Map and information booklet for Kanheri caves

VISUAL COMMUNICATION PROJECT 2

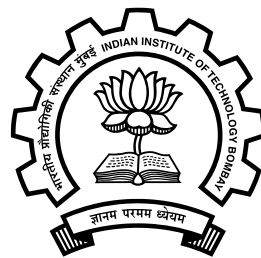Guide

Prof. G. V. Sreekumar

By

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Approval Sheet

This project titled "Map and information booklet for Kanheri caves" by Harshita Bandodkar,176450013, is approved in partial fulfilment of the requirements for Master of Design Degree in Communication Design.

Project Guide:

Chair person:

Internal Examiner:

External Examiner:

Date: 21/12/18

Place: Mumbai

Declaration

I declare that this written submission represents my ideas in my own words and where others ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/ data/ fact/ source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been needed.

Signature

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Date: 21/12/18

Industrial Design Centre,
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Acknowledgement

I would like to express my gratitude to Prof. G. V. Sreekumar for being my guide and friend during the course of the project and offering me valuable insights. I would also like to extend my gratitude to Dr. Suraj Pandit, researcher and authority on Buddhist art history in India, professor at Sathaye college, Mumbai, for his kindness, time and efforts in helping me understand and experience Buddhism and Kanheri.

I would also like to thank Prof. Mandar Rane for his help during my time of predicament and with the making of the map.

Abstract

Kanheri caves in Mumbai are a group of 129 rock cut caves of Buddhist origin. These caves have around 100 inscriptions and served as an important Buddhist settlement. Due to their large number, visitors do not always visit all of the caves and also don't have enough information about their origins and significance. Most of the information given by guides is usually misguiding and incomplete. The caves also depict mythological stories which is hard to be deciphered by uninformed visitors.

Proposal:
To create a multidimensional information platform for visitors to understand Kanheri caves in its historical, mythological and cultural context.

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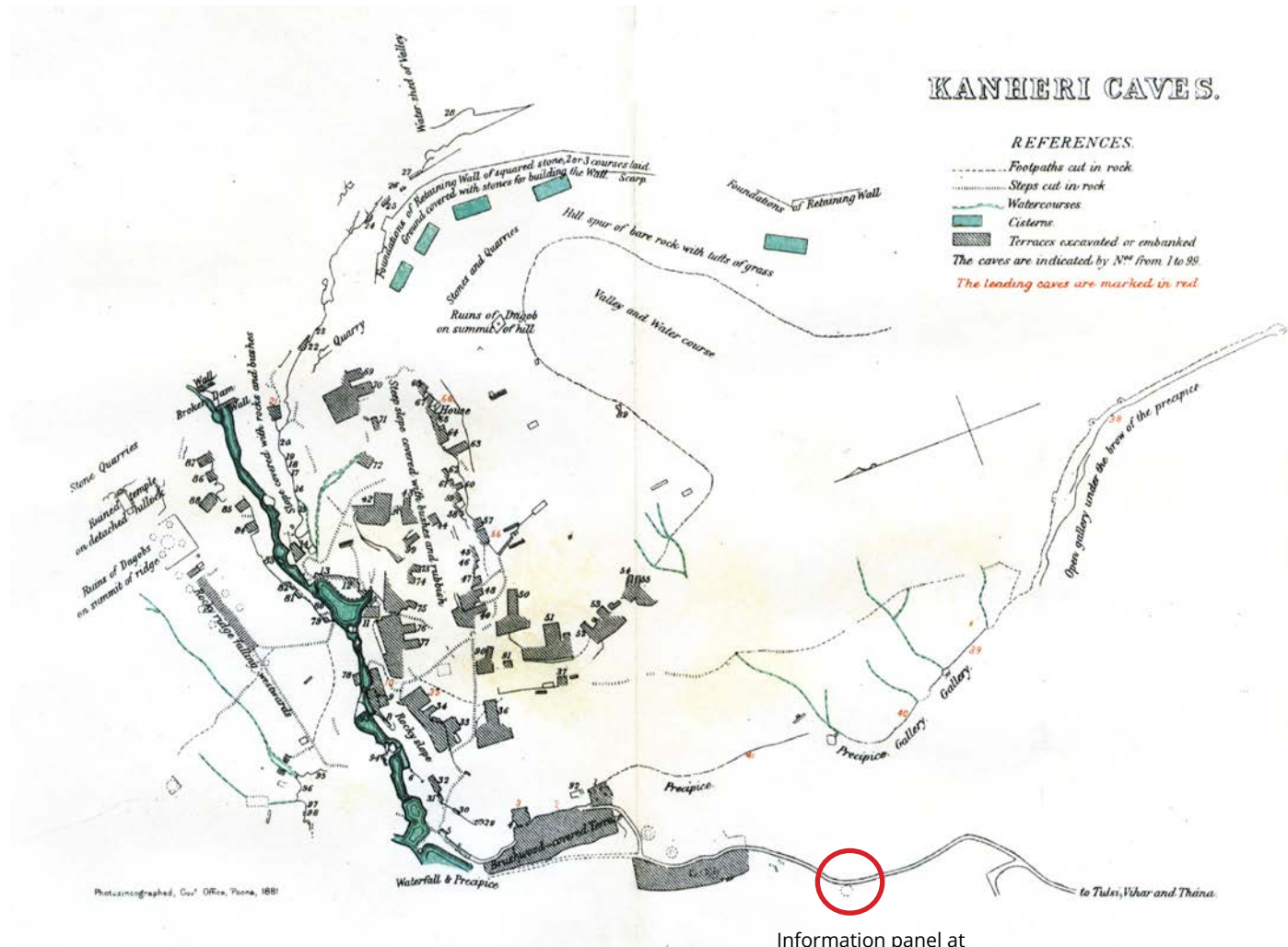
Caves 1 and 2 during monsoon

Introduction

Location

The rock-cut caves at Kanheri are located in the ancient island of Salsette about 32 km from Mumbai and 8 km from Thane. They are approached through a densely forested area through Sanjay Gandhi national park. Kanheri is surrounded by various ancient sites like Sopara, Kalyan, Thane, Bassein and Chaul. Even today, native inhabitants use pathways in the forest that connect to the site. On the periphery of Kanheri, cave sites like Mandapeshwar, Jivadani, Jogeshwari and Mahakali are present.

The caves are scattered on three hills, northern, southern and the eastern with most of them located on the southern hill on either side of the stream.

KANHERI CAVES.

REFERENCES.

- - - - - Footpaths cut in rock.
········ Steps cut in rock.
~~~~~ Watercourses.
▨ Cisterns.
▨ Terraces excavated or embanked
The caves are indicated by Nᵒˢ from 1 to 99.
The leading caves are marked in red

Information panel at
the entrance

Information panel at
the entrance

About the caves

Fa-hein, a Chinese pilgrim who travelled extensively across India during 4th century said,

"….there is a country named Dakshina, where there is a monastery (dedicated to) the bygone Kasyapa Buddha, and which has been hewn out from a large hill of rock. It consists in all of five storeys. At the very top there is a spring, the water of which, always in front of the apartments in the rock, goes round among the rooms, now circling, now curving, till in this way it arrives at the lowest storey, having followed the shape of the structure, and flows out there at the door. Everywhere in the apartments of the monks, the rock has been pierced so as to form windows for the admission of light, so that they are all bright, without any being left in darkness."

Kanheri, (*Krishnagiri in Sanskrit (black hill), Kanhagiri in Prakrit)* is a cave complex cut in living rock, bearing a testament to when it was first occupied in the 1st century CE, for over 1600 years till today. Kanheri is made of basalt rock formed out of volcanic eruption that made the rock soft and easy to excavate.

Widely known as the black mountain monastery back in the day and in most scriptures, Kanheri, comprising of over 129 caves and still counting (7 caves were discovered about 3 years ago) was also an educational institute, pilgrim and a religious site.

The site bears over 100 inscriptions in Brahmi, Pahlavi and Japanese, mostly dedicatory.

Schools of Buddhism at Kanheri

Broadly, Buddhism is divided into three schools:
Hinayana, Mahayana and Vajrayana.

After Buddha's Nirvana, in the second Buddhist council, differences between the Bhiksus led to two groups *Sthaviravada* and *Mahasanghikas* which later became Hinayana (Theravada) and Mahayana.
Hinayanists believe in the chain of causation, the eight fold path and the four noble truths. They did not believe in the existence of souls and emphasise on the path to *Moksha* being a personal journey.

Mahayanists believe that every person had the potential to attain Buddhahood. They worshipped Bodhisattvas over the Buddhas, a Bodhisattva being one that holds back their Nirvana in order to help others gain enlightenment. They did not consider Buddha as the only great teacher and have past and future Buddhas. They incorporated image and idol worship which was previously prohibited in Hinayana.

Vajrayana was a direct development of the *Yogachara* philosophy of Mahayana. It introduced the concept of *maha sukha-* eternal bliss and allowed five makars: wine, meat, fish, sweets and copulation. Negative mental factors such as desire, hatred, greed, pride, etc. were not rejected but were seen as part of the path.

The four noble truths and the eightfold path

The Buddha's first sermon after his enlightenment centred on the Four Noble Truths, which are the foundation of Buddhism
The four noble truths are
1. Life is suffering (*dukkha*)
2. Suffering is caused by desire (*samudaya*)
3. The end of desires brings an end to suffering (*nirhodha*)
4. Walking the right path frees us from desires (*magga*)

The right path is the eight fold path which is
Right View is also sometimes called Right Understanding. It is insight into the nature of things as they are, in particular insight into the first three Noble Truths - the nature of *dukkha*, the cause of *dukkha*, the cessation of *dukkha*.

Right Intention is sometimes translated as Right Aspiration or Right Thought. This is an unselfish intention to realize enlightenment. You can call it a desire, but it is not a *tanha* or craving because there is no ego attachment and no desire for becoming or not-becoming attached to it.

Right Speech is communicating in ways that promote harmony and understanding. It is speech that is truthful and free of malice.

Right Action is action that springs from compassion, without selfish attachment.
Right Livelihood is earning a living in a way that does not compromise the Precepts (no killing, no stealing, no misusing sex, no lying and no abusing intoxicants) or harm anyone.

Right Effort or Right Diligence is the practice of developing wholesome qualities while releasing unwholesome qualities.

Right Mindfulness is a whole body and mind awareness of the present moment.

Right Concentration is the part of the path associated with meditation. It is focusing all of one's mental faculties onto one physical or mental object and practicing the four stages of meditation.

Observation

The first four caves are easily accessible after which the caves spread out which is confusing to follow as there is no signage. People seem to be get tired after visiting a few caves. During the first few visits which were during the monsoon, it was more crowded and the main attraction was the stream. In the later visits as the weather got humid, fewer and fewer people were seen.
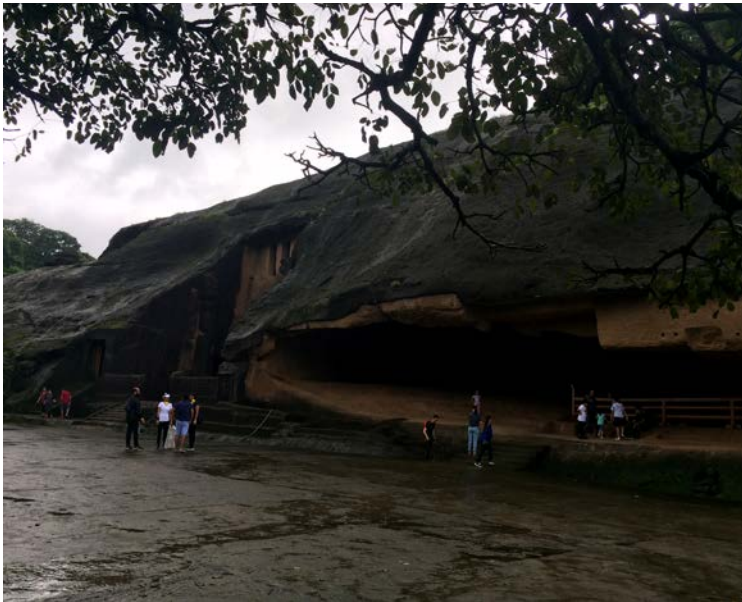
Most people visit with family and friends and most are occupied taking photographs and selfies.

Tourists seem to convert this beautiful historical place into a picnic spot and start enjoying there meals anywhere around the location but as plastic is banned in the national park, there is no littering.

All the pictures are shot over a period of 6-7 trips to the caves mostly on the weekends.

There is only one information panel at the location. Very few of visitors notice it and attempt to read it.

The caves are fairly occupied with tourist on weekends. People from all over India visit the caves.

Very few people enquire about the place and try to understand its history and significance.

A few do ask the guards around for information. Foreign nationals usually are accompanied by guides that are provided as a part of their tourist packages.

Stories of visitors

A couple of people who were revisiting Kanheri along with friends were interacted with and below are their experiences.

A couple from France that stays in Mumbai
"We first heard about the caves in a pamphlet of the flight. It is an interesting place but there is no information. We know nothing about Buddhism and we were interested to know more. The children were keen too. In Paris we usually have guided pathways in parks and museums so we can follow and explore ourselves. Language also becomes a problem while asking for directions from guards and fellow visitors".

A teacher from Malad accompanied by 18 students
"I looked up on Google and made sure it was safe to get kids and also basic information to educate the students. The guards helped us out with some more information and the important caves to visit. A map would have been useful. We look at all these sculptures and have no idea about them and most places are locked. They should put up a board saying which caves can be visited".

General reviews

There were a few general comments that people made that were in the lines of,

"No maps around, had to ask the guard for directions"

"The statue is of Shiva and that (Stupa) is a *Linga*"

"No signal so couldn't Google and information isn't accurate"

"Could only cover 10-15 caves and then got tired"

"Nice place to take selfies and photographs"

"Children wanted to know more, we googled about it"

"Elephanta was better"

"One of the guards told us some stories about some caves"

"Copy of Ellora"

The caves

The excavation at Kanheri happened in three phases,
1st phase or Hinayana: 150 CE- 200 CE

2nd phase or early Mahayana: 200 CE- 350 CE

3rd phase or late Mahayana: 450 CE- 700 CE

There was a hiatus between phase 2 and 3 as there was no patronage received due to loss of trade.

The caves were excavated in clusters as follows:
Group I: cave nos. 2-7
Group II: cave nos. 14-30
Group III: cave nos. 49-70
Group IV: cave nos. 31-40
Group V: cave nos. 88-93
Group VI: cave nos. 8-12

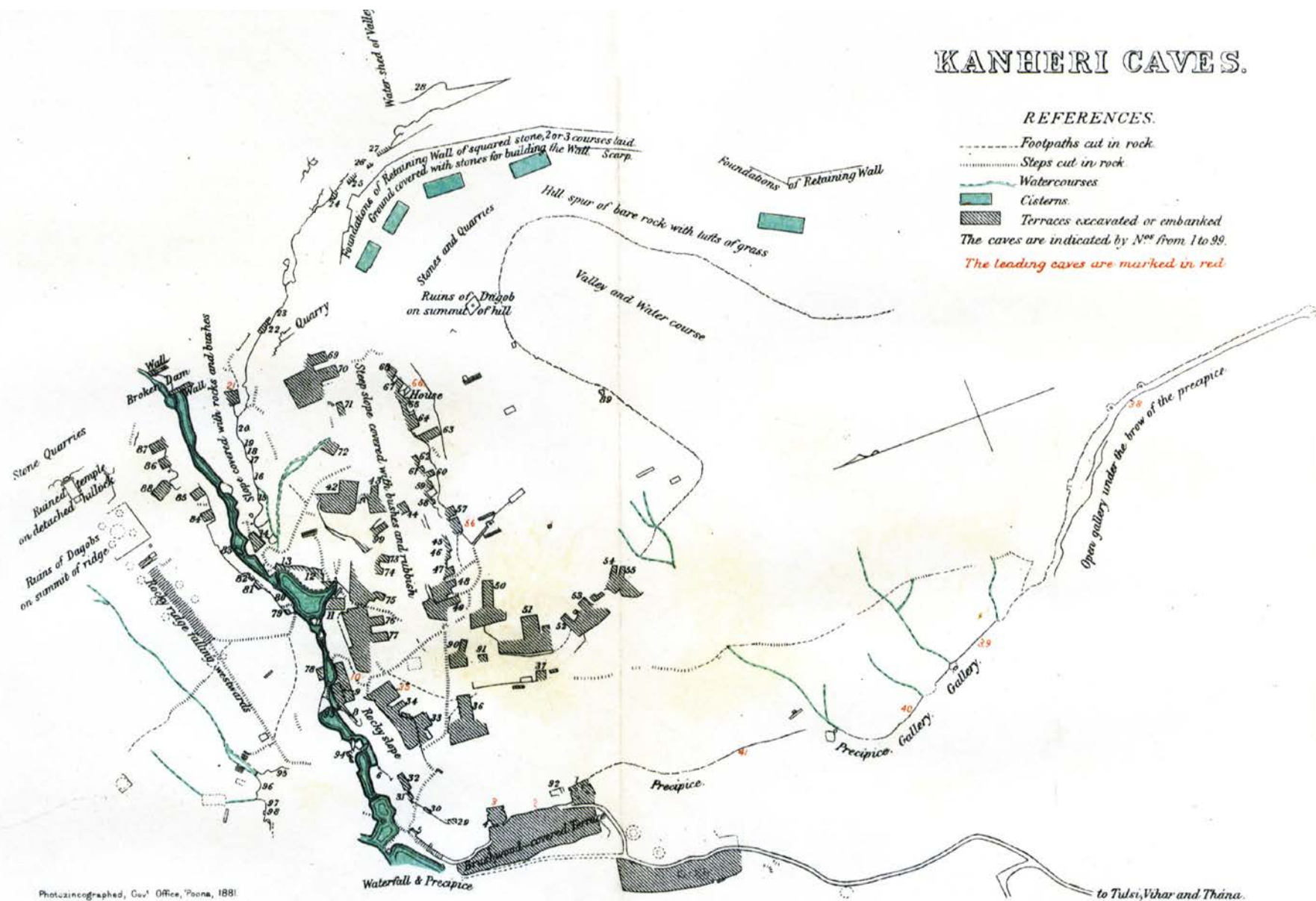There are two main types of structures at Kanheri:
Chaityas and **Viharas,**
Chaityas are mainly prayer halls with Stupas, hemispherical structures containing relics while Viharas are residential quarters with or without cells.
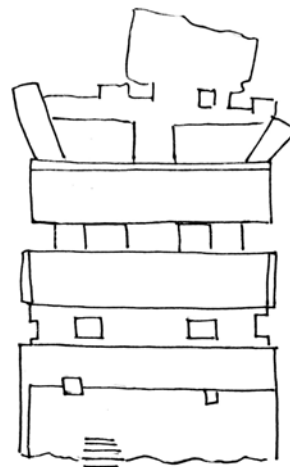
map from 1881, source: Google

Cave 1

This was the last cave to be excavated in the 6th century CE. It is two-storied and incomplete and is probably due to the lack of patronage as most funds were being diverted towards Shaiva caves by the end of 6th century CE.

Had it been completed, it would've been the biggest Chaitya on site and in India.

This cave would give you an idea about how caves are excavated. Any rock cut cave is excavated top to bottom and outside to inside. So a storey couldn't be added on top later. A mistake couldn't be undone and yet excavating was much cheaper than building from scratch and much longer lasting. And if you notice the cave interior, you'll see how the excavation is from outside to inside.

The only prominent feature about this cave is the pillar on the left. It looks intricate but is fairly simple to carve. Also, they're only for decoration. Since this is a hill, no support is needed.

One might wonder how long it took to excavate this cave. Based on the chisel marks, archaeologists' estimate that four groups of workers worked simultaneously and it took anywhere about 2 to 2.5 years to excavate whatever has been excavated.

floor plan, cave 1

Entrance, cave 1

Cave 2

Cave 2 is a Chaitya-vihara cave and has five subdivisions. The left most area is a vihara(2a) with cells. The three following divisions (2b, 2c, 2d) have Stupas, with the second one (2c) damaged. The last 2 divisions to the right are one chamber with a partition (2e) and another small chamber (2f).

Standing at the corner of 2a onlooking Stupa 2b, you can notice graffiti by a British soldier from 1875. Around this Stupa you can notice a set of seven Buddhas known as the *Manushi Buddhas. Manushi Buddhas* are the Buddhas that have taken a human form to live and work in the world out of compassion for the suffering of living beings. The seventh Manushi Buddha is Gautama Buddha or *Shakya muni.* The back wall depicts Avalokiteshvar, the Bodhisattva.
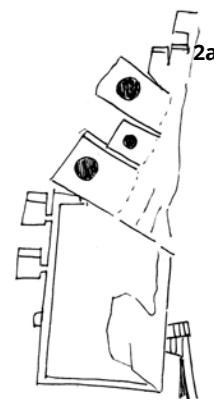
Also on top of the exterior of the cave, you can see small cuboid holes. Those were for wooden facades to shelter from the rain that poured eastwards.
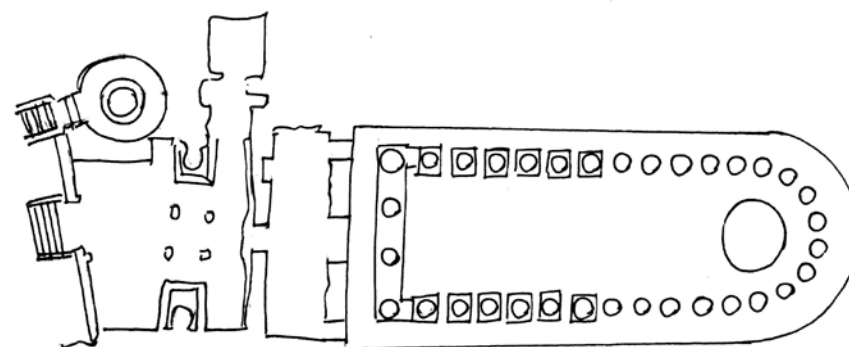
floor plan, cave 2

Cave 3

Looking at the floor plan one can see that cave 3 has an uneven courtyard. This is because both 2 and 4 were excavated before and chaitya 3 had to be fit into the remaining space.

Walking towards the entrance of cave 3, one would find two *dvarapalas*. Notice the railing pattern. Among the animals at the bottom, one would be able to find a double humped camel. These camels aren't native to Maharashtra. The other explanation could be that the artist came from a place where he had seen these animals. The closest place to Mumbai where one would find Bactrian camels is Ladakh.

Moving into the courtyard, there are two pillars adorned with statues.

floor plan, cave 3

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On the base of the base of the pillar on the right, there is a figure that looks like *Nagaraja* with the five hooded snake. Above that there are three figures. Observe the central one. Now look at the left pillar. One would find that the central figure is missing on the left. The sculpture belongs to the Kushana tradition of art from Mathura and was made only in bronze.

It's deciphered that a bronze statue was brought to Kanheri, possibly as a gift, and placed on the left pillar. A replica was carved in stone on the right pillar. Next to the right pillar, there are two Stupas carved on the wall with inscriptions. There's an overwhelming amount of sculptures here. Starting at the front wall, there are two pairs of sculptures of two couples. These are the donors for the chaitya. One pair is Gajamita and Gajasena and their wives whose donations started the excavation of cave 3. They were from the Pakistan part of Punjab. Their distinct earrings found in another excavation were made of pearls, a part of Kshatrapa art of Gujarat.

The second pair is Ananda and Aparenu from Kalyan whose donations helped complete cave 3 after a period of hiatus due to lack of funds. There are multiple sculptures of Buddha above these sculptures.

The key distinction between these sculptures is that some sculptures are protruding out while some are inset. The sculptures protruding out like that of the donors was planned and carved during the excavation. The others were added at a later date. When the excavation of the cave started in the 2nd century CE, Hinayana was the dominant school and image worship was prohibited. Stupas were the only icons worshiped. When Mahayana took over, image worship was allowed and it was then that these images were added to the existing cave.

It is hard to miss the Colossal Buddha images to the sides of the veranda. These are from the 6th century. The half-closed eyes add a divine feel to the sculptures. Below this at the corner of the wall, one could find the image of Tara, the female deity in Vajrayana. This form of Tara is called *Dipa Tara* bearing a lamp, divinity for the navigators and traders using sea. Next to her is an image of Bodhisattva Avalokiteshvara as *Padmapani* holding a lotus.

Buddha image, cave 3

Inside the chaitya, behind the first pillar on the right, you could find another image of the bactrian camel on the top, at the corresponding left pillar you could find a *griffin*, half lion, half bird. Griffins are a part of Persian mythology. Moving along, each pillar head is decorated with lions and elephants. The 8th pillar on the left shows the Bodhi tree. The 6th pillar on the right depicts a rider with a conical cap that is a part of the Saka civilization of Persia. Tracing all the important locations that the cave art has taken reference from, one can find that it matches the Silk route! One can also notice the difference in the pillars that indicates where the work was paused and resumed. Also, common folk were allowed only till the area covered by the fifth pillar. The Stupa had wooden appendages as tall as 40 ft. during the mahayana period decorated with Buddha images. This can be deciphered by the holes in floor around the Stupa.

Cave 4

Just outside cave 3 is a flat roofed circular chaitya. The square Harmika on top has an inscription. This chaitya was built in memory of thera Dhammapala who was died before cave 3 could be completed and is referred to in an epitaph in cave 3.

As one starts walking towards the left of cave 4, after a flight of stairs there is what appears to be a deformed sculpture of a lion. It had a counterpart on the right which was an elephant. This point had a gate beyond which common folk were not allowed and only monks and the authority were allowed.

Cave 11

Excavated in the 5th century, it could have been a library where scribes wrote, copied work or read religious scriptures. Some people mistake it to be a dining hall. It couldn't be a dining hall because monks didn't have elaborate meals. It is also called the darbar hall and is one of the largest caves at the site.

Inscription in the veranda calls Kanheri "Shri-krishnagiri-Maharaja-mahavihara" and mentions a permanent endowment for excavation

Stupa, cave 3

lion image after cave 4

and clothes of the monks. The interest accrued was to be given to the donor and then to authorities after he passed away. This establishes Kanheri as a bank, accepting deposits and paying interest.

The interest was to be split 5 ways, on footwear, clothes, medicines, meditation cells and salary for copying manuscripts. This throws light on a votive tradition of gifting manuscripts to the monastery which were bought from the monastery in the first place. This was one of the ways the monastery gained funds and was discovered due to footers found on these manuscripts.

The main shrine has 7 cells at the back wall, 3 on the right and 4 on the left. There are sculpted panels with Buddha in *dharmachakrapravarthana mudra* in the left cell in the veranda. This was the pose in which Buddha preached to his very first disciples, 5 of them.
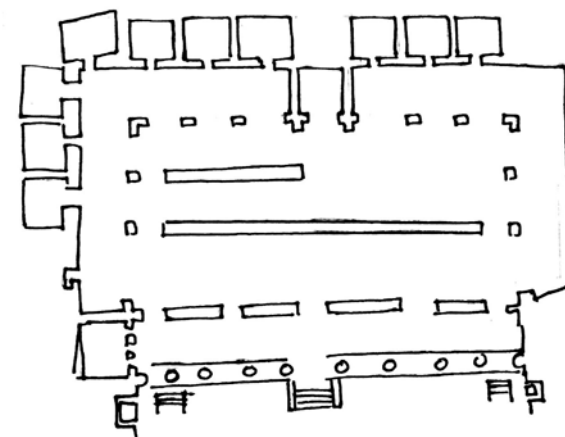

floor plan, cave 11

Cave 21

The front is ruined. The inscription mentions a donation of agricultural land at Magathane and "Adha pana Kheti" which meant that the land was owned by the monastery but cultivated by a farmer and half the produce was given to the monastery and the other half belonged to the farmer. In 1950, A.G. Dixit went looking for this piece of land and found that this piece of land was demarcated and uncultivated. The local folk still protect the land.

Cave 28

It is incomplete due to water seepage and bad rock. Instead of giving up their work, they converted it into a water tank adding some additional depth. This cave is at a higher altitude but has no stairs. This indicates that stairs are carved after the completion of the cave.

Cave 34

The shrine is unfinished and has 4 incomplete Buddha figures and has a niche at the rear for a movable image. This was when Mahayana

painting on the ceiling, cave 34

had not completely taken over and monks worshiped idols in hiding. Just outside the antechamber one can find the remains of a painting on ceiling of Buddha in *bhumisparsha mudra*, the position in which he attained nirvana. The painting style is from the 6th century and resembles the paintings from Ajanta caves at Aurangabad, though not as grand.

Cave 41

The most important feature of this cave is the 11 headed Avalokiteshvara which is the only image of its kind found in India. Avalokiteshvara being the protector, this form of his is very significant.

The central shrine has Buddha in *vyakhyan mudra*, the teaching pose. The walls are adorned with the Sravasti miracle. Monks from the previously dominant religions like Jainism and Ajivika mocked king Prasenjit questioning him about Buddha's abilities. On his behest to prove them wrong, Gautama Buddha made a mango tree grow in a day and multiplied into multiple forms of himself.

The main door frame is in a vase motif, the symbol of prosperity. The cave has panels of 8 Buddhas on lotuses and the trinity (Gautama Buddha with two of his attendants usually Avalokiteshvara or Maitreya or Vajrapani)Maitreya is the future and the eight Buddha currently waiting in Tushita heaven. This cave marks mahayana domination at Kanheri.

Cave 67

This cave is adorned with rich sculptures with repetitions. This is so because when people couldn't afford to donate complete caves or cisterns, they donated images and sculptures. The left wall shows a panel of *dipankara Buddha. Dipankara Buddha* was the 6th Buddha and the predecessor of Gautama Buddha. In that eon, *Dipankara Buddha* prophesied that the brahmin Sumedha would become the next Buddha and out of respect he let *Dipankara Buddha* walk on his hair. Sumedha later became Gautama Buddha. This story is depicted in the panel.

11 headed Avalokiteshvara, cave 41

The rear wall depicts the 7 manushi Buddhas with Maitreya. There are traces of plaster on walls and the ceiling. Buddha on a lotus is a part of the Gandhara art where as in Mathura art he is shown seated on the floor or a lion throne. The lotus is held up by 2 *nagas*, Nanda and Upananda. The lotus is a double lotus (*visva Padma*) that depicts someone who is in the world but not of it.

Cave 87

This cave is called *Nirvana-vithi* or the graves gallery. There are over 100 structural Stupas and 25 inscriptions. There is one large Stupa built in stone with 3 cells and sculpted feet of guardian figures. These Stupas are built in memory of monks (*acharyas*) that attained nirvana. This indicates that Kanheri was a college of monks. The rear wall has small chambers where idols were kept. This is again when Mahayana was still taking over and idol worship was prohibited. There is one empty Stupa with inscription "theranam" meaning respected or elderly, kept in waiting for a teacher that was ill and was expected to pass away.

Cave 89

The cave has various depictions of sravasti miracle with patches of paint left on the panels suggesting the depiction of fire. The wall on the left of the entrance of the cave shows a panel with the mango tree in the miracle which is rare in cave art. The row of seated Buddhas above main panel remains unexplained.

Cave 90

The cave is significant because of its 3 Pahlavi inscriptions (1009 CE- 1021 CE) and a Japanese inscription (1990s) written vertically. This inscription brought to the fore front the story of a monk from Japan belonging to the Nara Monastery of Nicheran sect, after his diary was found in the archives. The monk travelled to Kanheri to carve about his sect on his master's saying. This was the birth place of Nicheran buddhism in 1912.

Japanese inscription, cave 90

The Pahlavi inscription names a few Persian visitors, refugees from Iran and shows the beginning of Zoroastrianism in India. The central figure in the wall is missing and provision is made for a movable idol. One panel shows Avalokiteshvara's litany which portrays him protecting his devotees from 8 or 10 dangers; fire, royal punishment, river, bandits, demons, anger, sea storm and killers.

Water management system at Kanheri

The water sources at Kanheri are either water springs or stored rainwater. Twenty one inscriptions at the site mention donations for water cisterns referring to them with different names.

There is a water stream that flows from the east to west between the northern and southern hills which collects water at the eastern end. Ancient engineers converted this catchment area into a small perennial reservoir by constructing two small walls between the northern and the southern hills, beyond caves 30 and 41, which was functioning till the 14th-15th century. Today the walls are a poor state of preservation.

On the top of the southern hill, there are five water tanks that suggest a well-developed water system. Most of the cisterns and tanks at the site are connected to each other with a network of small channels making sure to utilise rain water. On the eastern hill, there used to be a place called Gomukh or Gaymukh where the natural spring water was collected in a small tank. These are called live cisterns.

There are two tanks adjacent to each other and a rectangular basin at the entrance of cave 2. The largest is useful in collecting rain water and has a wooden lid, the second one was wash hands, clothes or fetch water for bathing. Surplus water from the two overflowed into the basin and was probably used to feed animals.

The southern hill is covered with a network of small channels varying in depth and breadth. It begins from smaller tanks on top of the hill and reaches the upper most layer of caves where the cisterns store it. When these cisterns get filled, the provided outlets divert the water to the network of channels leading to the second layer caves. All the cisterns were provided with wooden lids. These cisterns are still active.

Earlier caves around the stream do not have cisterns. Many monks that came to Kanheri stayed there mostly during monsoons to observe *Vassavasa* (they stayed at one place in the rainy season). The earlier caves were probably built to accommodate these monks. As monks started settling in and more caves were excavated away from the stream, water cisterns had to be built to provide water.

Designing an Experience

A set of ideas were developed to provide a complete experience of the site. Out of the 101 numbered caves, fourteen of the most important ones structurally and historically were chosen for the sake of this project.
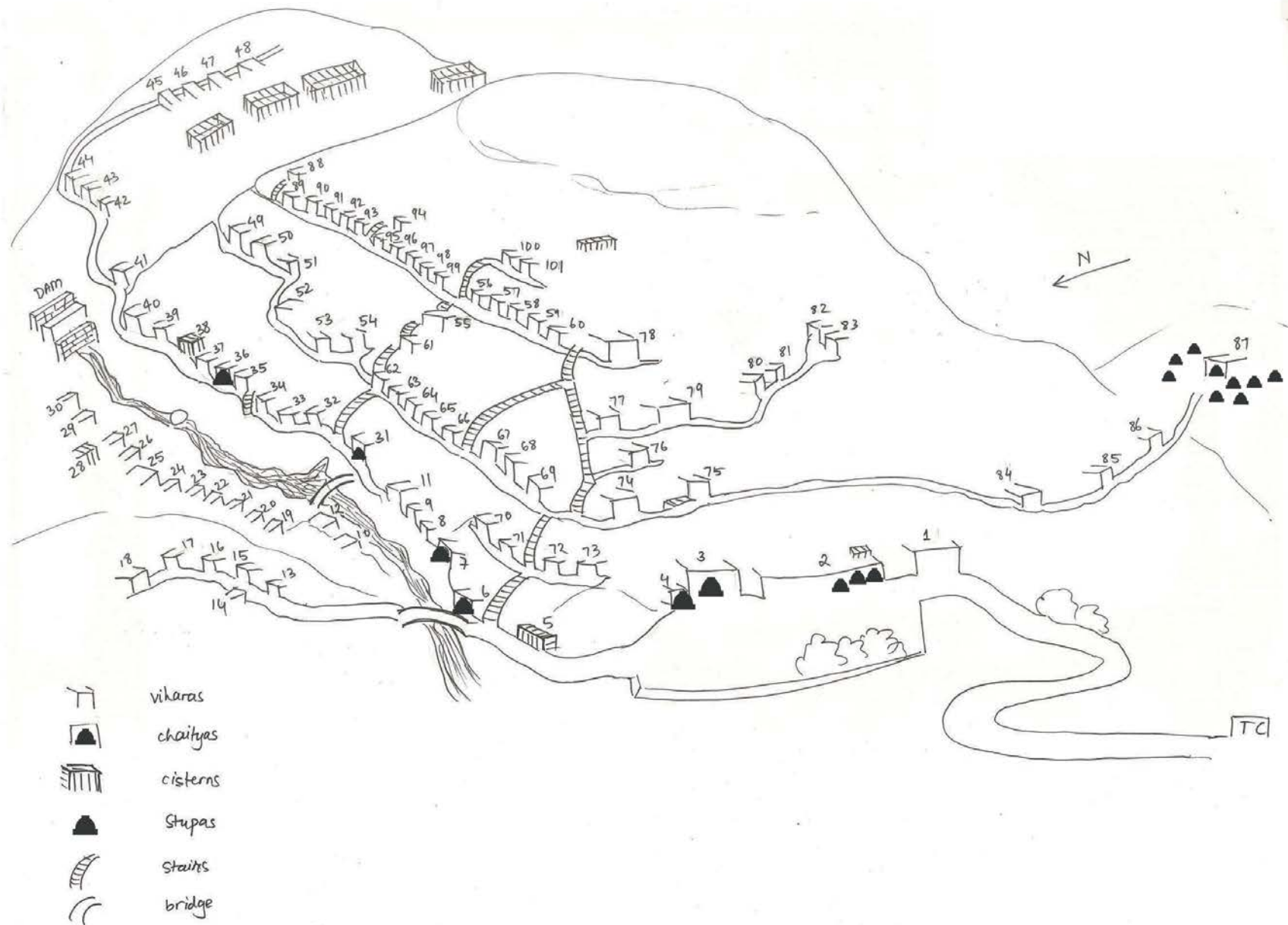
The map

The first design intervention was to design a map for the site. Few maps are available on the internet namely one from 1881 with the old numbers and one by the archaeological society of India from 1970s.

Few of the points that were kept in mind while designing the map was
1. A top view map would not give a complete idea of the area as there are multiple levels
2. Providing Trails would be useful
3. Along with the trail, showing the user's current location would also be helpful
4. The important caves could be marked so as to make it much easier
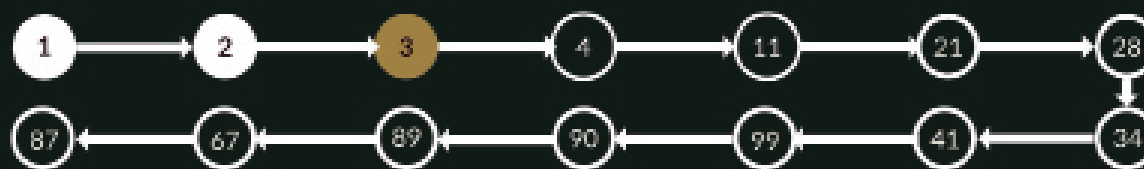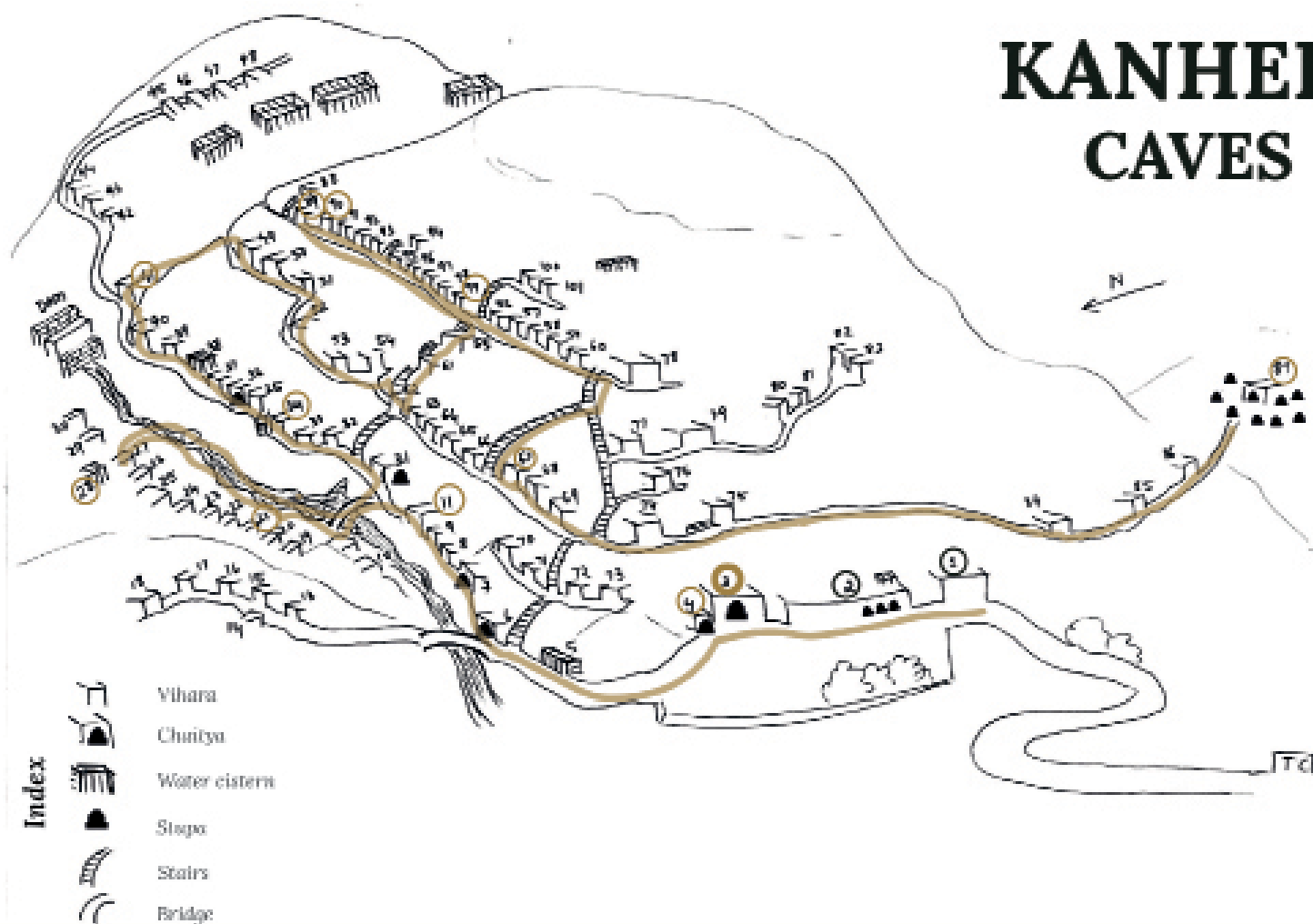5. Marking the type of caves, Vihara or Chaitya, would also be helpful

Considering these points, a legend was designed with a raised 3D map that would give a clear mental image of the topography of the site.
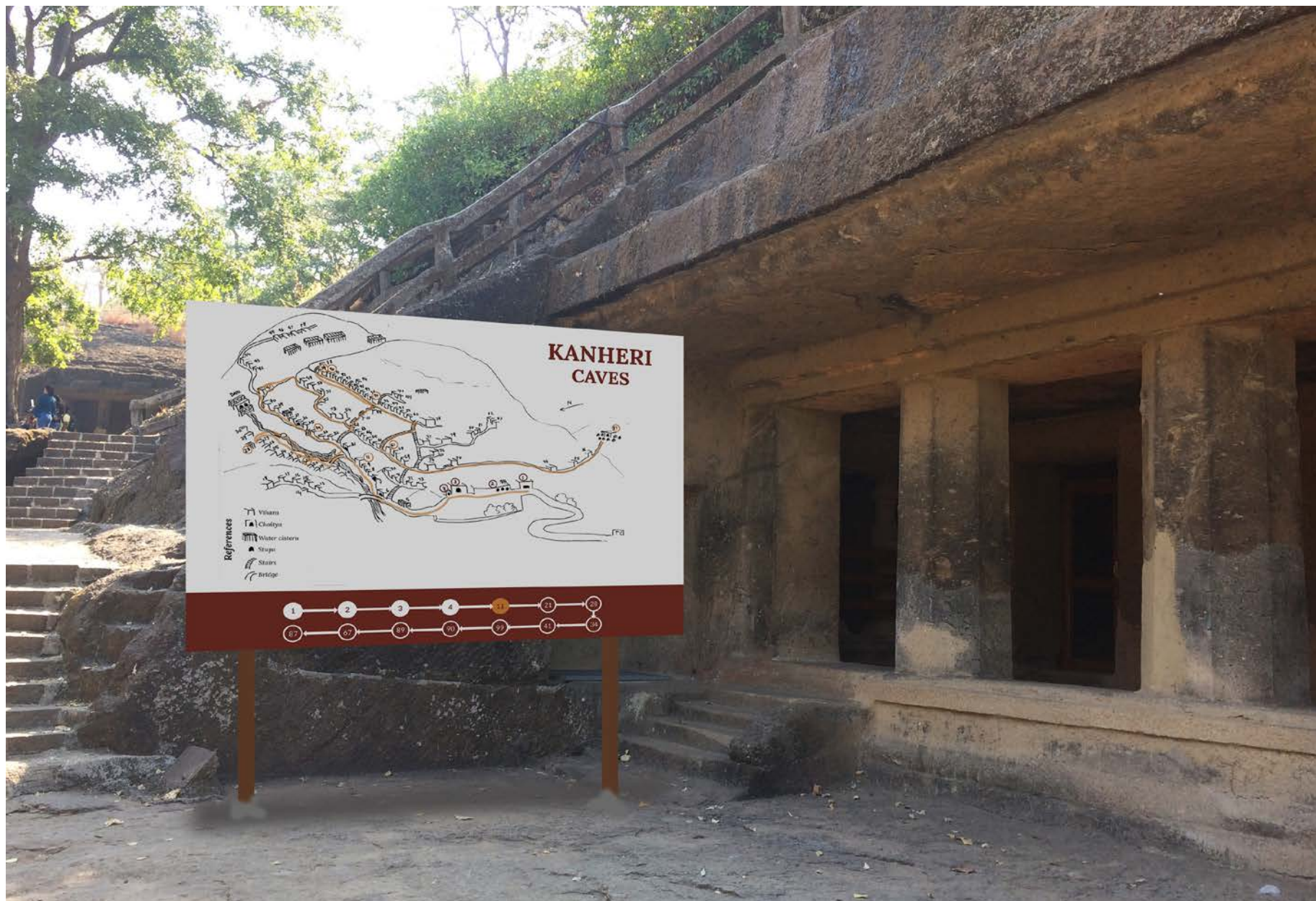
Further, a trail was added with the important caves to track one's route. A digital version of the map is yet to be made.
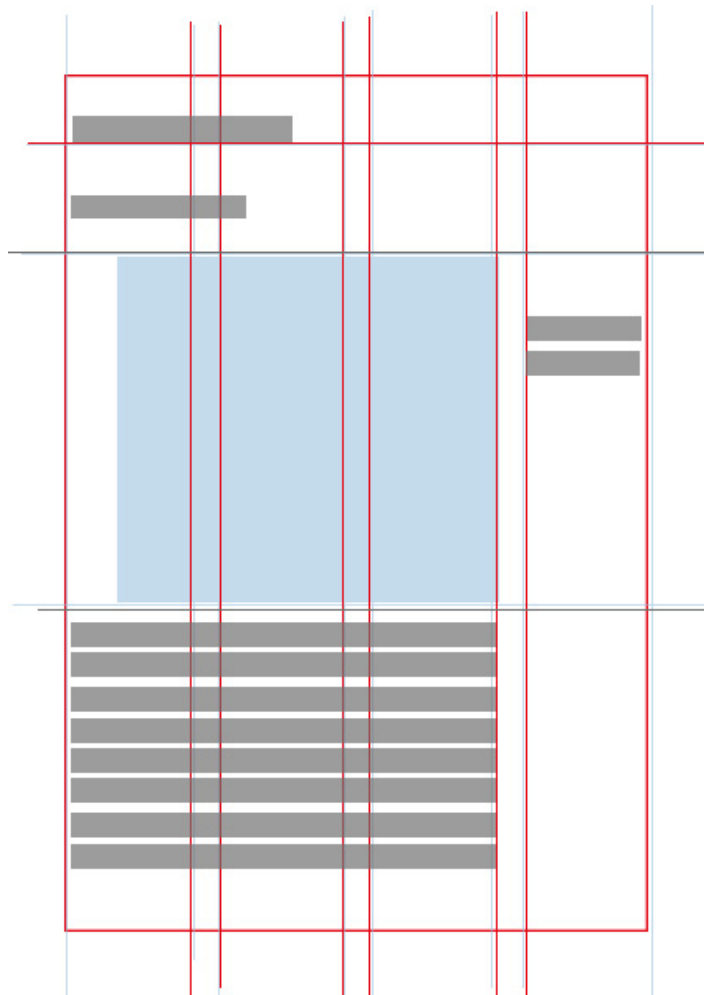
Initial sketch

N

DAM

TC

Symbol	Legend
viharas
chaityas
cisterns
Stupas
Stairs
bridge

KANHERI
CAVES

Index

Vihara

Chaitya

Water cistern

Stupa

Stairs

Bridge

1 → 2 → 3 → 4 → 11 → 21 → 28

87 ← 67 ← 89 ← 90 ← 99 ← 41 ← 34

Design proposal at the site

Booklet

A booklet would act as a constant guide of the journey along with a amp attached.

The booklet contains information about each of the caves along with a floor plan where needed.

The booklet gives the users cues to look around and explore the caves while discovering stories about it while being to visualise what the caves must have looked back then.

The booklet is compact sized so it can be carried around easily and is black and white to make production more affordable.
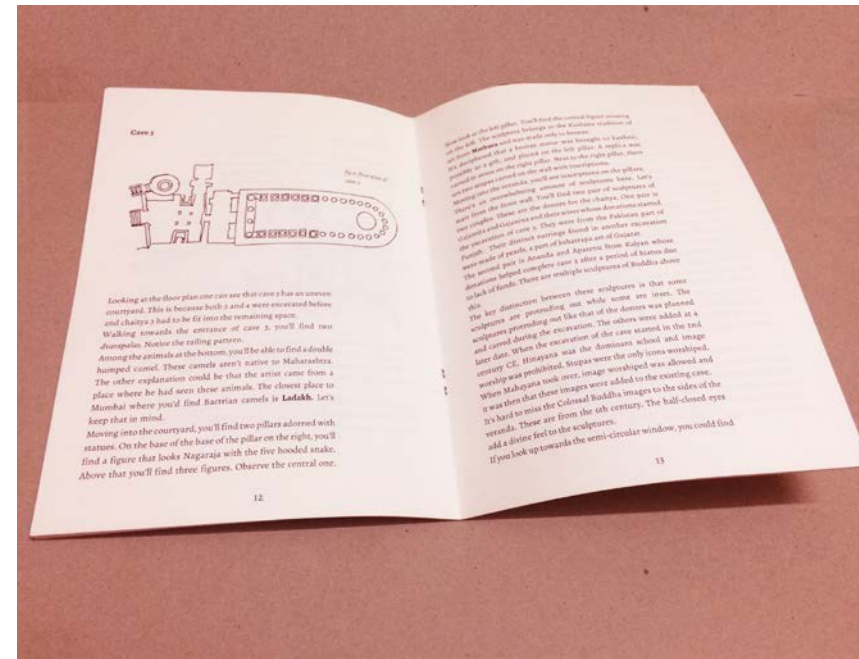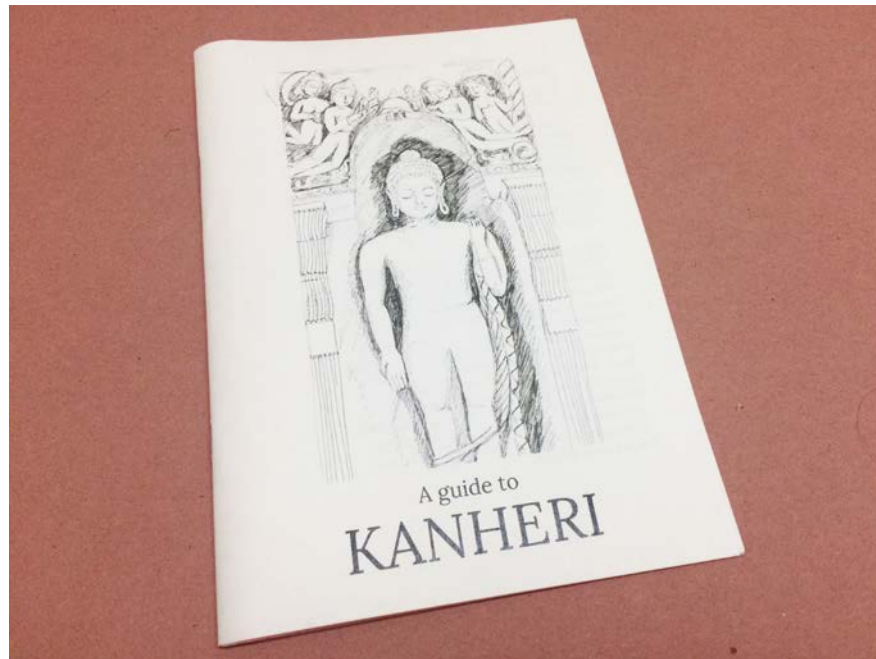
Size of the booklet : *A5*
Typeface : *Alegreya*

The booklet starts with :
    Introduction to Kanheri caves
    History and timeline
    Description of individual caves

Grid followed in the booklet
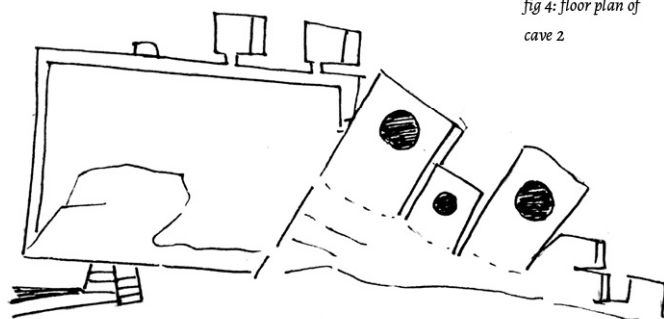
Cave 2

fig 4: floor plan of cave 2

Cave 2 is a Chaitya-vihara cave and has five subdivisions. The left most area is a vihara(2a) with cells. The three following divisions (2b, 2c, 2d) have stupas, with the second one (2c) damaged. The last 2 divisions to the right are one chamber with a partition (2e) and another small chamber (2f).

Standing on the corner of 2a on looking stupa 2b, you can notice graffiti by a British soldier from 1875.

Around this stupa you can notice a set of seven Buddhas known as the *Manushi Buddhas*. *Manushi Buddhas* are the buddhas that have taken a human form to live and work in the world out of compassion for the suffering of living beings. The seventh *Manushi Buddha* is Gautama Buddha or *Shakya muni*. The back

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The main body of the *stupa*, or *anda*, represents our world, which rises through the center of the Buddhist universe.

The *yasti*, which rises through the top of the *anda*, symbolizes the axis *mundi*, the point at the center of the universe that connects heaven and Earth.

The three stone disks on the *yasti*, called *chhatraveli* (or *chatras*) represent the three jewels of Buddhism: the Buddha (Siddhartha Gautama), the Dharma (the Law) and the Sangha (the monastic community). They can also be seen as the Teacher, the Teaching and the Taught. The *yasti* is surrounded by a small fence called the *harmika*. The part of the *stupa* surrounded by the *harmika* is a square area that represents the domain of the gods. Finally, there are four gateways leading into the *stupa* called *toranas*, which are aligned with the cardinal directions.
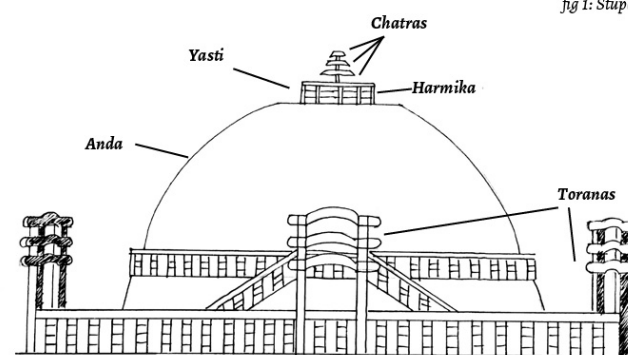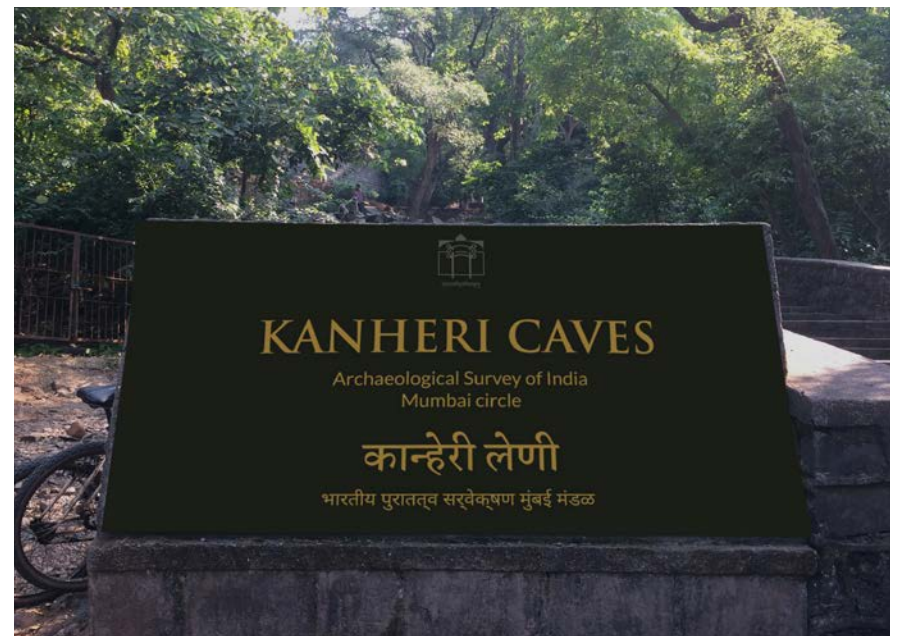
fig 1: Stupa

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pages from the booklet

Redesign of the panels

The existing information panel and the name plate were redesigned to match the complete revamp.

Design elements

Font selection
Headings
Font- Lora
Point size- 130

Sub-headings
Font- Lato
Point size- 50

Colour selection
A range of colours were chosen inspired by ancient Buddhist manuscripts and also by the robes worn by monks of various sects at Kanheri.

References

Borden, D.D., *Cartography, thematic map design*, WCB/McGraw-Hill, 2002

Coomaraswamy, Ananda, *Buddha and the Gospel of Buddhism,* New York : Harper & Row Publishers, 1964

Dhavalikar, M.K., *Cultural heritage of Mumbai*, Mumbai: Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, edition 1, 2016

Keates,J.S., *Understanding maps*, New York: Routledge publications, edition 2, 2014

Maraldo, John C. and Dumoulin, Heinrich, *Buddhism in the modern world*, New York : Macmillan, 1976

Dr. Pandit, S.A., *Stories in stone, Historic caves of Mumbai*, Mumbai : Instucen trust, edition 1, 2013.

Dr. Pandit, S.A. "Kanheri: A Study in its Sustain Patronage." *Academia,* 2003 <https://www.academia.edu/2624293/Kanheri_A_Study_in_its_Sustain_Patronage>

Dr. Pandit, S.A. "Water management system at Kanheri." *Academia,* 2010 <https://www.academia.edu/2624271/Water_Management_System_at_Kanheri>

Siderits, Mark, Buddhism as philosophy, an introduction, Washington, D.C.: Hackett Publishing Company, Inc., 2007

Surrey, Janet and Shem, Samuel, The Buddha's wife, New York: Atria books, 2015

< https://sgnp.maharashtra.gov.in/1231/Kanheri-Caves >

< http://asi.nic.in/ >

 < http://en.wikipedia.org/wiki/Kanheri_Caves >

< http://www.googlefonts.com/ >