on the west by a narrow and tapering stretch of rock and on the east by a straggling island, trifurcated in its northern extremity, and possessed of a broken coast line. The last island known as Parel was mostly covered by

### Caves in MMR

tamarinds in the south and prickly pears in the north-west; extensive stretches of it were entirely covered by tidal marshes. It is from the northern tip of this island that voyages crossed the arm of the sea to enter Salsette. The parallelogram shaped, middle island, known initially as *Baradbet* (Desert island) and Nevale, and later as Mahim, was perhaps the only low, flat plain possibly an emergent sand bar on the northwestern flanks, and at the entrance to a wide bay known as the Mahim Bay. This island was full of coconut groves. The seventh island lying to the south of Nevale, in between the northern prong of Bombaim and Nevale was a rocky ledge separated from Bombaim by a wide stretch of sea, that was the last to be filled up in the process of amalgamation of the seven islands into one.

In between the seven islands was a fairly wide, shallow creek, into which the seas around poured during the high tides, and flooded the low-lying stretches of all islands.

### Salsette group of islands

Separating Bombay group of islands from the Salsette group was a wide bay, the Mahim Bay. Salsette, or Sashti as it is known locally in Marathi and the largest of this group, lying centrally is dominated by a central mass of hills surrounded by tidal flats. To the south-east of this island, also characterized by a central hill mass, was the Trombay island. The rest of the islands, much smaller, all lay on the western flanks of Salsette. These included Bandra, Juhu, an old linear sand bar rising just above sea level by a metre or two, Vesava, Marve, Dharavi and Rai Murdhe, all with a knoll core and fringing wave—cut platforms and sandy beaches. These islands seem to have remained separate till as late as 1808. These islands could earlier be reached during low tides by walking across the tidal inlets in between, barring the island of Dharavi that had to be reached by a boat.

# Geology

The entire Greater Mumbai area is occupied by Deccan basalt flows and their acid and basic variants, poured out between the late Cretaceous and early Eocene times. The basaltic flows are horizontally bedded and are more or less uniform in character over wide areas. Certain extrusive and intrusive mafic types are associated with basalts and are found in the Bombay Islands and its vicinity. This is in contrast to the monotonous uniformity displayed by the Deccan basalts in general. Furthermore, some fossiliferous sediments, mainly of tufaceous origin and partly of fresh water origin, rich in fauna, are also found in Bombay area.

The stratigraphic succession of rocks in Bombay area is given below :----

Recent Alluvium, Sand and recent Conglomerate

Cretaceous to

Eocene

Trap dykes

Laterite

Volcanic agglomerate and breccia Basalt flows with interbedded ash beds and fossiliferous fresh water shakes.

The Deccan traps belong to the plateau basalt and are so designated on account of their steplike or terraced appearance and their extensive distribution is up to South India (Deccan). They occupy about 5,18,000 sq. km. in Maharashtra, Gujarat, Madhya Pradesh and parts of the Deccan, and form the most extensive geological formation of the Peninsular India, with the exception of the metamorphic and igneous complex of Archaean age. The traps in general may be divided into three groups, *viz.*, upper, middle and lower as indicated below :—

Upper Traps (457 m. thick)	Bombay and Kathiawar, with numerous intertrappean beds and layers of volcanic ash.
Middle Traps (1,220	Madhya Pradesh and Malwa, with numerous ash beds in the upper
m.thick)	portions.
Lower Traps (152 m.	Madhya Pradesh and eastern area, intertrappean beds, but rare ash
thick)	beds.

#### Caves in MMR

The trap country is generally characterised by flat-topped hills and step-like terraces. In the amygdular flows, the top is usually highly vesicular and the middle faiily compact, while the lower portion often shows cylindrical pipes filled with secondary minerals. Vesicular and nonvesicular flows alternate with each other, or the flows may be separated by thin beds of volcanic ash or scoria or by lacustrine sediments known as the "Intertrappean " Beds. The traps attain their maximum thickness of over 2,133 metres near the Bombay coast. As many as 48 flows have been recognised in Western India from borehole data, the individual flows varying in thickness from a few metres to 40 metres (West, 1958).

Besides the common dolerite and basalt, the Deccan traps comprise other types like lamprophyre, limburgite, monchiquite, poiphyrite, andesite, monzonite, nepheline syenite, granophyre, rhyolite, obsidian and pitchstone. Felsitic differentiates such as the andesite, rhyolite, rhyodacite and pitchstone also occur in the Bombay area. Mafic types such as oceanite, ankaramite and monchiquite are also met within this area. Flows of picrite basalt, olivine basalt and oligoclase andesite occur in Deccan basalt terrain, but are not found in the Mumbai area.

### Geology: Bombay (Mumbai) Islands

Bombay Island has ridges along its western and eastern sides. The city is built on the central low-lying part of the island. The western ridge comprises stratified ash beds overlain by hard, massive andesitic lava flows, both formations showing gentle tilt towards the west. The stratified ashes which display variegated colours and variable textures attain a total thickness of about 45 m. The varieties are, from bottom to top : (i) coarse grained acid fuffs of variegated colouis noticed to the east of Worli fort, (ii) Yellowish brown ash exposed near Chowpatty beachy along the embankment of Walkeshwar road, Malabar-Cumballa ridge, Haji Ali tomb and the Worli and Worli fort hills. The exposures at Worli contain fossil tortoise and frogs (Rana Pussilla) and (iii) coarse grained carbonaceous ash covered by yellowish brown tuffaceous ash devoid of fossils.

The ash beds are capped by massive lava flows which attain a thickness of about 16 m. The rocks are aphanitic, have a conchoidal fracture and exhibit conspicuous hexagonal columnar

jointing. They are exposed on the Malabar, Cumballa, Worli hills and extend on to the Salsette island. Dark coloured fossiliferous shales attaining a thickness of about 2 m. are exposed at the foot of the Worli hills. Being deposited during a period of quiescence and overlain by a later flow, these beds are known as ' Intertrappean Beds'. They are very significant as the fossils in them are helpful in fixing the possible age of the associated lava flows.

The eastern ridge represents a different suite of rocks. They are, from bottom to top : (i) basalt, greenish amygdaloidal basalt exposed at Bhoiwada, Mazagaon and Koliwada hills, (ii) red ash breccia noticed in the exposures at Sion, (iii) highly chilled basic lavas of Sewri fort and Antop hills, described as Melaphyre in the older literature, (iv) stratified ashes of Sewri and Cotton Green; the exposures described by earlier students of the geology of Bombay are now covered by buildings, but are exposed in some road cuttings.

The geology of the intervening low lands is more or less obscured by the development of the city of Bombay, but some of the recent excavations near Flora Fountain, Old Custom House and Dadar have revealed the presence of either the greenish-grey basalt or the yellowish brown ash.

### **Geology: Salsette Island**

The central portions of Salsette island comprise a range of hills trending north-south merging into the tidal swamps towards the east; while towards the west these hills pass into wide plains with a few isolated hillocks. Basalt is the major rock unit constituting the main ridge extending from Ghatkopar, Vikhroli, east of Jogeshwari, Aarey Milk Colony to Kanberi and beyond. At places, there are ash beds intervening between successive flows; these may be seen in the cuttings of the Western Express Highway passing through Jogeshwari. The isolated hills near Andheri, Jogeshwari railway station, Chincholi and Mandapeshwar are also largely composed of basaltic types. Acid to sub-acid types are associated with the basalts at Dongri, Manori, Madh, Karodiwadi, Malad and Kurla. The basalts in the quarries at Gilbert hill, Andheri, exhibit perfect columnar jointing with spectacular pentagonal columns, over 40 m. in height.

### Caves in MMR

Another interesting geological feature is the occurrence of a vast thickness of volcanic agglomerate near Tulsi lake and Kanheri caves, indicating a possible volcanie focus from which much of the pyroclastic rocks in the Bombay and Salsette islands may have extruded. These agglomerates are largely made up of elongated sub-angular vesicular bombs, blocks of brown chert, trachyte, volcanic ejectment and small pieces of yellow to reddish brown limonitic matter, varying in size from a few centimetres to as much as one metre, set in a matrix of dense, dull light grey amorphous material. At places this matrix resembles bauxite. Some of these agglomerates show fine banding and layers with alternate siliceous and tuffaceous matter, at places with beautiful and intricate plications and contortions. Some of the horizons of the agglomerates and breccias, particularly those which are bauxitised, are quite soft. Differential weathering has resulted in the siliceous bands which stand out as fine minute ribs in some places, simulating fossil wood. This feature, may be observed in caves No. 84, 85, 86 and 87 at Kanheri.

The basalts are intersected by sills and dykes of olivine do leiite, tachylyte, etc. The dykes have a general north-south trend and appear to be limited to the eastern margin of the main ridge from west of Mulund, and the eastern banks of the Vihar lake to Vikhroli. Some of these dykes extend further south towards Mankhurd, Chembur and Nanole in the Trombay Island.

Volcanic breccias and ashes interbedded with basalts are noticed at several places near Ghod Bundar, around Tulsi and Vihar lakes, Santacruz, Kurla and Sion. The plains to the west of the main ridge extending from north of Bandra to Borivli and beyond are clothed by marine alluvium represented by saline marine muds, recent shell-limestones, calcareous sand stones, etc. A fair stretch of shore sands with occasional duns extends from Juhu in the south to Varsova, Marve and Manori in the north.

# **History (Ancient period)**

when the man made first home in the cluster of seven small islands, which now have been welded in to the modern cosmopolitan city of Mumbai, he was yet in the Stone Age. Various remains from the pre historic times prove this fact that during the Stone Age man occupied this land for various purposes.

Anthropologists have discovered flint tools, similar to those found in the European pre historic caves, at the shores of Back Bay and also on the further side of the harbor. Their makers doubtless earned subsistence by fishing in the sallow waters which encompassed the islands. Their subsistence was also based upon hunting wild animals in the jungles, which formerly shrouded the face of the land.

Microlithic remains found at Kandivli also suggests that the changing pattern of human occupation in the region along with the cultura development in the pre historic period.

The mythological legends tell us that the land of Konkan was rescued from the seas by Parashuram, who is regarded as an incarnation of the god Vishnu. After killing Kartavirya, who had murdered his father Jamadagni. Parashuram is said to have exterminated the Kshatriya clan twenty one times and conquered the whole earth. He then made a gift of the whole country to the Brahmana, Kashyapa. Then for his own residence he made the Western ocean recede from the Sahyadri range and formed the country of Sapta Konkan. These were the seven different regions which included the coastal area from the Broach of Gujrat to the Tulunadu of the Karnataka. One of the major region out of the Sapta Konkan was Shurparak (modern Sopara in the Thane district), extending 400 Yojanas in the length.

The earliest historical reference to Aparanta (Northern Konkan) occurs in the inscription of king Ashoka, which says that the Buddhism was introduced in to Konkan during the reign of Ashoka. This is also proved by a large number of Buddhist caves which were excavated for the residence and worship of the Buddhist monks and at a number of places along the western coast. Out of which caves at Kanheri, Mahakali are of special importance and noteworthy.

From the way in which Aparanta is mentioned in the fragment of Ashoka's edict found at Sopara, it can be inferred that the rulers of that country, who were the Mahabhojas and Maharathis were a sort of semi- independent rulers. Though like several other provinces they acknowledged the superiority of the emperor Ashoka.

In the course of time one of these rulers, named Satavahana rose to power by and established his supremacy over the region and also over the local chiefs. It seems that he might have received support fromsome of the Maharathis with whom he had matrimonial alliances.

The family descended from is then referred as Satavahana. They are mentioned in the Puranas as Andhra. Their capital seems to have been located at Pratishthana (Paithan). Their earliest records in the form of inscriptions are found at Naneghat, and Nasik. The first king of this dynasty, who is mentioned in the Purana is Simuka. He was succeeded by the next ruler Krishna, as his son Satkarni was a minor. The next ruler of this dynasty was Satkarni I. He seems to have extended his rule over the whole of the Deccan and even marched over the Narmada. He performed the Rajasuya and Ashvamedha sacrifices, which probably commemorated by his great victories or supremacy in the Deccan.

Some years after, when the Satavahana rule was weak, it seems that Maharashtra and Konkan was conquered by Shaka Kshtrap Nahapana, who was probably appointed by the contemporary Kushana ruler to rule over the Konkan and Maharashtra. Seavaral inscriptions of his son Rishabhadatta have been inscribed in the caves at Nasik. The Satavahanas thus had to leave the control over Maharashtra and Vidarbha in this period.

Later Gautamiputra Satkarni retrieved the glory and the fortune of the Satavahana family. He made a daring dash in to Vidarbha, Western Maharashtra, and thereafter he also defeated Nahapana. Gautamiputra Satkarni was succeeded by his son Vashishtiputra Pulumavi, who was an equally great king, who ruled over a large area. Other important ruler of the dynasty was Yadnashree Satkarni whose records are engraved on the Chaitya wall of Kanheri. Within the 50 years of the rule of Yadnashree Satkarni, the rule of Satavahanas came to an end. About 250 C.E. the Rule of Satavahana was replaced by Abhiras in the Western Maharashtra and By Vakatakas in the Vidarbha. The founder of Abhira dynasty was Rajan Ishvarsena.

According to the Puranas, the Abhiras ruled for 167 years and seems to have been replaced by Traikutakas, who were previously their feudatories. This royal family took its name from Trikuta or three peaked mountain.

From inscriptions and coins we get information that the founder of this dynasty was Maharaja Indradatta. Thane district was included in the dominion of the Traikutakas and this is indicated by the mention in one of the copper plates found at Kanheri.

After the Traikutakas, the Kalachuris became supreme power in Gujrat, North Konkan and Maharashtra. The coins of Krishnaraja, the earliest known king of the Kalachuri dynasty have been found in the islands of Mumbai. These have been found in the vicinity of Kalbadevi.

In the copperplates of the Kalachuris , Shankargana, the son of Krishnaraja, is described as the lord of the countries between the eastern and the western seas. Konkan must therefore have been included in the Kalachuri dynasty.

Konkan Mauryas were the next ruler in the political chronology and they are also considered as important ruler from the point of view of the art ad architectural development. Many scholars attribute the excavation of Elephanta caves to the Konkan Mauryan rule. In the 7-8<sup>th</sup> century C.E.

The Chalukyas of Badami rose to power in the first half of the 6<sup>th</sup> century C.E. Pulakesin I, Kirtivarman, Pulakesin II were the great rulers of this dynasty.

The Rashtrakuta who succeeded the Chalukyas in the Deccan then controlled the power Maharashtra. They were credited for the excavation of the Ellora caves and also some scholars give them the credit of the excavation of the Elephanta caves. Dantidurga, Dhuva, Govinda III were the great and important rulers of the dynasty. The son of Govinda III was Amoghavarsha, who was a man of peaceful disposition, but whose reign was full of troubles. In spite of that his contribution to the development of culture is noteworthy.

The Rashtrakuta power became weak after the death of Krishna III. Within six years, his large empire crumbled like a house of cards.

Shilaharas were the feudatories during the rule of Rashtrakuta rulers. They contribute a lot to the art and architectural development. The mention of the name of Kapardin, the prince of Shilahara dynasty shows that he made some donations for the excavations at Kanheri. The power of Shilahara weakened in the reign of Nagarjuna and Mummuni.

Thus the ancient period of the history of Maharshtra and especially the Mumbai region went in the hands of Yadava rulers in the medieval period. Notable thing over here is that the rock cut architecture and the cave excavations in the Deccan seem to have declined and replaced by the Structural temples.

This change in the architectural and artistic pattern was influenced by the changing pattern of trade and economic scenario of the times. The donations were given more for the construction of temples instead of the cave excavations. This type of local as well as royal support was well intended for the development of the temple structures.

Caves in MMR



Map of MMR Region MMR Region extends beyond the Mumbai and takes up four district of Maharashtra state. Mumbai city and Mumbai Suburban (complete) Thane and Raigad (part)

Srouce: Website of MMRDA

CHAPTER 6 CAVES IN MUMBAI

# Introduction

The Mumbai Metropolitan Region provides an important evidence of rock-cut architecture with almost 150 caves in the Region.

Following are the caves that come under the Mumbai Metropolitan Region in their approximate chronological order:

- Jivdani caves (Virar)
- Mahakali or Kondivite group of caves (Andheri)
- Kondane caves (Karjat)
- Kanheri group of caves (Borivali)
- Magathane caves (Magathane, Kandivali)
- Lonad caves (Bhivandi)
- Mandapeshwar caves (Poinsar)
- Jogeshwari caves (Jogeshwari)
- Elephanta or Gharapuri group of caves



Location of Some Important Caves in MMR Region Source: Google Images Caves in this region are primarily of two types: Buddhist caves and Hindu or Brahmanical caves. The excavation of these caves started in 2<sup>nd</sup> century B.C.E. and continued up to 9<sup>th</sup>- 10<sup>th</sup> century C.E. it simply means the caves of this region is remnants of the glorious past of almost 1200 years in this area.



The caves are scattered over the MMR Region. This chapter gives a brief description of the caves in the MMR Region, their location, history and chronology, description, artistic and architectural significance.

# Jivdani



# Jivdani Caves

# Introduction

Caves of Jivdani are located in the vicinity of Virar in Vasai Municipal Corporation. Jivdan is a small hill situated about three km east of Virar. These are actually a group of Buddhist caves but now house a shrine of goddess Jivdani.

# **Location and Setting**

The caves are located about 100 m above the plain on the western side of the hill. On the same hill there exists a temple of Goddess Jivdanimata.

A person has to climb a flight of more than 800 steps to reach the main temple. It is a steep climb and there are shops on both sides of the pathway leading to the temple. These shops sell the material for pooja (worship) of the goddess, cold-drinks, religious CDs, books, ant other such stuff to cater to the large number of pilgrims coming to the temple.









Location of Jivdani Caves Source: Google Images

# History

The caves at Jivdani are simple excavations without many architectural or decorative features. The cells are devoid of benches. There are mainly viharas excavated for the Buddhist monks probably occupied by them during Varshavasa. Its simple execution of plain walls and less architectural features suggest its early date.

Some scholars believe that the Jivdani caves are supposed to be the oldest caves in Maharashtra. According to them these caves were excavated during 3<sup>rd</sup> or 2<sup>nd</sup> century B.C.E..

## Description

There are altogether 12 caves, which are divided into 2 groups. There are 7 linear excavations, which also includes the present day shrine of the goddess Jivdanimata (cave no.4) in the first group and 5 other caves in the second group. The caves here are numbered from north to south.

### **Important Caves**

The caves at Jivdani are divided into two groups, one located at an upper level than the second group. The caves are recorded by James Burgess and others.

First group consists of seven caves.

Cave no. 1 and 2

Caves no. 1 and 2 are small cells, placed adjacently. Cutting of the cave is simple and with front side open. These cells are well executed and even the corners of the walls are in right angles.

Cave no. 3

Cave no. 3 is unfinished and roughly of the same measurement of that of cave no. 1 and 2 but the rare wall is left unexcavated.

Caves in MMR

Cave no. 4

Cave no. 4 is now the shrine of Jivdanimata, a goddess of the locals. The walls of this small cell are now covered with the thick layer of paint and even the front portion is provided with the doorway because of which the historicity and the antiquity of the cave is almost lost.

### Cave no. 6

Cave no. 6 is a kind of a tunnel of 90 cm height and width. On the nature of the excavation it appears to be of later period than the other caves of this group. This now houses a modern image of Krishna, thus is called 'Krishna Gumpha'.

### Cave no. 7

Cave no. 7 is a large hall, measuring about 6 m in width and 5.5 m deep and 2.1 m high. Probably this cave had front wall also but only a small portion of it is preserved.

Today, the temple of Jivdani has occupied the first group of caves, thus obliterating features of the original caves, though the traces are still visible in a few places.

Second group of the site has 5 excavations. All of them are located at the lower level at about 8 metre below the first group. Access is at present restricted to these caves and the caves are locked. The caves are in bad shape and have been painted at some places.

### Cave no. 8

Cave no. 8 is a water cistern measuring about 1.1 m in length, 0.90 m in breadth and 0.90 m deep. It is called Mankund.

### Cave no. 9

Cave no. 9 called 'Vaghache Mandir' is a large cell situated towards the south of the water cistern. There is a rectangular doorway in front. Entire interior is well made; the planes of the walls, floor and ceiling meet in right angles it is so even in the corners of the doorframe. However the lower corner of the doorframe is partly broken. The surface of the walls is well dress and smoothened and this can be easily observed.

### Cave no. 10

Adjacent to cave no. 9, a wall of 25 cm separates the next cave that is cave no. 10. The front portion is badly damaged but one can easily make out that there had been a front wall with a framed doorway in the middle. A smooth surface treatment which was given to the walls can be seen at few portions where the preservation against the weathering is good. This cave is called 'Gaygotha' as there is a painting of a cow on the wall of the cave.

### Cave no. 11

Cave no. 11 is an unfinished cave. In front of this unfinished cell there is an open water cistern (Cave no. 12) which is 1.2 metre deep. The description of the cave and the cistern appear in the old records of the 19th century. These reports mention that the water cistern was badly ruined. It can't be located today, nor cave 11.



Above Left: the 10, 9, excavated at the

Above Right: Cave Vaghache

**Below Left: Locked** door of Cave no. 9

**Below Right: Cave** no. 10, Gaygotha with a painting of a cow visible on the

# **Significant Features**

James Burgess in his "Archaeological Survey of Western India" has given detailed description and importance of the caves. He mentions that from the point of view of architecture, '*these caves are of unsophisticated nature and thus it seems that this was definitely not the monastic establishment*'.

The very simplicity of this group leads many scholars to the conclusion that this group of caves belongs to the early phase of the rock cut architecture dating back probably to the centuries before the Christian era.

The existence of the tradition of the smoothening of the walls is also an interesting feature which can be compared to the caves of Mauryan times elsewhere. Technologically this feature is more seen in the remains of the Mauryan times rather than the caves of later times.

There are no stone beds in the viharas, indicating that these caves are of that early stage of Buddhist monkhood when the monks still followed the rigorous practice of using the shelter of the caves only during the Vashavasa and without any comfort of living.

Presently, the place is known for the temple of Jivdani, which has significantly altered the nature of the original Buddhist caves. There are however, a few important features of the original caves, which are still visible and need to be preserved.

# mahakali (kondivite)

# Mahakal i (Kondivite) Group of Caves

# Introduction

These are Buddhist caves located in the western suburb of Andheri in the city of Mumbai. There are 19 caves carved into a long hillside. The caves are important, especially cave no. 9 which is probably among the oldest examples of chaitya in India.

These caves are referred to as Mahakal in Mahikavatichi Bakhar, (Chronicle of the Royal Court). Fergusson in his 'Cave Temples of India' has referred to the caves as Mahakal or Kondivite. The modern name Mahakali is in all probability a corruption of the word Mahakal, but is misleading and often thought of as related to the goddess Mahakali.



# Location and Setting

Mahakali caves are located in the vicinity of Jogeshwari- Vikroli link road at the distance of 6 kilometre from Andheri railway station. It consists of four caves on the northwest face and a group of fifteen caves at the southeast.



Location of Mahakali Caves Source: Google Images

**Design Plus**


Location of Mahakali caves Above: the road on the Northwest side Below: Jogeshwari-Vikroli Link road and the big building complex at a distance

# History

This Buddhist group of caves is of early phase of the development of rock cut architecture in western India, which belongs to the centuries prior to the Christian era. The entire village was originally an old settlement, including Marol village, Mulgaon and had several fresh water tanks which have over the years disappeared.

The apsidal chaitya (cave no. 9) resembles the ground plan of the chaitya of Lomash Rishi cave in Barabar hills (Eastern India), both having a rectangular hall with a cell at the end. The Lomash Rishi cave belongs to the Mauryan period and this is considered as one of the early attempts in rock cut architecture.

### Description

There are altogether 19 caves in the group of caves at Mahakali.

### **Important Caves**

### Cave no. 9

It is the most important cave in the complex. Cave no. 9 is locally known as 'Anasicha Kamara' is a Chaityagriha having a circular cell housing Stupa in its centre and a rectangular hall in front. The hall is 7.6 m long and 5.3 m broad and 2.7 m high. The side walls touching the sides of the semicircular front wall of the cell are 9 m and 9.4 m long. The circular cell cut in the back, has a semi circular front projecting for about 1.5 m from the back wall of the hall. It has a rectangular doorway 1.14 m broad, 2.3 m and on either side of the doorway is a window 1 m high and 83 cm long. The roof over the hall is flat but the circular cell has domical roof.

The interior of the circular cell is 4.4 m in diameter and the domical ceiling rises to a height of about 4.6 m. in the centre of this cell is the Stupa of 2.2 m diameter. The space between the Stupa and the wall is around 1.1 m wide.

The Stupa has a cylindrical drum with Vedika band at the rim and over this is hemispherical dome. There is no Harmika above. Probably there used to be the Harmika of wood which is suggested by the flat surface with holes in the corners on top of the hemispherical dome of the Stupa. This Stupa is partly ruined.

The windows are finely carved with the imitation of the wooden Vedika. The front portion of the rectangular hall is now open but mortises in the floor of the hall suggest that there was a wooden screen. In front of this three steps have been cut in to the rock. An inscription is also carved above the left lattice window in the thin front wall of the circular chamber.





There is a two-line Pali inscription over the right window recording, "*Gift of a vihara, with his brother by Pittimba a Brahman of the Gotamas gotra, and inhabitant of Pachi Kama.*".

A carved panel of the Buddha with attendancts and other figures called the Buddhist Litany, is cut on the right side of the outer hall, which is a later addition.



Cave no. 9 is one among the group of 15 caves towards the south east hidden in a low scarp. These caves are numbered from west.

Cave no. 5

Cave no.5 or the first cave from the east has the verandah. It had two plain square pillars and pilasters.

#### Cave no. 6

Next cave has a front verandah wall whose face is carved in Buddist rail pattern. Four plain pillars rise from the wall. Below the floor of the verandah is a water cistern with four openings earlier covered with the slabs. In the middle of the back wall of the verandah is a door with five sided pilaster. Inside is the plain pillar-less hall with an alter for an image in the back wall. The side walls of the hall are full of socket holes for wooden pegs or frame. On the left wall are two hollows, probably the beginning of the cave was stopped at the stage due to defect in the rock.

#### Cave no. 10

Cave no. 10 is a small cave with a hall and a cell at the back. This cave is badly damaged. Its front portion has almost disappeared. This cave is at a higher level than the Chaitya hall and interesting the hewing of the cave have damaged the right corner of the Chaitya. This indicates the later date of the cave than that of the Chaitya.

#### Cave no. 12

Cave no. 12 is also in poor state of preservation. It consists of three cells in a line all opening in to a hall in front. At present all the front and partition walls are broken. The hall was about 7.6 m long and appears to have had a niche in the left wall. There is a band of Vedika design on the projected portion, just under the ceiling.



**Design Plus** 





Caves on the South-east side

#### Caves on the South-east side











Caves in MMR

There are four caves towards the north west of the hill.

Cave no. 1

Beginning from the first (cave no 1), is the dwelling cave, with a verandah. It is provided with two square pillars and two pilasters, unfortunately because of the bad rock all these pillars are crumbled. There is a water cistern in the left corner and a stone bench in a recess on the right. Verandah opens in to a plain hall with a bench on the right wall and cells on the left and back walls.

#### Cave no. 2

Cave no. 2 has two doors and two windows in the front wall this cave is without any carving or pillars. State gazetteer of Maharshtra refers to it as a dining hall. A door on the east wall opens in the cave no. 3.

#### Cave no. 3

Cave no 3 can be entered from a courtyard. it has been provided with a stone bed and also a water cistern on the right side. this cave resembles the caves at kanheri. from the court four steps lead to verandah with a low front wall, carved in a buddhist rail pattern. unfortunately the railing pattern is now defaced. the cave is divided in the centre by a doorway and two eight sided pillars. the hall which is entered by a plain door measurs around 4.2 mt X 2.4 mt in length and breadth. the cells are excavated in the side walls.



### Caves in MMR



Caves on the North West face

# **Significant Features**

The peculiar plan of the Chaityagriha at Kondivite, unique of its kind in Western India, has attracted many art historians to study this monument with great interest. There is a general similarity in plan between this and Lomash Rishi cave in Barabar hills, both having a rectangular hall with circular cell at the end. However it is important to understand that merely on the basis of similarity in the ground plan it should not be taken as the earliest in Western India. The relative chronological position of this with reference to the other Chaityagriha in this region can be made out from the form of the Stupa inside. It can be observed that the Stupa in Kondivite is very similar to the Stupa at Tulja Lena no. 3 (Junnar). Kondivite Stupa however has an advanced feature in introducing the railing and also a square platform to receive the Harmika which have been of wood. Both from style and technique of Stupa it has close affinities with Bhaje no. 12.

An inscription above the window is datable on palaeographic grounds to 2<sup>nd</sup> century C.E. It is not clear whether this inscription is contemporary to the excavation or added later. This inscription is also highly damaged. According to the readings of Bhagavanlal Indraji, it appears to record the making of a Vihara by a Brahmin. It is also possible that the inscription was carved much after the cave was excavated.

Kondivite is therefore an important cave group which enhances our understanding of the evolution of caves in India.



# Kondane Caves

# Introduction

A group of caves at Kondane though not very large, is significant as it presents great potential for the study of the development of rock cut architecture, especilly in the early decades of the 1 century C.E. It has got close affinities with the early chaityagriha at Bhaje and has preserved the sculptural, and palaeographic evidence which is very important to fix the chronological position of this cave.

# **Location and Setting**

Kondane in Karjat taluka, Raigad district, is one of the well known centers of rock cut architecture. It is located at 6 km distance from Karjat. This cave group cut in a cliff on the north bank of the river Ulhas, below the Rajmachi fort.



Location of Kondane Source: Google Images

### History

The location of the cave group suggests that it was one of the major religious establishments along the Borghat, a route leading from Kalyan and Sopara towards Bhaja and Karle and further Junnar and Ter etc.

### Description

This is a small group consisting of eight caves out of which seven are Vihara and one Chaityagriha. It seems that all eight caves belong to the early phase of Buddhism, Hinayana period and probably have remained untampered by later activities of Mahayana sect. All the caves are facing towards the west and these are numbered from south to north.



### **Important Caves**

Cave no. 1

Cave no.1 is a well known Chaityagriha of Kondane with highly impressive carvings and decorative features along with an architectural work. Roof of this Chaityagriha is apsidal in shape. With the arrangement of pillars, the lower portion of which is badly weathered and disappeared, the Chaitya hall is divided into three parts, a nave and two side aisles.

The nave is almost 5 m wide and the side aisles including the pillars are about 1.5 m wide. The walls are straight but the pillars are slightly inclined towards the inner side, indicating its early date of excavation. The Stupa is almost 3 m in diameter and is placed at the end of the nave at equal distance from the sides and back wall. The roof over the aisles is curved and the roof above the nave is vaulted or apsidal.

At present the lower front portion of the cave is badly damaged by weathering. It appears that this cave too belongs to the type of Chaityagriha with open front like Bhaje no.12 and Ajanta cave no.10; but the closer observation reveals that this cave had a front screen partly cut into stone and partly in wood.



Ground Plan of Chaitya at Kondane Source: History of Fine Arts in India and the West, Edith Tomory



One interesting feature of this cave is that the height of this Chaitya is more than the width. In many cases (Bhaje 12, Ajanta 9 and 10, Karle 8 etc) they are either equal or the height is less than the width. The only other cave that shares the similar feature is Nasik 18.

There are various architectural features which reveal the position of this Chaityagriha in the development of rock cut architecture in this region.

The absence of verandah, the open front and inclined octagonal pillars are some of the features that indicates that this cave belong to the early phase of rock cut architectural tradition in the western India. The presence of Harmika and more elaborate stepped capital suggest its little developed stage than the Bhaje 12 and Ajanta 10.

There is an inscription by the side of a Yakshi figure on the left side wall of the Chaityagriha, which refers to the making of making of that sculpture by Kanha, a disciple of Balaka.

In stylistic chronology this Chaityagriha can be placed in between Ajanta 10 and Ajanta 9. It is also noteworthy that this Chaitya has close affinities with the Chaitya at Aurangabad caves, especially in Stupa and façade decoration.

The inscription on the left wall can be dated on the paleographic analysis to approximately 175 B.C.E. This can also be taken as a date of the excavation of the Chaityagriha.

### Cave no. 2

Adjacent to cave no.1 at the height of Chaitya arch one cave (cave no. 2) is situated. Though the cave is badly damaged, it still retains sufficient features for a study. This has cells around the hall and a verandah in front. It appears that the verandah once had a line of five pillars. Unfortunately the lower part of the verandah is broken thus the form of pillars cannot be ascertained. Square stubs still hanging from the roof are the only indications.

The back wall of the verandah was pierced into by a doorway and two large windows on either side. The lower part of this wall is also broken; still it is possible to make out that the central doorway was 1.6 m wide and its lintel was 86 cm below the ceiling. The side openings are 1.7 m wide and their lintels are 1 m below the ceiling, thus theses side openings could be considered as windows at waist level.

The interior hall is 8.5 m wide and 11 m deep and 2.5 m high. There were all together 15 pillars arranged about 1.2 m away from one another in a arrow running parallel to the three inner walls. The bases of all these pillars are damaged and only stumps remain hanging from the ceiling. From the remnants it can be inferred that these were square in cross section both at the bottom and the top but octagonal in the middle.

There are eighteen cells around this hall arranged in such a way that there are six cells on each side of the inner wall. The cells vary in size from 4.8 to 7.2 m in length and breadth. Except first two cells nearer the front wall which has benches, remaining all cells has stone beds at one side.

All the lintels and jambs including those of the main doorway have cut corners for the insertion of wooden doorframe. A special feature can be noted here that to make provisions for the wooden doorframe sometimes the decorative sculptures have been cut. Probably it shows that originally there may not have been the intention to make all the cells and some may have been inserted in later times.

The roofs allover the hall and verandah are flat. The ceiling of the hall is finely carved with large beams and smaller connecting joints, dividing the whole roof into square panels. The pillars in the hall are shown to be carrying the weight of the heavy beams but the beams are less in thickness than the pillars. It looks as if the beams are passing through the pillars and interestingly this feature can be seen only in the caves of early date.

The interior hall has stretch of decorative work running along the three inner walls above the level of the doorways. This decorative work consists of a band of railing pattern connecting large Chaitya arches. The arches here are of simple type and it resembles the decorative pattern at Bhaje 12 and Nasik 19. The right wall of the verandah has some fine carvings. The lower part has four square pilasters. These support a band of railing pattern. Above this is a Chaitya arch with housing a Stupa. There are two inscriptions carved on the façade, one each on the lowermost band of the two successive projections. The upper one records that it is a donation by Kamchikaputa. The lower one probably states that the overhanging decoration is of Kamchika's son Dhamayakha of Baraka.

The position of this cave and the paleographic study of the inscriptions suggest that this cave is probably contemporary to the cave no. 1. The present cave is very important and unique because of the fact that this is the only one early period having pillars in the interior hall.

Cave no. 2a is a small cave with two cells placed adjacently, is located toward the left of the verandah of cave no.2. One of the cells has two benches while the other has only one. This cave appears to have been made as an expansion of the cave no. 2 for providing accommodation to the increasing number of monks. In its full capacity cave no.2 and 2a could have accommodated 23 monks.

Next to this is a simple cave with cells around the hall. The hall is about 6 m wide and 6.3 m deep. There are eight cells around this hall, two in the left wall and three each in right and the back wall. All the cells have two beds, one along each side wall. The front wall has a central doorway and an open window in each of its side. This cave is in the bad state of preservation. Probably due to the small size of this hall, there are no pillars in this cave. The cave does not have any decorations too, either on the wall or on the ceiling.



**Design Plus** 

#### Cave no. 4

Cave no. 4 consists of two cells, one behind the other. Both have two beds, meant for accommodating four monks at a time. There are three cells in cave no.5, cave no 6 had four cells, two cells and a verandah in cave no.7. These caves are broken and in poor state of preservation.

#### Cave no. 8

Although broken, cave no. 8 is somewhat an interesting cave. This has a peculiar plan and only of its kind at Kondane. This consists of a hall with 'L' shaped bench running along the left and back walls. In the back wall is a doorway leading to a cell with a bench to the left. In the right wall of this cell there is another doorway leading to a narrow recess. This might be the Vihara for the monks of a high status. There is a large cistern by the side of this, and it is noteworthy that this is the only cave at the site in which a cistern is present.



# **Significant Features**

Among the caves at Kondane, cave no. 1 and 2 are interesting from architectural study point of view. Both the caves are seems to be contemporary. They are being placed on the basis of style analysis and paleographic evidence and they are datable to around the early part of the 2<sup>nd</sup> century B.C.E.. All other caves at the site are simple excavations and very much ruined. After excavating cave no.1 and 2 their usefulness as a suitable place for temporary haults during the long journeys was recognized, more monks may have begun resort to this place and as a result the highly economical architectural works like cave 2a and 3 came up shortly afterwards. Later, caves 4 to 8 may have been hewn one after the other in the very same order, but their dates cannot be ascertained surely.

This small monastic settlement had at least seven Vihara, with a capacity of accommodating 54 monks. The Chaitya hall is big enough to hold this number. For a small place like Kondane the number of monks appears to be rather high.

It is more likely that this place was serving as a caravanserai along the trade route in which the people, particularly the monks moving along could have just spent a day or a night on their way, up or down the ghats.

Shortly afterwards the importance of Kondane caves appears to have diminished for some unascertainable reasons. It is also possible that the Borghat route itself began to be used scantily, due to some economic or political reasons, and in such case, deprived of resources available from the trading community; this place which had limited economic support could hardly have flourished any more.

Preservation of these caves is very poor but the remains at the site are enough to reflect the grandeur and glory of the past.



# Kanheri Group of Caves

# Introduction

The Buddhist group of caves at Kanheri is one of the most important cave groups of India. It has preserved the achievements of past human life of a period more than a millennium. It is one of the biggest cave groups with more than 120 caves in its whole complex.

The word Kanheri originates from the Sanskrti word Krishnagiri. Krishna generally stands for black colour. The other name in vogue was Kanheri which means 'black mountain'. The three inscriptions in the caves mention "Krishna-Saila", "Kanha Shele" Krishnagiri" in cave numbers 21, 98 and 101 respectively.



Caves in MMR

### **Location and Setting**

Kanheri lies in 19.13'N and 72.59'E in the heart of the island of Salsette. It is about six miles to the west of Thana and twenty miles to the north of Bombay. It is seven kilometers to the south east of Borivali.

The caves are located 60 m and 90 m above the surrounding plain. The view from hilltop is picturesque. There is a belt of thick forests with bamboo trees, mango groves and patch of rice and grasslands. This landscape provided a perfect setting for the monks to practice austerities and thus the reason why the area was chosen to excavate chaityas and Viharas in the region.

The caves are located well within the forest of the Sanjay Gandhi National Park. It's a long walk from the main entrance to the caves. Transport by mini-bus is available to reach the caves. Private vehicles also reach near the caves. There is a parking lot at the base of the caves.







### History

The Kaneri caves have a history dating back to 1<sup>st</sup> century BC. Various legends are woven round the formation of the caves. The record of Purna in Soparaa (225 BC), 20 kms from Kanheri shows that Kanheri was a prominent seat of learning. Arjuna- the hero of the great epic Mahabharata is said to have visited the place on his way to Somnath (Gujarat) from the holy place of Surparaka or Sopara. King Nahapana who ruled the area of Kanheri and Sopara in about 78 C.E. used the word Krishnagiri on many occasions.

Archaeological evidence found in Sopara and Girnar in the form of Ashoka's rock edicts shows that Kanheri caves were famous. But surprisingly none of the caves show any indication of being well-known during the Mauryan rule. Kanheri again became famous during the Satavahana rule around 1<sup>st</sup> century A.D. there is yet another legend according to which the fame of Kanheri dates back to the period of Gautam Buddha.

It is said that Gautama Buddha's disciple named Purana reached out to people to teach Buddhism and converted the people into Buddhism. Monasteries were built. It was later on that Ashoka decided to spread religion. In the fifth and sixth centuries more caves were added. They reveal Mahayana school of art. It is seen that although Silaharas, Yadavas and Muslims ruled the Konkan it was not disturbed till almost the middle of the 15<sup>th</sup> century. It was a home of the Buddhist ascetics. The Portuguese became the rulers of the west area of Kanheri about the year 1534, followed by the Marathas from 1760 and lastly the British in 1774. When the Portuguese set foot on this soil, the caves were still the homes of ascetics.

In the beginning the simple unadorned caves were probably meant to shelter wandering ascetics during the rains but with time a monastic settlement began taking shape.

Archaeologists believe that caves were inhabited round the first century AD.

Several factors made kanheri area ripe for a large monastic settlement.

The dense forest was well suited to a life of asceticism and study.

Kanheri forests existed on an ancient trade route connecting a number of trade centres and Indian ports.

**Design Plus** 

The area received heavy rain and water was easily available throughout the year. Additionally Kanheri was well connected with important trade centres like Sopara, Kalyan, Nasik, Ujjain, which enabled monks from other centres to visit it. As time passed the number of cells that were inhabited exceeded 100 and Kanheri became the most important Buddhist settlement on the Konkan coast. The earliest cells were simple with the barest minimum facilities, like the shelves carved in the rock to sleep on and a few tanks to store water. However, the later caves had images of the Buddha and the Bodhisattvas.

### Chronology

The cave activity at Kanheri started on a small scale, growing stronger with great patronage and activity and running through times when it began to languish with internal indolence and external apathy, until it petered out from the religious scene around the 13<sup>th</sup> century. Cave excavation in this area started in the first century B.C.E. These early caves at Kanheri are located on the hilltop in jungle towards the east side of the main cave complex. Monastery at Kanheri was probably established in the 1<sup>st</sup> century C.E. and thus began the excavation of over 120 caves at Krishnagiri or Kanhagiri or Kanheri hill.

Overall chronological development of Kanheri caves can be better understood with the help of three different phases of progress in the cave architecture as follows:

- 1<sup>st</sup> century B.C.E. to 4<sup>th</sup> century C.E. (Theravada—Hinayana Buddhism)
- 4<sup>th</sup> -5<sup>th</sup> century C.E. to 6<sup>th</sup> century C.E. (Mahayana Buddhism)
- 7<sup>th</sup> century C.E. to the 'decline' of Buddhism (later Mahayana—Vajrayana Buddhism)

In first 300-350 years of C.E. around 70 caves were excavated at Kanheri many of them bear the inscriptions of various donators which include Satavahana kings, their officials, traders and also other Buddhist monks as well.

30-35 caves were excavated in around 4-5<sup>th</sup> century C.E. and various sculptures were sculpted during this phase. Excavation of the caves continued up to 7-8<sup>th</sup> century C.E. Various inscriptions found at Kanheri suggest that this place was inhabited by Buddhist monks till 11<sup>th</sup> 12<sup>th</sup> century.

The caves of the first phase were simple cells consisting of rectangular hall without even front wall in the stone. The stupa has a simple form with the drum and dome only cut in stone; the rest of the members were to be of wood probably.

The next stage is seen in the main chaitya hall, the excavation of which stated in the 1<sup>st</sup> century B.C. with the custom of vault-roofed chaityagriha having the verandah and the interior adorned with simple octagonal pillars without base or capital. The work continued in the second stage (first quarter of 2<sup>nd</sup> century A.D.), when the uncarved areas were finally worked. The pillars which had already been carved were left as such. The others were fashioned with pot-base-pot and animal-capital type pillars. The verandah was trimmed and the main part of the chaityagriha was completed. There seems to be a long interval between the early stage and the second stage. It is likely that the old caves were tampered and enlarged in later times, thus obliterating all evidences of small hewings of the early period. Probably 2a is the only surviving cave of the earliest phase with cave 2e.

Kanheri must have gained popularity and patronage from about the second century A.D. Many cells were planned, water cisterns were constructed. The inscriptions of the period show that people coming from Sopara, Kalyana, Nasik, were causal for these works.

The successive periods are marked by continuous increase in the quantum of patronage as can be gleaned from the number of monuments and the number of donations. Around the 3<sup>rd</sup> century A.D. about a dozen caves were created. Probably it was during this time that oblong variety also came into existence.

The later part of the 3<sup>rd</sup> century was the most active period in the architectural history of the Kanheri establishment, many caves were excavated. Probably there was a continuous monk strength in the monstery and more and more caves were needed. The circular chaityagriha 36 too belongs to this period, a sleeping bench was added. A significant feature during this period is the omission of the railing decoration on the façade, a distinct break in the tradition which had flourished right from about 200 B.C. instead simple eaves with rectangular or beaked ledges became common. Similarly chandrasila which became almost an invariable component also shows gradual changes in design.

The caves 50, 74 and 79 show an additional item of great significance, they have small rectangular niches with arched top which are cut in the back wall of the hall right opposite the hall dooraway. The doors have shakha frame around displaying the importance attached to these caves.

# Description

### Features

There are more than 100 caves dating back from 1<sup>st</sup> century to 9<sup>th</sup> century AD, each connected with a flight of steps.

There are both Chaityagrihas and viharas.





### **Important Caves**

#### Cave no. 3

Cave no. 3 has a Chaitya. It was the last Chaitya established by the monks of the Hinayana order. There are two large carved images of the Buddha 7 metres in height on either side of this cave's entrance. It has 34 pillars and is like a walkway hall 28 m X 13 m in dimension. These encircle a 5 m high Dogba or stupa and have carvings depicting elephants kneeling and worshipping the Stupa at the far end. All carved into the existing basalt rock. The stupa iscylindrical, unlike the hemispherical stupa at Sanchi. In dfact, the front wall of this cave now symbolises Kanheri. Two merchant brothers Gajasena and Gajamitra, funded the conversion into a prayer hall and they are depicted with their wives on smaller panels.







Design Plus

Caves in MMR



Design Plus

### Cave no. 11

The other important cave is cave 11, the Durbar Hall or the Assembly Hall with a statue of the Buddha placed in the centre. He is surrounded by images of Hindu gods and goddesses.



The cave no. 11, which is referred as the 'Darbar Hall', consists of a hall with the front verandah. The hall has a shrine on its back wall and cells on two sides. An idol of Buddha in 'Dhammachakrapravartan Mudra' is carved in this cave. This cave has four inscriptions of different periods. One of which is dated to 775 shaka (853 C.E.), of the reign of Rashtrakuta king, Amoghavarsha and his feudatory the Shilahara prince Kapardin. This inscription records the donation of various gifts and funds provided for the purchase of books and also for repairs to the damages.
Caves in MMR

Cave no. 50

This is an interesting cave. Unusually the doorframe of the hall has a sunken ledge all round giving the impression of the Shakha decoration. Directly opposite this on the back wall of the hall, there is a rectangular niche with carved top. It could have been used to house the image of Buddha. This is significant as it signals the beginning of image worship in Buddhism, which is reflected in architectural and stylistic evolution of the caves.

## **Other important Caves**

Cave 34 is a dark cell and has paintings of the Buddha on the ceiling.

Cave 41 has besides other sculptures, a figure of 11-headed Avalokitesvara.

Cave 67 is a big cell, with the figure of Avalokitesvara as saviour, with two female figures on the sides in the verandah. There are also images of the Buddha portraying the miracle of Sravasti where it is said that he sat on a thousand petalled lotus and multiplied his image a million times. A surprising feature of the caves is the network of steps and trails connecting them.





## **Inscriptions:**

Caves in the form of Chaitya and Vihara are both in large number over here. There are more than 100 inscriptions engraved on walls of the caves. Most of these are describing the donations given by the people and followers of Buddhism, and traders etc.. These inscriptions give a lot of information about the socio-economic, political and also religioussectarian scenario of the times.

Two of the biggest hall caves at the site were dug out around the third century, when Kanheri had set up itself as a chief monastic settlement and donations started coming by. There are nearly more than 100 inscriptions, out of which, three are in Pahlavi two in Sansrit and one in Devnagari and the rest in Brahmi script.

The Kanheri inscriptions may be looked at carefully against the background of Naneghat inscription, which is the earliest known inscription of the Satavahana dynasty and also with the Nasik inscriptions of the Satavahana rulers. The pen style in the beginning shows western deccan influence in the Naneghat inscriptions. The same type is seen in the series of Nasik inscriptions of Hkusiri. Later on the coming of the Yavanas, and Sakas to Nasik, marked a change in the style of writing.

Nevertheless, it must be remembered that although Kanheri had a close relation with Nasik or other parts of India yet it developed its own characteristics. A peculiar features of Kanheri inscriptions its that the writer's name is conspicuous by its absence. Probably the monks who lived there wrote the inscriptions may be understood from the fact that they display various handwritings. The study of inscriptions of Kanheri also throws light on the manifestation of diverse factors of cultural estimates.

They may be briefed

Kanheri was a large Buddhist establishment in western India

It enjoyed a strategic position and was well connected to hinterlands.there was brisk trade with Rome and other middle eastern countries and Kalyan, Sopara, Chaul were renowned ports of the times.

**Design Plus** 

As a result of the continuous communicatrion of Kanheri from north to south many donations poured for the further construction of caves.

The inscription at Kanheri also bring to light the high regard of the students towards their teachers. The epitaphs in the cemetery show that teachers with high religious achievements were honoured.

It also reveals that Kanheri was a well flourished centre of higher education.

The inscription of political history.

Of the numerous inscriptions that are found in the whole complex of Kanheri caves put light on the various aspects of the past life in this region. Though most of these inscriptions are of donations but they still give considerable information about the royal patronage and also the most important is the support given to the establishment by trader, businessmen class along with the common people.

Of the various donor inscriptions found here mention of ancient cities such as Sopara, Nasik, Kalyana, Cheul, Dhenukakata are found. The donors were from all classes of the society; from the members of the royal families to the commoners. The prominent personalities among them were, Gautamiptra Satkarni, Vashishthiputra Pulumavi, yadnyashree Satkarni, Madhariputra Shakasena (all these were the rulers of the Satavahana dynasty). King Amoghvarsha (Rashtrakuta dynasty) and Kapardin (prince of shilahar kingdom) have also contributed for the overall setup and maintenance of the monastery.



**Design Plus** 



## Water management at Kanheri

Caves at Kanheri are well known for being the largest monastic establishment of the ancient times in the Western India. This particular site is also famous for its educational setup, which it had for the study of Buddhism. In the field of art and architecture and its development through rock cut caves, the Kanheri group of caves stands ahead of the many other group of caves, of Western India. Similarly various aspects of the caves at Kanheri, such as sculptures, paintings, sectarian affiliation, pattern of monastic establishment etc. are also of equal importance. Water management at Kanheri is one such feature which can be taken as the characteristic feature of the site.

After looking at the spread of the site in time and space one can imagine the need that must have forced the makers of these caves to have a proper water resource management. This need of storing and proper rain water harvesting was very well planned over here and hence we get ample of evidences and remnants to reconstruct the ancient water management techniques and the thought which was behind all these advancements.

Among the various types of the excavations carried out at the Kanheri hill, the excavations of the tanks and cisterns are of equal importance as that of the viharas, chaitya and halls. Apart from this one can notice the attention which is given towards the water supply, storage, resource management and also rain water harvesting.

For water storage, there are many water cisterns excavated within the cave complex of Kanheri. Many of the cells and viharas at Kanheri are provided with water tanks or cisterns for its residents in ancient times.

One can notice the groves and channels cut in to the rock to direct the rain water and also the flowing water of the stream. It can be easily observed at various locations that these groves carry the rain water to the water cisterns and the water was then stored in to these cisterns which could be used throughout the year especially during the post rainy seasons. It is interesting to note that, even today most of these channels and groves are in working condition and thus indicating the well developed 'rain water harvesting' technique of the ancient times. There are even some large open ponds excavated on the surface of the rock and also the natural stream which provides ample of water for storage and also for various other purposes such as bathing, washing cloths etc.. These open ponds were probably served for the community utilization.

Right beneath at the Cliff of the two rock formation is the remains of an ancient dam. Here too the water stored was for community utilization.





**Design Plus** 

## **Significant Features**

The site of the Kanheri caves, though lonely in today's context but not far from the flourishing trade centers of the ancient time i.e., Sopara, Kalyan and Cheul. Kanheri is perhaps the only rock cut monastery in the whole of western India. which has the feeling of having been a pleasant and popular dwelling place. The rows of cells, water cisterns, dining halls, lecture halls and temples joining together joined by flights of rock cut steps and the crowded burial gallery show what a huge monkhood must have dwelled at Kanheri.

The centre of trade and population on which Kanheri monastery originally chiefly dependent was probably three miles to the west and at the mouth of the Tulsi valley some where near the deserted village of Magathan, which appears in one of the cave inscriptions. Pilgrims no doubt came from the east by Vihar and Tulsi but the main approach was from the west, Probably through the Padan hills.

The early date of a few caves at Kanheri is supported by the reference in an inscription t Nasik cave 3 which states that, in the time of Gautamiputra II (2<sup>nd</sup> century C.E.), Kanheri though so small hill, was famous enough to be ranked with Sahya, Vindhya and Malaya mountains.

An inscription in cave no 5 at Kanheri points out that as early as the reign of Vashishthiputra (around 150 C.E.) Water cisterns were made for the older caves.

The places in the neighborhood of the caves, mentioned in the inscriptions at Kanheri include, cities such as Kalyan, Sopara, Thane (Sthanak) and villages like Mangalsthana (probably Magathane), Sakaparda (probably Saki near Tulsi) and Saphad etc. Of more distant place there are Nasik, Pratisthana (Paithan), Dhanakat or Dharnikot, Gaud or Bengal and Dattamitra in Sind. The gifts were caves, cisterns, pillars, pathways, images and also endowment in cash or in land.

Kanheri was a centre of learning, and also a religious establishment of various sects of Buddhism at various time periods. These caves are important from architecture point of view. It displays a great example of water management at the site. Where the rain water was channelized to a water reservoir, well planned drainage system, check dams at a few places are among the various salient features of the Kanheri complex.

The importance of Kanheri lies in the fact that the monuments here display a continuous tradition of the latest stage of Hinayana phase of Buddhist architecture from which a gradual transition towards the earliest Mahayana architectural forms can be traced.

The Kanheri monuments belong mainly to an age in the history of Buddhist monarchism when the monks had taken somewhat an easier life. The caves must have been occupied during the monsoons.

From the inscriptions, it can be estimated that the total of monetary investments made for the benefit of monks in this monastery exceeded sixty thousand Karshapanas. A tank too had been built within the precincts of this monastery, the only instance of its kind. It is suggested by Gokhale thatr the tank had proprietary rights over lands fed by this tank.

If the number of cells meant to accommodate the monks is taken as any indication, it appears by the end of the period under construction that at least 60-70 monks were residing at the place. The total capacity of all the mandapas if they are considered as dining halls would be somewhere around 120 diners at a time.

At Kanheri an extra expenditure of energy and money was bestowed on the creation of the caves, than it is normally necessary for providing just accommodation for the monks to reside.

It is also likely that Kanheri monastery served as an educational institution.

Almost all the caves have benches cut in the rock, especially in the verandah.

Though the caves are located in isolation, they had close links with the neighbouring towns and cities. In fact the extensive architectural activity here depended on the philanthropy of the wealthy laity of the towns. The number of inscriptions at this place reveal that most of the architectural works were actually the donations of the residents of the nereby towns.

The location of Kanheri nearby, the then metropolitan centres like Sopara, Kalyna, and Thana may have enabled it ti develop as a progressive centre. It was probably receiving people from different part of the Buddhist world, and there may have been food lot of exchange of ideas, which made their impact on the architecture and sculpture. At Kanheri the first appearance of the Buddha is seen on a pillar in cave 3, in the caves later on.





## **Lonad Caves**

## Introduction

The cave at Lonad, Bhivandi taluka of Thane, as mentioned by James Burgess and James Fergusson, was discovered by Mr.W.S. Sinclair of the Bombay civil service in 1875. He identified it as a Brahmanical cave but later studies on this cave have proved it as a Buddhist group of caves. The cave is having various sculptural panels with the stories from Jataka. It was probably excavated during the reign of Vakataka period.

## **Location and Setting**

Lonad is a village about 6 km away from Kalyan and can also be reached from Bhivandi. The cave is located on a hill opposite the village. One has to climb approximate height of 50 m from the road to reach the cave.



## Description

The cave has a verandah, a hall with three entrances. The verandah measures around 14.40 m long and X 3 m wide. The hall at the back of the verandah is 13.50m long and 5.70 m deep, entered by three doors. Opposite the principle entrance and cut in the rear wall of the hall is a shrine. This shrine appears to be an unfinished excavation. Similarly opposite the side entrances a cell was intended to be carved. The verandah consists of square ground plan and provided with four pillars. Verandah is also provided with a carved frieze which runs on the architrave from north to south. The rock above the architrave is weathered and fallen down especially above the middle two pillars.



The cave has a large open court with the steps leading to the verandah. These steps are preceded by chandrashila. The cave has moulded plinth. At southern side there is a large sculptured relief while on the northern side a water tank is cut in to the rock. Of the pillars of verandah two central pillars are elaborately carved out. Though on the right side has fallen down but M.N. Deshpande and A.P. Jamkhedkar has referred about the fragments of this pillar, recovered from the floor. The existing pillar is square in section at the base and the shaft has a recess in the middle portion. The pillars on the either side of these two central pillars have square section and their upper part shows a semi circle over a faceted base, probably to fix the lotus medallion. Similar feature can be seen at Ajanta.

The pilasters here imitate the style of two side pillars. The interesting feature over here is that, the medallion on the top of the pilaster of the southern end has probably the representation of two headed Ganesha, which is partly damaged due to weathering. Other pilasters do not have such sculptural brackets. The central doorframe has two Yaksha figures on the either side. These Yaksha are shown in seating posture and they are carrying a bowl of plenty on the head.



M.N. Deshpande describes it as Vessantara Jataka

**Right: image of a Ganesha** 

**Design Plus** 

The door frame has two tall pilasters on the either side with its upper parts fluted and carrying a round ghata over the fluted kalasha. The doorway beyond the pilasters has on each side an octagonal member after which the lotus patravallari is carved. The two side entrances are less elaborately carved but contain the naga dvarapala on each side.



The central cell in back side of the hall is unfinished and it contains three sculptures of Mahishasuramardini. It is clearly seen that the hall is also incomplete stumps of uncut rock can be seen at various locations.

The deity enshrined into garbhagriha is known as 'Khandeshwari'. The goddess is shown carrying khadga or khanda in her hand. She is represented in the form of Mahishasuramardini.

At the left end of the hall we find a youthful prince seated on a raised platform conversing with a lady who is standing towards his right. The left side of the sculpture is worn out, so difficult to describe the entire panel. The second panel shows an elephant is walking along, mounted by a mahout and an attendant. The elephant here is escorted here by an attendant who faces two persons marching forward as if to oppose the escort. The third panel depicts the elephant standing to the left. Close by the trunk of an elephant stands a youthful prince in the position of giving a gift to a Brahmin who has stretched his right hand to receive the oblation of water to receive the gift. In his left hand he holds an umbrella. He is accompanied by two other persons including a child. This panel perhaps tells a story of king Vessantara giving away the miraculous elephant to a Brahmin from a neighboring country in spite of the strong opposition from the elders of the city.

The story is continuing in the next panel where an elderly royal personality is shown seated on a bhadrasana and waited by attendants. The royal figure seems to be discussing on some important and serious matter with courtiers. People seating in front are in various attitudes; the nearest seated person is listening quite attentively and those seating away from him are in rapt attention while one of the standing figure is begging the king with folded hands. The female flying whisk holder is shown with her index finger on her lower lip in a vismaya mudra.

The next panel here shows the scene of the banishment of prince Vessantara in consequences of the royal command. The prince with his wife Madri is shown riding a chariot, followed by loving subjects and followers. The Jataka tale mentions further about the gift of the horses. The same scene can be seen in the next panel which is also damaged. It shows the chariot drawn by two horses with a Brahmin in front asking for the gift of the horses.

The same story is continued in next three panels; out of which one panel is badly damaged and its remnants were found by Deshpande and Jamkhedkar during their visit.

Other panels depict incidents and stories from other Jataka of which the first show a scene where a female, probably a princess, is shown in depressed mood. The next panel shows two sequences: a king is seated in Bhadrasana and surrounded by courtiers and the adjacent panel court scene is depicted.

The three succeeding panels from the last three compartments of the frieze are comparatively clear. The first panel shows a lady lying on a couch with her right hand under her head. She is depicted with a group of maids as attendants. This could be the scene of conception; in this context probably that of Maya.

Next two panels depict Panchika and Hariti. This panels shows the story of the conversion of Hariti, the wicked demi-goddess who used to consume children of the citizens of Rajgriha. Bin the first part of the panel her conversion is shown in which she is shown besides the Buddha. Her children are shown behind them. The other part of the panel depicts the scene where young children are playing and enjoying.

## **Significant Features**

It can be easily understood that this cave was excavated and used by people of Buddhist faith. It was intended to be a Buddhist Vihara and therefore its façade is decorated with the depiction of Jataka scenes.

The long frieze or the frescos here are depicting:

- 1. Vessantara Jataka
- 2. Conception of Maya
- 3. Conversion of Hariti
- 4. An unidentified Jataka

One astonishing factor in this context is the presence of Ganesha sculpture on the left side pilaster. This figure, though abraded, clearly indicates that it was a two headed Ganesha. This also points out towards the early stage of the iconographic development of Ganesha where he is shown holding broken tusk in the right and a bowl of sweets in the left hand. It seems that this image of Ganesha could be later addition because no other Brahmanical god is represented here. While in western india many Buddhist cave were in later times were reused as Brahmanical caves for example the caves at Junnar, popularly known as Ganesh lena, the cave at Aurangabad has also yielded a large image of Ganesha. It is possible that after the decline of Buddhism the cave at Lonad was probably occupied by the devotees of Ganesha.

This cave at Lonad has many similarities with cave no.1 at Ajanta and cave no.3 at Aurangabad. Both the caves are dated approximately to 5<sup>th</sup> century C.E.. on stylistic and schematic backgrounds it appears that this cave at Lonad is also of the 5<sup>th</sup> century C.E.. This period is contemporary to Vakataka rule.

The style of plastic ornaments also recalls the Vakataka tradition which is best depicted on the sculptural panels in Lonad especially on the sidewalls of the portico. Pillars at Lonad do not strictly follow the order of the Ajanta 1 and 2, Aurangabad cave no 3, but the rosette pattern underside of Tarangapotika has exact parallels at Ajanta cave 19 and 26. On the whole it seems that the pillars at lonad order may have contributed to the evolution of the Elephanta pillar type.



anninna

## magathane

## Magathane Caves

## Introduction

Magathane, a part of western suburb of Mumbai, near to Kandivali, lies in the poor state of preservation. This cave has been referred in one of the inscriptions at Kanheri as "Mangalsthana".

## **Location and Setting**

The Buddhist caves of Magathane lie on the periphery of Kanheri, near Kandivali. They are excavated in the lower district of the island, and even in the hot season they stand in pools of water.

## History

One of the inscriptions at Kanheri refers to the village Mangalsthana which is understood as Magathane by the scholars. This inscription talks about the donation given by a trader from Mangalsthana to the monastery at Kanheri.

## Description

The cave has imposing *makara* gateway and a tall image of Buddha. Inverted lotus petals are carved on the ceiling. Stylistically these caves can be dated to the 6<sup>th</sup>-7<sup>th</sup> century C.E.. In earlier times there was a huge tank in the vicinity of these caves but now it is difficult to trace.

In the back of the hall of the principal cave is a large figure of the Buddha, squatted in the Jnyana Mudra (attitude of abstraction), and above his shoulders are other smaller images in the same attitude. The other walls of this shrine or recess have also been sculptured with numerous figures of Buddha on the lotus throne held by Naga figures, etc. over the arched entrance to it is a fine torana or ornamental frieze between two makara heads. This frieze is continued in compartments to the right and left along the side walls, and in one panel is a dagoba in bas-relief with traces of two worshipping figures besides it. The pillars are of the style of cave 7 at Ajanta.

The above details as recorded in the 19<sup>th</sup> century are totally obliterated and these caves lie in the total apathy by the people living around. The caves are also under the threat of an upcoming construction project. Voice has been raised against the neglect of the caves and petition has been filed by Anita Rane Kothare who is fighting to protect the caves.



## mandapeshwar

## Mandapeshwar Caves

## Introduction

Mandapeshwar, called Montpezier or mount Poinsar by the portuguese, located at the distance of 2 km from the Borivali railway station. This Brhamanical cave once had many sculptural panels but many of them were destroyed by the Portuguese. They also built a fort over it and converted this shrine in to a chapel. Now this cave is under the protection of Archaeological Survey of India.

## **Location and Setting**

Mandapeshwar caves are located near to Borivali, suburb of Mumbai. The road which connects these caves from Borivali station is also named as Mandapeshwar road. The ruins of an old Portuguese built church stand on top of it. The Immaculate Conception Church is located to its south end and there is an open area in front of the caves which is used as play ground and for parking vehicles.



Location of Mandapeshwar Caves; Source: Google Images

## History

These caves were excavated after the excavation of Jogeshwari caves. These caves were probably occupied by ascetics till the arrival of Portuguese in this region in 16<sup>th</sup> century C.E.. Portuguese destroyed these caves and built a church above it. Mandapeshwar caves were referred by Portuguese as 'Mont Pezier', but now popularly known as 'Mount Poinsar'.





## Description

The main cave shrine at Mandapeshwar has a rectangular opening with four pillars. It is a type of large sized Mandapa (hall) of the Chalukyan period. The central chamber is a main shrine (garbhagriha). This shrine is in a state of incompleteness. Here at Mandapeshwar it seems that the original Buddhist excavation was represented by a simple rectangular cave excavation that is to found to the south of the main cave.



Above: Images of a Mandapa and a shrine Below Right: the excavation to the south of the main cave In its present condition the main cave resembles the excavation of the main cave at Jogeshwari so as to suggest that there exist a similarity in the technique of rock excavation and thus of the period also. This technique comprised the sinking of a vertical shaft from the top without unduly straining oneself about the slopy rock projection to the front of the proposed excavation. The cave is in the state of incompleteness. One simple cave in the southern side can be attributable to the Buddhists. It is also been opined by scholars that it is also possible that these was the scene of Buddhist as well as Brahmanical activity since the famous cave group of Kanheri are just across the valley towards the west and were the most important Buddhist group near Mumbai right from early historical period to the medieval times. There is a reasonable probability of simple southerly Buddhist cave, if only it is Buddhist, not being very much separated in time from the main excavation.



Rock-cut shrine near the cave temple Source: Cave Temples of the Deccan As for the age of the main cave excavation, the criteria would largely be based upon the nature of the pillar forms, sculpture panels and its remnants and the development of the layout of the cave itself.

Though now in the state of incompletion a façade showing a projecting rock outcrop as a natural cornice indicating as it was to Mukhamandapa and leaving the rock scarp almost vertical to the extent of its thickness above which the natural slope of the rock is to be seen. This further provided in later times with structural walls erected on it by the Portuguese, when this cave itself was converted into a church. In fact even the façade of the main cave had been completely blocked by masonry construction providing only for one entrance in the centre and two windows on either side. At the southern end a masonry platform had been constructed providing for the image of Jesus on it. However in the original plan of the rock cut architecture, the façade of the main cave primarily have shown the rocky projection like Mukhamandapa or porch outside which, on either side, were provided two side chambers. Each of these side chambers are having two free standing façade pillars and pilasters, but which have been completed to any degree only on the southern side and hardly started on the northern side.



Left: fortifications built over the cave Right: A cross is seen carved in the side walls of the main cave

The Mukhamandapa porch itself was of a wide rectangular opening within which, facade pillars of free standing type and pilasters at the side ends had been cut, in addition to mere rectangular window opening in the centre of a plain screen wall at either end of the façade opening.

The outer side chambers had apparently been completed at the very close of the execution of the main cave and thus had not been given the stylistic finish in their pillars as are found inside.

Only the pilasters at the southern and northern end of the pillared façade and at the inner extremities of the screen wall projection carrying the plain window openings have survived which gives us an idea of the character of the pillar order. The free standing pillars have almost completely been worn out except the details of their corbels. Fortunately, the side pilasters, show pillar wit a high cuboidal base, whose pitha had been provided with simple roll mouldings, above which the main plain base is finished with its own top part decorated with three bands and padmakosha above. The shaft narrows in octagonal part entirely carved with makara motifs and having upper border in beaded design. The prominent padmakosha row is raised encasing a multi-fluted kalasha. This kalasha is fairly vertical in its profile.

Entering through this façade the main central vestibule of rectangular shape is reached which is provided with three chambers; one at the back, and two on sides with a raised platform. This comprises of a basal wall with projecting upana, padma, vritta, kumuda, kantha, kumbha, kapota, etc.

The main part of the back is not so provided, but has its shrine part and the ardhamandapa in front almost at the same level of the main hall. The side chambers show a façade of two free standing pillars and two pilasters at both ends leading into a rectangular hall. The walls of this hall have not been finished to the same degree on both the sides, nor do they show original condition (K.V.S.Rajan). It seems that in a subsequent time even additional chambers had been provided on the back wall on either side of the main shrine chamber and its ardhamandapa. These chambers have their own ardhamandapa and proper inner chamber; both however of different type from earlier layout.

The main shrine chamber has a high rectangular doorframe, flanked by pilaster and shakha each. The pilaster form would seem to be nearer to that of Jogeshwari. On the ceiling of the ardhamandapa a circular block has been chiseled out, probably for carving out the lotus medallion.

The south side chamber of the main hall and the subsidiary chamber to the south of the main shrine are the only chambers that contain sculptural panels. The latter chamber is the squarish ardhamandapa within the plain rectangular opening.



Archaeological Survey of India has restored to these caves.



Design Plus

# jogeshwari

## Jogeshwari Caves

## Introduction

Jogeshari caves are locaed near the jogeshwari Vikroli Link Road. This is one of the largest excavation in entire India. This Brahmanical cave belonged to the Pashupata sect. though this cave is of an outstanding character, its state of preservation is very poor dur to natural weathering of rock and the impact of human settlement in the vicinity. The place is today a shrine of Goddess Jogeshwari.

## **Location and Setting**

Jogeshwari is a Brahmanical cave located near to Mahakali group of caves in the suburban region of Mumbai, now known as Jogeshwari. These caves are surrounded by a highly populated slum area. Caves are now under the protection of Archaeological Survey of India and the shrine inside is under worship.



Location of Jogeshwari Caves Source: Google Images

## History

These are probably the earliest caves of the Pashupata sect of Hinduism. These caves were excavated in the rising hillock of a rock. The main cave with the Shivalinga in the central shrine is worshipped as a mother goddess Yogeshwari or Jogeshwari. This cave is approximately dated to the 7-8<sup>th</sup> century C.E.

## Description

The excavations at Jogeshwari is axially arranged due east-west with two entrances, one at either end, although the main entrance was intended towards the east as it can be understood from the point of view that the longitudinal selection of the constituent units of the temple.

The Jogeshwari cave is one of the largest excavations of its kind in India. There is a striking similarity in cave at Jogeshwari and Dhumar Lena at Ellora and the great Elephanta caves. It resembles them in many respects but the hall is here is square instead of being star shaped as in them and the sanctum is situated exactly in the middle of the hall surrounded by an aisles separated by equally spaced row of pillars. The hall itself is almost of the same size as that of Elephanta.



Plan of Jogeshwari caves Source: Cave Temples of the Deccan

### Caves in MMR

The court on the south seems to have been left unfinished. It can be assumed that this side could be intended for the main entrance. Only a narrow winding passage on the east leads in to this partially excavated court, in which stands the verandah of the cave supported by 10 columns of the Elephanta type and pilasters. This verandah is 120 feet in length and at its back have three doors and two windows looking in to the great



hall. On the southern side the main part of the temple has been provided with a corridor all along its extent from east to the west. This corridor is having a row of façade pillars.

The approach from the east is by descending passage and a flight of steps from 10 to 14 feet wide, leading in small court in front of a neat doorway with fluted pilasters having Shardula brackets and a bas- relief under an arch over the lintel. This is the entrance to the covered porch about 36 ft long and 45 ft in width. This is provided with 4 pillars on each side, separating it from two apartments, the walls of which have been covered with sculptures. On the right hand side an image of Ganesha is installed. This image doesn't seem to be there in the original plan of the cave.



Left side compartment once had the panel of Saptamatrika along with Ganesha and Virabhadra. Unfortunately this panel has damaged and only the remnants can be seen. These are more or less similar to the sculptural panel at Elephanta, who are found on the east and subsidiary shrine. These Matrika are actually eight in numbers instead of traditional seven probably the sculpture of Yogeshwari was also part of this panel. The similar doorway leads from this porch to into a court about 42 X 66 ft in measurement. On the opposite side of the court are three entrances in to a second porch (60 ft wide and 28 ft deep), with two rows of four columns each across it, from front to back. From this three more doors, one in each inlet, lead in to a great hall.






#### Caves in MMR

The approach on the west side is also by a descending passage cut into the rock, into the partially roofed court, steps here lead down in to a small cave with two side recesses, each with two pillars in front. These recesses once had huge sculptures but due to the deteriorating condition of the rock and poor state of preservation these have almost disappeared. From this there is a door to enter in to the great hall.



On the south side of the cave there is an open court towards the toe of the rocky outcrop and the end part is again carved in the form of a few cave chambers facing the main cave and having the inner chambers and common outer corridor. Only the outer corridor on the western side carries figure sculptures of a male and female with two attendants, and inner wall has two more carved figures but these are now beyond recognition. There is also a large cell containing Shivalinga and a small one for the devi. There are few other small excavations one of them now converted in to the shrine of Hanuman.



**Design Plus** 

The interior of the hall is in the form of Sarvatobhadra sanctum, i.e., the sanctum is situated in the centre and it is provided with four door openings on all cardinal directions and with doorframe. These are approached by four steps and provided with Chandrashila at the bottom from each of the four directions. This sanctum chamber is surrounded by a pradakshinapatha just below the level of Chandrashila and about three feet below the level of the Sanctum. This has itself comprised a square pavilion with the set of six pillars on all sides. All these pillars are of similar type. The sanctum has Panchashakha doorframe on all the four sides.

Just outside this pillared pradakshinapath is an outer perambulation almost of the same width as the inner one and leading towards the Mukhamandapa. This outer perambulation does not have any special feature either on the wall or the ceiling except that the floor of this portion is at the lower level as compared to the central part.



**Design Plus** 

# **Significant Features**

It is generally accepted by the scholars in the field that these caves were excavated by the people belonging to the Pashupat sect of Shaivism. Excavation of the caves of *Pashupat* sect at Jogeshwari was later on followed at the site of Mandapeshwar and Elephanta.

This cave is considered as one of the largest cave in India. One can observe the gigantic excavation of this cave from just walking through the cave. The distance from the eastern entrance porch to that on the west, including the court and without the passage is 250 feet in straight line which exceeds that of any other known Brahmanical cave except Kailash at Ellora.

The sculptural remnants at the site can be divided in to two different categories, the earlier ones and the later. It probably indicates that the excavation of this cave lasted for a longer time over lapping with two different artistic and stylistic trends.

The most outstanding feature of this cave is the longitudinal lay out of the cave temple and also the Sarvatobhadra sanctum is similar to that of the Ellora and Elephanta. K.S. Soundra Rajan in his book, 'Cave temples of the Deccan' have given credit of this cave to the Chalukyan period. According to him the layout of the cave and even the pillar details are having close affinities with the Chalukyan art and architecture. One of the shrines on the southern side facing toward the main excavation seems to have followed the Rashtrakuta style. This cave was probably excavated during the late 7<sup>th</sup> or the early 8<sup>th</sup> century C.E.

Cave temple of Jogeshwari is considered as one most important Brahmanical cave because of its huge size, sculptural art and also the layout of the cave.



# Elephanta

### Introduction

The World Heritage Site of Elephanta is contains a collection of rock art linked to the cult of Shiva. It is one of the most splendid manifestations of Hindu art in Western India. The seven caves located in the Arabian sea island, 11 km east of Mumbai, richly represent the Indian rock-cut art of Saiva faith ( $6^{th} - 7^{th}$  century C.E.). The art here carries a perfect expression especially the large and bold relief panels that are housed in Cave 1.

The site was inscribed in 1987 as a World Heritage Site by the UNESCO for its Outstanding Universal Value based on the criteria i and iii.

Elephanta is anciently known as Gharapuri. The present name of Elephanta actually derives from a colossal basalt statue of an elephant measuring about 4.5 m long by 2.4 m high, which once stood near Raj Bunder, the old landing place near the southern point of the island, where most people arrived in the past. The statue was removed in the 19<sup>th</sup> century, and kept in Victoria Gardens (Jijamata Udyan, Byculla), where it still stands even today.

Criteria for Nomination of Elephanta Caves as a World Heritage Site in 1987:

- i. Represent a masterpiece of human creative genius;
- iii. Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

# **Location and Setting**

Elephanta island is located in Colaba District in the state of Maharashtra (N18 58 0.012 E72 56 8.988). It is situated about 11 km northwest of Apollo Bunder (Gateway of India), the departure point for the ferries to the caves. The journey by boat takes one hour from the mainland to reach the caves. There is a regular boat service between the Gateway of India and Elephanta.

There are three small villages and landing places. They are Set Bunder in the North-West, Mora Bunder in the North and Raj Bunder in the South.

Ferries running to Elephanta land at a new jetty, on the northern shore of the island. A short walk along the jetty leads to a flight of steps which ascends to the caves. The climb ends at the main cave on the side of the western hill of the island at an elevation of about 85 m above the sea level.

The Elephanta island consists of two hills separated by a narrow valley, gradually rising to the east until it reaches a height of almost 200 m above the sea. For most of its area, this island is thickly wooded with palm, mango, tamarind, karaunda and other trees; its 7 km of coastline is fringed with sprawling mangroves.

The caves are excavated in Trap basalt. The island on which the Elephanta Caves are located is also a resultant of volcanic lava flow which approximately took place between Cretaceous and Eocene periods of the Secondary and Tertiary Epochs respectively of Geological Time Scale.





**Design Plus** 



Image Source: http://whc.unesco.org/en/list/244/documents/







#### Caves in MMR





Elephant found at Elephanta kept in the premises of Bhau Daji Lad Museum.

### History

The history of rock-cut activity at Elephanta is shrouded in mystery. Not much information is available on the patron of the monument, or the workmen who were involved in its execution; there is also considerable uncertainty about the religious cult to which the cavetemple was once dedicated. Other than the inscribed slab that was sent to Portugal and which subsequently disappeared, not much inscriptional evidence is found.

The ancient vestiges found in the island go back to the early centuries of Christian Era representing sherds of Roman amphorae, ancient jetty or docks (?) and a brick stupa.

There is difference of opinion among the scholars regarding the historical foundation and popular spiritual interpretation of the place and sculptures. The caves are either assigned to Vakatakas who were responsible for the Buddhist excavations in Ajanta in the 5<sup>th</sup> century C.E., the Chalukyas of Badami who ruled from 6<sup>th</sup> to 8<sup>th</sup> century C.E. and even Rashtrakutas who commissioned the magnificent Kailasa at Ellora during the 8<sup>th</sup> century.

Walter Spink, a renowned art historian who has extensively studied rock-cut architecture of Maharashtra is of the opinion that Kalachuri<sup>1</sup> Dynasty especially Krishnaraja, was responsible for the excavation of the caves at Elephanta, whose reign coincides with the midsixth century. This is further supported by the many small copper coins found at Elephanta which have been associated with Krishnaraja, thereby suggesting that he may have been the principal benefactor of the monument.

Karl Khandalavala however believes that the caves must have been patronized by a king of the 6<sup>th</sup> century Maurya Dynasty, who ruled from their capital Puri, which is identified with Elephanta. Several European visitors who visited the island in the 16<sup>th</sup> century also referred to Elepahanta as Puri, thereby suggesting that the island was known by this designation. M.A. Dhaky is another art historian who concludes that the Mauryas must have been patrons of Elephanta.

Like the confusion about the creation and patronage to the cave, nothing is known about the next thousand years after the caves were excavated. The Konkan Coast came under the sway of successive lines of rulers. When the Portuguese came to Elephanta in the mid-16<sup>th</sup> century, the caves were abandoned and dilapidated. The Portuguese damaged the caves and disfigured the sculptures by firings several gun shots in the caves. The English took possession of the caves in 1774 by establishing a small garrison at the place, which led to further deterioration at the place. It was only in 1890 that the Public Works Department of Bombay began to take steps to arrest further decay at the place. The monument was declared a Protected Site in 1909 by the Archaeological Survey of India, which even today is the custodian of the site.

<sup>&</sup>lt;sup>1</sup> According to Walter Spink, during the sixth century C.E., the Kalachuris controlled the Konkan coast of western India, where the island of Elephanta is situated. Kalachuris remained powerful in the Konkan until the turn of the 7<sup>th</sup> century, when they were overwhelmed by the Chalukyas.

#### **Religious Affiliation**

There is also much speculation about the religious cult for which the monument was intended and the particular rites that must have taken place at the cave. While the insistence on Shiva as the sole iconographic subject of the sculptures is fairly common in a Hindu temple, Elephanta is one of the few monuments where Shiva in his multi-headed form serves as the pre-eminent visual and dramatic focus. There is a spatially defined duality, juxtaposing the linga and the god's image, is unique to Elephanta, unknown anywhere in the whole spectrum of Hindu architecture and art.

According to the distinguished scholar Stella Kramrisch, Sadashiva should be thought of as a five-headed figure, with three visible heads facing into the cave and two invisible, one turning into the mountain and the other rising above. In the Puranas this aspect of Shiva is said to transcend all other aspects of the God.

Pashupata Sutra and other texts do emphasize a three-fold deity- Sadashiva, who is described a creator, protector and destroyer, i.e., Vamadeva (the beautiful one), Jyeshtha (the central face), and Rudra (the left horrific face).

There is not much information on whether the cave was actually under worship. Charles D Collins, the theological historian, speculates that Elephanta was used by the Pashupata sect of Shaivas. He proposes that the sculpture panels formed part of an integrated programme, which emphasized the importance of Yogishvara, who he does not hesitate to identify as a representation of Lakulisha, the founding teacher of the Pashupata sect.

According to Collins, an important and distinctive rite of the Pashupatas is the counterclockwise ambulation and the entrance and the sculptural scheme is tied well in case of Elephanta to match this pattern of ambulation within the cave.

However, given the gaps in historical data, the affiliation of the cave to Pashupata sect cannot be confirmed.

#### Architectural and Artistic Evolution and Influences

Comparisons with other examples in Mumbai help situate Elephanta within an overall architectural and artistic development, suggesting a date towards the middle of the 6<sup>th</sup> century C.E.

Elephanta forms part of the tradition of rock-cut art and architecture which started in the Deccan around 2<sup>nd</sup>-1<sup>st</sup> century B.C.E. in the form of Buddhist caves. The caves at Jogeshwari and the smaller caves at Elephanta are sources for the main cave at Elephanta. In layout, the cave with entrances on three sides is clearly inspired by Jogeshwari, but the central hall is expanded in case of Elephanta into a plan of five bays, with additional triple-bayed extensions in the middle of each side to create a stepped outline of 12 corners. Another innovation at Elephanta is the displacement of linga shrine away from the cetnre, thereby permitting a clear axial north-south approach. Column forms develop those already announced in the lesser caves at Elephanta, with massive square lower shafts and fluted circular upper shafts providing an elegant transition to the compressed-cushion capitals and the brackets with rolled sides. The doorways of the linga shrine display shallow pilasters and relief bands with setbacks, though these are only faintly etched.

The architecture and sculptural scheme of Elephanta is copied at Dhumar Lena (Cave 29) at Ellora, one of the earliest at Ellora, dating back to the end of the 6<sup>th</sup> century C.E. here the linga shrine lies on the principal axis of the cave, opposite the main entrance, rather than to one side.

The plans of Elephanta was not further developed and the Hindu sanctuaries were conceived quite differently as a simple linear sequence of columned verandah, mandapa or columned hall, and shrine being cut out in the rear wall. The spacious halls continued to be an essential component of the temple in the later period, but the fluted columns also disappeared to be replaced by columns with vase-and foliage capitals.

The sculptures at Elephanta derive inspiration from the Buddhist sculptural art, especially that seen in Ajanta and Aurangabad, and the Gupta art as seen at Udyaigiri and temples like Deogarh. It however, does not seem possible to pinpoint the precise origins of its technical assurance, stylistic consistency, iconographic range and enlarged scale. None of these attributes are visible at Jogeshwari. There is an isolated reference of a local Konkan tradition as seen in the impressive sculpture of Shiva found at Parel, where Shiva is depitcted in multiple forms.

The scheme at Elephanta is followed in Ellora, as seen in Dhumar Lena, though the sculptural sequence is different and also other caves such as Ravan ki Khai. The scheme at Elephanta came to an end with Ellora as the later tradition concentrated on pe-carved panels inserted into the walls of free-standing structural buildings.





Sketches of Elephanta of the 19<sup>th</sup> century Source: British Library



Shiva Image from Parel

# Description

Among the two hills on the island, the western and the eastern has altogether five rock-cut caves in the former and the latter, has a brick stupa on the top of it with two caves and few rock-cut cisterns. One of the caves on the eastern hill is unfinished and the other a plain excavation.

The most important among the caves in the western hill is the great Cave 1 which measures 39 metres from its front entrance to the back. The entrance to the cave, which lies to the south, is a man-made opening framed by architectural pillars and pilasters. A cave can be entered through a courtyard. There is a small site museum at the site as well.

### Architecture

The cave has a triple bayed entrance, from East, West and North. The open entrances allow light into the depths of the cave. The cave fabric is laid out as a great columned hall, approximately 42.5 metres deep. It is divided into bays by rows of free standing columns, with additional half-columns set into the walls.

The entrances on the East and West give access to the artificially excavated courts within the fabric of the hill that are open to the sky.



Caves in MMR

Plan

The interior of the main cave of Elephanta has an overall geometric configuration. It has a symmetrical layout. It is a square of 5 by 5 smaller square bays, with triple-bayed extensions on four sides, each bay measuring about 5.5 metre square. There are total 36 bays. The scheme corresponds to the mandalas, representing the universe, which regulate the plans of Hindu temples and have an essential role to play in the sacred architecture.

There are two axes formed in the cave. One axis links the two entrances positioned in the middle of the eastern and western triple-bayed extensions, upon which is positioned the linga within the sanctuary; another axis runs from the entrance in the triple-bayed extension on the north to the sculptural composition located in the corresponding position on the south. Movement along these two axes offers quite different experiences; with the East-west linga sanctuary and North-south culminates in a Sadashiva representation of Shiva.

It is thus a unique and complex plan intended to serve the rituals of worship.



PHOTO LITIL LONDON, & E

basend

Plan of Elephanta Caves Source: Cave Temples of the Deccan

**Design Plus** 



Plan of Elephanta Source: Elephanta, George Michell





#### Columns

The lower shafts of the columns take a plain cubical form, the upper shafts being circular and fluted; the transition is marked by ganas, which are carved at the corners. Columns are topped by circular cushion capitals that continue the concave flutings of the shafts beneath.

The brackets which have rolled sides, are linked together by shallow beams that run along the cave ceiling.





Design Plus

#### Shrine

The square shrine accommodating the Shiva Linga, occupying one of the bays, has plain walls with doorways in the middle of four sides approached by steps and flanked by large dwarapalas. Inside the chamber is the linga standing on a pedestal more than 3 metres square; the linga itself rises to the height of one metre, fashioned from a separate block of stone.





The linga chamber is flanked by superbly modelled dvarapalas on the four doorways. They are partly cut out in the round, with their upper limbs free of the walls. The gigantic scale of these figures proclaims their crucial role as guardians of Shiva. The dvarapalas bear features such as elaborate crowns, auspicious threads, refined facial expressions, etc. These figures are badly damaged, but nevertheless provide testimony to the splendid scale and refinement achieved by the craftsmen at Elephanta.





#### **Sculptures**

All the architectural features serve as a setting for a magnificent series of sculptures carved into the walls of the interior of the cave, on either side of the entrances on the north, east and west and in the three bays along the rear (south) wall. These panels occupy most of the full wall spaces of a single bay of the plan, measuring some 3.5 m to 4 m wide and 3.7 to 4 m high.

The panels take the form of deeply cut compositions recessed upto 2 metre into the walls. The overall composition takes 3-dimension. Ceiling and walls are plain in contrast to the deeply cut sculptures.

In all panels, Shiva is represented almost in identical manner to show that they indeed portray different aspects of a single supreme divinity. Except for Sadashiva, the central sculpture in the theme, all panels focus on a central larger figure of Shiva surrounded by a crowd of smaller and lesser consorts, celestials and other beings. These and other dynamics of the panels imply a subtle geometry that contains and directs the placement of all the figures.

#### The sculptural scheme is such-

At the entrance (from the north) on the left (east) is Shiva as Yogishvara (Lord of Yogis), seated calmly in meditation, on the right (west) is Dancing Shiva, dancing in lalita. The sadashiva panel in the rear wall forms the visual climax. The panels on either side of Sadashiva depict Ardhanarishvara (Shiva as androgyne) to the left (east) and Gangadhara (Shiva bearing Ganga) to the right (west).

The next sculpture is that of Kalyansundara (the marriage of Shiva-Parvati, south) on one side of the triple bayed portico of the West. On the north is the panel showing Shiva impaling demon Andhaka with his long trident.

Just inside the east entrance is another pair of sculptural panels. To the north is Ravana seen lifting Kailasa, while to the south is the scene of Shiva-Parvati playing dice.

### Sadashiva

The most striking of the sculptures is the famous colossal Sadashiva at the back of the cave facing the entrance. Three busts of Shiva, the aghora, turbulent and fearsome; tatpurusha, benign and meditative and vamadeva, mild pleasing and lovable. On each side of the Trimurti recess is a pilaster in front of which stand gigantic dwarapalas or doorkeepers.





### Yogishvara

As Yogishvara, Shiva is the supreme master of all yogic disciplines, as well as the teacher of all the arts that give expression to an understanding and realisation of ultimate reality.

Yogishvara is seated silently in meditation; surrounded by the celestial beings, other gods, such as Vishnu, Brahma, Indra, etc. the hieratic symmetry of his swelling body expresses the inner pressure of prana, the breath of ife, the control of which is central to all yogic endeavours.

This panel is badly damaged; but similar such panel is also found at Ellora in the Dhumar lena which is better preserved and helps to gain some insight into how the actual panel must have looked like at Elephanta.



#### Shiva Dancing

The dancing Shiva provides a total contrast to the meditating Shiva on the panel opposite. Here the body of the god is portrayed in movement, with the axis of the trunk set at an angle to that of the head and the legs. Seven of the eight arms can be made out. Shiva wears elaborate crown, with tiers of tassels and jewels, elaborate earrings, jewelled bands around the neck, arms, rich costume, as against the expression which is calm and detached.

Confirmation of this posture comes from Dhumar lena in Ellora.

The act of dancing can be taken as central to the outer expression of the god's innermost energy, a manifestation of the forces of nature in their ceaseless round of creation and destruction.

The sculpture is deeply recessed. There are other accessory figures of celestial beings, gods and even drummers, attendants, ascetics, the figure of Shiva the most prominent and impressive.





### Ardhanarishvara



It is a combination of Shiva and Parvati into one composite figure, a symbol of perfect union of opposites. The interpretation of this unique form of god is given in Shiva Purana. It is written that at the beginning of the world's creation, Brahma tried to produce living creatures, but they were unable to reproduce themselves, since he had neglected to make women. Brahma implored Shiva to help and he obliged by assuming the form of Ardhanarishvara, transforming one side of his body into a woman. In this way, Shiva took over the role of creation from Brahma himself. Another story is of Bhringi, one of Shiva's most devout followers. Bhringi's devotion to Shiva excluded all other deities including Parvati. To convince Bhringi of their oneness, Shiva manifested himself in an androgynous form, the female half representing Parvati.

The contrasting gender components of the god are clearly expressed, eight side being male side with a broad shoulder and left side of female, with single breast. The difference is also visible in the face, curve of the body, hair, drapery, headdress, different emblems (male form with a serpant, female form with a mirror). Shiva leans comfortably on a nandi, a stately presence in the composition.

#### Caves in MMR

#### Gangadhara



This sculpture portrays a particular episode drawn from the Puranas, the moment when Shiva received the goddess Ganga in his hair. The story relates to how Ganga descended on the earth because of the austerities of Bhagiratha, a legendary king, and how Shiva agreed to bear her in her jatas to control the flow of the river.

Comparatively well-preserved images of Shiva and Parvati stand in complementary postures. Thre three-headed goddess Ganga is seen at the head of Shhiva. Bhagiratha is at the bottom left of the panel.

#### Kalyansundara

The Kalyanasundara panel depicts Shiva and Parvati standing next tot each other, their bodies turned slightly inwards, so as to be in a gentle communication. Shiva is holding Parvati's hand, an act showing a performance of a marriage rite.

All the celestial beings are present for the celestial marriage, including Brahma, Vishnu, Himavat, father of Parvati, Chandra, moon god, gandharvas, ganas, etc.



#### Andhakasuravadhmurti

Opposite the marriage panel is the scene of Shiva impaling Andhaka, with his trident. It relates to the story of in the Puranas that tells of the extraordinary boon to Andhaka whose every blood drop would create another demon. Andhaka was born out of a drop of sweat from Shiva's brow. Andhaka grew up to be a monster and even tried to abduct Parvati. Shiva punished him by burning away his flesh and sins with his fiery gaze. Shiva also gathered blood in a skull cup so that he could not reproduce.

Unfortunately the panel is badly damaged and much is left to imagination. The skull cup, bell, sword are visible. Despite the absence of the details, the force of Shiva in this fiendish act is still effectively communicated through the posture, facial expressions.





Sculptural panels in Dhumar Lena at Ellora



### Ravana lifting Kailasa



Ravena, the demon king of Lanka, was passing from the foothills of Mount Kailasa. Here his path was blocked as Shiva Parvati could not be disturbed. Enraged at this, Ravana lifted the entire Kailasa mountain and shook it violently. Parvati was terrified, but shiva merely pressed the mountain down with his toe, thereby crushing Ravana beneath it.

Once again, Ellora sculptures are helpful in confirming the details, which are only faintly seen at Elephanta.
#### Caves in MMR



#### Shiva-Parvati playing dice



Shiva and Parvati are depicted in the panel as playing the game of dice. Shiva's face is totally mutilated, while Parvati's body is also partially damaged. The lower part is not clearly visible, even though few gamas can be seen in the right bottom of the panel.

## **East Court**







Images of the East court and the cave in the East court

## **Lesser Caves**



## Significance

Though badly damaged by time, weather, and countless acts of vandalism, the sculptures here still communicate the power of the God. The outstanding artistic qualities of the sculptures can be appreciated. They are among the greatest masterpieces of Hindu art in its first formative phases of development from the 4<sup>th</sup> to 9<sup>th</sup> centuries. The centripetal scheme by which subsidiary figures are visually linked with Shiva is another compositional device that can be found at elephanta.

The caves remain enigmatic even today and continue to attract visitors who are overwhelmed by the grandiose of the entire excavation.



Site Museum at Elephanta, which gives the basic orientation about the cave architecture and sculptures to the visitors

CHAPTER 7 SIGNIFICANCE, VALUES AND EFFORTS TOWARDS CONSERVATION

# CHAPTER 7 SIGNIFICANCE, VALUES AND EFFORTS TOWARDS CONSERVATION

## Significance and Values

Western India, especially the state of Maharashtra has got almost 1000 caves in its varied geographical locations. In many aspects the rock cut architecture of the western India has a definite place of importance in the art history of India. While in other parts of India the rock cut architecture appears random in space and time on the other hand it shows the dynamic and continuous activity in western India for a period of more than 1500 years. In terms of utter number of rock cut monuments of western India, it exceeds the rest of India taken together.

The monument in this area also rich in variety, ranging from water cisterns, halls, Viharas to the beautiful temples and belonging to all three major religious faiths and their sects. The geological pre requirement of the existence of hills and rock expanses the suitable are for excavating caves is of course obvious.

There are almost 150 caves in the vicinity of the city of Mumbai, which includes major group of caves, such as Kanheri, Jogeshwari, Elephanta, Mahakali, Mandapeshwar, Magathane, Jivdani etc. They have yielded many important evidences of the past prosperous life in and around Mumbai. Many such evidences suggest that the region covered by Mumbai metropolitan was the centre of socio-economic activities right from the ancient times and not with the arrival of Europeans.

Caves in this region are primarily of two types: Buddhist caves and Brahmanical or Hindu caves. The excavation of these caves started in 2<sup>nd</sup> century B.C.E. and continued up to 9<sup>th</sup>- 10<sup>th</sup> century C.E. it simply means the caves of this region is remnants of the glorious past of almost 1200 years in this area.

The caves are important because of the political, art-architectural, socio-economic, religious, and philosophic and also technological, educational values they preserve.

#### Historical and Archaeological

The caves are significant for they are an important source for the reconstruction of history of the Mumbai Region. They give an unbroken record of the political, social, economic history of the period ranging from the early centuries of Christian era to the 8<sup>th</sup>-9<sup>th</sup> century. The inscriptions prove to be of immense help in understanding the trade activity, local support, royal patronage. It also provides evidence to the connections with other countries.

#### Technological and scientific

The selection of rock as a medium, techniques of excavation, excellent sense of the dimensions and perfection achieved in architectural components over the years are testimony to the technological achievements of the period. The ancient water system seen in all the caves are the evidences of early Rain water harvesting employed by the excavators. The water system is an excellent source for understanding the scientific advancements of the period.

#### Artistic and architectural

Mumbai Region has some of the masterpieces of sculptures unparalleled in history. The larger than life sculptures at Elephanta, Buddha, Avalokiteshvara at Kanheri, etc. are some of the examples of the immense sculptural wealth which the caves in Mumbai portray. The architecture also evolved over the years and caves in Mumbai provide evidence of this evolution which resulted in refinement of architecture and sculpture.

#### Aesthetic

Some of the caves in Mumbai like Kanheri, Jogeshwari were planned on a grand scale and they are the magnificent architectural edifices. The ornaments, herido, expressions as depicted through sculptures are testimony to the skills achieved by the sculptors and have social reflections as well. All the components are tied well together to create an effect which is aesthetically pleasing and provide feelings of the divine and pristine forms.



#### Landscape

The caves are located in the regions which are replete with natural beauty, and thus preserve landscape values which have serenity as well.



#### Socio-Economic

The caves were excavated at strategic locations and lay on important trade routes which gave traders essential resting places. It also provided safe and pious atmosphere for the traders. The contribution of the traders to the cave activity was quite noteworthy as also seen from the inscriptions. The Buddhist sanghas maintained excellent relations with the neighbourhood, which was the source of their daily food as there is no reference of cooking at the cave site. Thus this shows the peaceful coexistence between different segments of the society and also the spirit of charity. The social support to the cave activity is also reflected in the records of grants for repairs and maintenance of the caves not only by the Buddhists but also by the Hindus.

#### Religious

The Buddhist caves evolved as places where monks could take refuge during Varshavasa. The caves thus had religious and spiritual meaning attributed to them. The Hindu caves are also attributed to the religious sects such as Shaivism. At places like Jivadani, Jogeshwari, the religious usage still continues, though the nature of worship has undergone significant changes. But the caves are still living monuments and in a way provide sketchy pictures of what could have happened in the past. The caves were hewn in such terrains which were difficult to reach and thus had the idea that the person achieved merit when he took efforts to reach the place. Thus the caves fulfilled religious requirements of the people.

#### Educational

The caves like Kanheri became centres of learning. Even today, the caves have educational value and continue to educate, enlighten the visitors.

#### Research

The caves also have research potential and can contribute to our understanding of the past in a significant manner.



## **Efforts towards Conservation**

The monuments are either under the jurisdiction Archaeological Survey of India (Kanheri, Elephanta, Jogeshwari, Mandapeshwar, etc.) or are state protected. Some caves like Magathane do not have any statutory protection. The caves today are not in good state of preservation despite the efforts taken by the Government from time to time.





The caves are facing the threat of natural weathering, but at the same time, there are several other issues which have emerged as a result of urbanization. There is a problem of encroachment at many places such as Jogeshwari, which obliterates the features of the caves. The change of usage over the years and needs of the time have also affected the fabric of the caves thus threatening the very existence of the caves. The most important issue today is the lack of awareness on part of the people of Mumbai, which has led to the neglect of the monuments.

The heritage is a testimony to the past, and serves as a great inspiration. It is the responsibility of the people today to understand the importance of the rich legacy that we possess and a duty to pass it on to the future generation so that the next generation can also appreciate the momentous achievements of the past.



## **BIBLIOGRAPHY**

Burgess, J., Bhagvanlal, I., 1881, 'Inscription from the Cave Temples of Western India', Bombay

Burgess, J., 1882, 'Archaeological Survey of Western India' Vol. V, pp 53-54.

- Burgess, J., 1883, '*Report on the Buddhist Cave Temples and their Inscriptions*', Archaeological Survey of Western India, Vol. IV, London.
- Banerji- Shastri, A., 1926, 'The Lomash Rishi Cave Facade', 'Journal of the Bihar and Orissa Research Society', Vol. XII

Brown, Percy, 1959, 'Indian Architecture: Buddhist and Hindu', Bombay

- Chandra, R.P., 1927, *'The Beginnings of Art in Eastern India'*, Memoirs of the Archaeological Survey of India, vol. V.
- Chandra, Moti., 1977, 'Trade and Trade Routes in Ancient India', Abhinav Publication, New Delhi.
- Chaudhari, K. K. (ed.) 1986. *Maharashtra State Gazetteers, Greater Bombay District* Vol. I. Bombay: Government of Maharashtra.
- Chaudhari, K. K. (ed.) 1987. *Maharashtra State Gazetteers, Greater Bombay District* Vol. II. Bombay: Government of Maharashtra.
- Cleere, H.F. 1989. Introduction: the rationale of archaeological heritage management, in *Heritage Management in the Modern World* (H. F. Cleere ed.), pp. 1-19. London: Unwin Higman.

Dehejiya, Vidya, 1972, 'Early Buddhist Rock Temples- A Chronological Study', Thames and Hudson ltd., London

- Dehejiya, Vidya, 1997, '*Discourse in Early Buddhist Art: Visual Narratives of India*', Munshiram Manoharlal, Delhi.
- Deshpande, M.N., Jamkhedkar, A.P., 1987, 'New Interpretation of Indian Art and Culture', editor: M.S. Nagaraja Rao, 'Kusumanjali', 'S.H.C. Sivaramamurti Commemoration volume', Vol. II, Agam Kala Prakashan, Delhi.
- Dhavalikar, M.K.1985. Antiquity, in *Maharashtra* (Saryu Doshi ed.), pp. 257-270. Bombay: Marg Publications.
- Fergusson, J., Burgess, J., 1880, *'The Cave Temples of India*, Oriental Books reprint Corporation, Delhi (re printed in 1969)
- Ghosh, A., 1989, 'An Encyclopedia of Indian Archaeology', Vol. I & II, Munshiram Manoharlal, Delhi.
- Gupta, S.P., Asthana, S. P., 2002, '*Elements of Indian Art*', Indraprastha Museum of Art and Archaeology, D.K. Printworld pvt ltd., Delhi
- Herrmann, J. 1989. The world's cultural heritage, in *Heritage Management in the Modern World* (H. F. Cleere ed.), pp. 1-19. London: Unwin Higman.
- Huntigton, Susan, 1985, '*The Art of Ancient India: Buddhist, Hindu, Jain*', Weather Hill, Tokyo, New York.
- Khandalavala, Karl.1985. Rock-cut Temples, in *Maharashtra* (Saryu Doshi ed.), pp. 257-270. Bombay: Marg Publications.
- Kunte, B. G. (ed.). 1977. *The Gazetteer of Bombay City and Island*, Vol. I. Pune: Government of Maharashtra. (vol I)

Lipe, W. 1984. Value and meaning in Cultural Resources, in Approaches to Archaeological Heritage: A Comparative Study of World Cultural Resource Management System (H. F. Cleere ed.), pp. 1-11. Cambridge: Cambridge University Press.

Michell, George. 2002, 'Elephanta', India Book House Private Ltd.

Nagaraju, S., 1981, 'Buddhist Architecture of Western India', Agam Kala Prakashan, Delhi.

- Ray, Himanshu Prabha., 1986, 'Monasteries and Guild: Commerce under the Satavahana', Oxford University Press, Delhi
- Ray, Himanshu Prabha., 1994, 'The Winds of Change: Buddhism and the Maritime Links of Early South Asia', Oxford University Press, Delhi.
- Singh, Upinder, 2008, 'A History of Ancient and Medieval India' From the Stone Age to the 12<sup>th</sup> century'., Pearson Longman, Delhi

Solomon, Gladstone W.E., 1931, 'The Art of Elephanta', The Times of India Press, Mumbai.

Spink, W. M., 1958, 'On the Development of Early Buddhist Art in India', Art Bulletin, XL.

- Soundara Rajan, K.V., 1981, 'Cave Temples of the Deccan' Archaeological Survey of India, New Delhi.
  - Tomori, Edith, 1982 (re print 2006), 'A History of Fine Arts in India and the West', Orient Longman Private Limited, Chennai

UNESCO. 1970. Sites and Monuments. Paris: UNESCO.

Zimmer, H., 1955, 'The Art of India and Asia', Vol. I and II, edited by Campbell, J., New York.