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INDIA'S DECCAN UPLAND: HISTORICAL AND CULTURAL GEOGRAPHY OF WESTERN INDIAN BUDDHIST CAVES

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ABSTRACT

The paper discusses the geographical factors and the historical geography of western India and proliferation of the Buddhist caves in the early centuries of Christian era where the Buddhist monastic establishments in the area negotiated the sustaining factors like water conservation and how monsoon showers forced them to adopt certain architectural format in the excavation of the Buddhist caves and how there was strategic shifts of Buddhist excavation activities only in the region of *Mulaka* and *Aparanta* by discussing briefly the developments in historical regions of *Mulaka* and impacts from neighboring *Vidarbha*, which played an important role along with dynamics of patronage and politics of preference at certain site in the later *Mahāyāna* developments.

KEYWORDS: *Assaka, Mulaka, Māmala, Aparānta,* Buddhist caves, Western Deccan, natural passes, historical region, Ajanta, Pitalkhora, Ellora, Elephanta, Kanheri, patronage, *chaitya, stupa, vihāra,* Satavāhana, Vākātakas, *Vidarbha, Thervādins, Mahāyāna*.

1. INTRODUCTION

The Buddhist caves in western India are the largest number of cave monuments located in the mountain ranges of Sahyādri, started getting excavated from 2nd century BC to 7th-8th century CE. Their architectural development is unique and deeply connected with many geographic, social and political factors. The analysis in the present paper is confined to few cave sites in order to understand their sustenance in the hard weather conditions and how certain strategies get evolved in defining their architectural language along with politics of patronage and making of the site. Methods of formalistic analysis in architecture and sculptural language are applied to understand the intrinsic and extrinsic factors in the excavation of Buddhist caves. The study of western Indian Buddhist caves began with extensive documentations during colonial times mainly by Jass Burgess (1883, 1964) proposing possible chronological date brackets, and making details of inscriptional data with Indrajit (1881), later works concerned with documentations, historical, and chronological issues mainly by Deshpande (1959, 1961, 1981), Dehejia (1972), Nagaraju (1981), Dhavalikar (1984), Spink (2005), and work on epigraphy by Indrajit (1881), Gokhale (1991). Due to paucity of space, the discussion in this paper does not include the caves in the Karhataka regions and analysis is confined to few important sites.

The Indian subcontinent is broadly divided into three distinct geographical areas mainly the Deccan peninsula, the Indo-Gangetic Plain, and the Himalayan ranges. The Deccan upland is part of the Deccan peninsula and is located on the western side bordered by the Arabian Sea. Today, the area is situated in the state of Maharashtra in the Republic of India. It's a unique upland when seen from the coastal region of western India. The coastal area is lowland; on the other hand, the upland is away from the coastal area and constitutes hilly terrain of Sahyādri mountain ranges like a vertical cliff when viewed from the coastal area. It acts as a dividing physical mass between the coast and the upland. The mountain ranges of Sahyadri are considerably very high at the northern end and gradually their height decreases towards the southern end. The area beyond the vertical cliff is an upland terrain with mountain ranges at many places and often they are termed as extensions of the Sahyādri ranges. The physical geography being the long durée factors, it is interesting to observe the ways in which humans in this area responded and made the optimum use of the physical geography to construct its cultural geography in the early centuries of the Christian era. The natural gaps between the hill locks are known as ghats (natural pass), and there are many ghāts in the mountain ranges of Sahyādri acted as

routes of communication between the coast and the upland. The natural passes are a space between the vertical cliffs where climbing of the hill becomes relatively easy to go to the upland from the coastal area. Both the ancient and modern channels of communications like roads and rail were made through these natural passes. Rivers in the coastal areas originate in the mountain ranges of Sahyadri and flow westward to meet in the Arabian Sea whereas rivers in the Deccan upland area originate from the mountains of Sahyadri ranges and flow eastwards to meet in the Bay of Bengal. The main river valleys in the Deccan upland are Godāvari, Bhimā, and Krishnā. On the other hand, the northern areas of the upland have Tapti and Purnā Rivers flowing from east to west meeting in the Arabian Sea. The following Map 1 shows physical distribution of river valleys in the state of Maharashtra in India. River Godavari covers the largest area in the Deccan upland.

Thus, the location of the Buddhist caves in western Deccan according to the river valleys are- i) Tāpi-Purna valley: Ajanta, and Pitalkhora, ii) Upper Godāvari valley- Nasik, Aurangabad, Ellora, iii) Bhimā valley- Bhaja, Karla, Junnar, Shelawadi, Shirwal, iv) Upper Krishnā valley- Wai, Yerphal, Tamkane, Pohale, Karad and Rudreshvar-Eradwadi, whereas in the Konkan area has Kanheri, Virar, Kondivite, Kondane, Ambivale, Thanala, Chaul, Nenavali-Khadsambla, Kuda, Mahad, Khed Chiplun, Pali-Sudhagad, and Panhale-Kaji. The cave excavations consist mainly of the *chaitya* caves (worshipping/congregation halls) and vihāra (residential caves). Both the varieties have numerous different designs and variations developed over a period of time. Earlier works of Dehejia (1972), Nagraju (1981), and Dhavalikar (1984) are important to understand the architectural development of the western Indian Buddhist caves in general, whereas Ray's work explored the trading conditions in the regions in the early historic period (Ray, 1986). The objective of the present work is to explore archaeological, environmental, political, and economic factors that went in making the archaeological-cultural profile of the historical regions by adopting the following methodological tools-1. The geographic locations of the caves, 2. Use of geographic conditions to construct cultural profile as well as the use of the water cisterns as part of the larger sustenance mechanism, 3. Political conditions as impacting factors in the rise of certain cave sites and how it impacted the larger cave excavations, 4. By making use of inscriptional evidence to understand patronage, 5. Architectural stylistic developments. As mentioned earlier, the largest numbers of Buddhist caves are located in the western area of Maharashtra state. The following Map 2 shows different cave sites and their locations in the area of western Maharashtra

mostly concentrated in the mountain ranges of the Sahyādri. Their geographic spread and locations as well as life indicate their dominations in the respective historical regions. The subsequent analysis discusses historical and cultural geography and later developments in the few historical regions.



Map 1. The physical distribution of the river valleys in the state of Maharashtra.(source: https://wrd.maharashtra.gov.in/site/upload/pdf/Vol_III_Maps.pdf?MenuID=1219)



Map 2. Distribution of Buddhist cave sites in the western Maharashtra/western Deccan.

2. BUDDHIST CAVES AND THE CULTURAL GEOGRAPHY OF WESTERN DECCAN

Many Buddhist caves are excavated in this area and have strategic locations in terms of proximity to the ghats (natural passes), ancient trade routes, and settlements. There are a number of ancient seaports located in the coastal areas such as Sopara, Kalyan, Chaul, Dabhol, Jaigarh, and Vijaydurg, these are mentioned by Periplus (Huntingford, 1980, sec 52). All important places in the upland are connected with the coastal seaports via the natural passes that also constitute trade routes.

Peninsular India is first mentioned as Daksināpatha in the Aitrēya Brāhmaņa dated to the pre-Buddhist times (Ray, 1986, p.161) and also gets mentioned in the several Buddhist texts. The historical regions are known from the inscriptional record at Nasik cave no. 3 during the time of the Sātavāhana king Pūļūmāvi are Assika, Assaka, Mulaka, Kukur, Aparānta, Anūpa, Vidarbha, Benakataka (Senart, 1905-6, no. 2) as deśas (countrys) of Daksināpatha. The other regions known from an inscription at Sannati are Uparigiri, Jayasi, Chakara, Dakhava, and Damandeśa (Sarma & Rao, 1993, p 15-23).

The coastal area is known as Aparanta from the evidence of text and inscriptions, the upland in the western Deccan has several regions such as Aśmaka and Assaka/Mulaka whereas there are sub-regions mentioned in the inscriptional records are Māmala (Senart, 1902-3, no. 19), Karhātaka (Luders, 1912, no. 705, 763, 767, 809, 891), and Govardhana ahar (Senart, 1905-6, no.4). Buddhist text Suttanipāta (Suttanipāta, 5-1:2, Bhikshu Dharmarakshita, 1983) mentions that the river Godavari was a dividing line between the Asamaka and Mulaka (Alaka). It is difficult to mark the possible boundaries of each historical region, but it may be presumed that the areas are marked by the geographical boundaries of rivers and mountains. Each historical region has its own cultural and archaeological profile constructed over a period of time by the Buddhist population of that time. The distribution of Buddhist cave sites according to the historical regions is as follows:

1) *Aparānta-* Virar, Kanheri, Kondivite, Ambivali, Kondane, Uran, Chaul, Pali-Sudhaqad, Nenavali-Khadsamla, Gomashi, Thanala-Nadsur, Mahad, Kol, Khed, Chiplun, Panhale-Kaji and Lonad.

2) *Mūlaka-* Ajanta, Aurangabad , Pitalkhora and Ghātotkacha (Gulivada), Ellora

3) Govardhana āhāra- Nasik

4) *Maīnala āhāra* (Mavāl)- Junnar, Karla, Bhaja, Bedsa, Shelarvadi, Shirwal.

5) *Karhātaka āhāra*- Karad, Yerphal, Rudreshvara-Eradwane, Tamakane, Wai and Pohale. The Buddhist caves belong to the *Thervādin* and *Mahāyāna* traditions, their distinction is generally marked by the presence and absence of the Buddha image respectively, however, at times, it becomes difficult to follow such criteria. The problem requires more discussion and is out side the scope of present inquiry.

3. PATRONAGE, POLITICS AND BUDDHIST CAVES

The inscriptional records in the Buddhist caves reveal names of various patrons and their occupations such as royal personal, officers, Mahārathis, Mahābhojakas, gahapatis (landowner and an agricultural traders), traders, wealthy people, guilds of bamboo workers and corn dealers, herdsman, carpenters, stonemasons, gardeners, monks, nuns, lay devotees, iron dealers, goldsmith, coppersmith, writers, farmer, and collective donations by people, and many others. Such diverse donations indicate a strong economic base for the Buddhist monastic establishments. Patronage being diverse in the region, one of the distinct patterns generally observed is that the local people or the royalty have made land donations whereas people who traveled from various places made donations in the form of money or investments with guilds to transfer profit for the Buddhist Sangha. Their subsistence has always been dependent on donations and nearby settlements. Many water cisterns are excavated in all the cave sites to preserve monsoon rainwater. Cave sites such as Nasik and Ajanta became a site of political contestation. Nasik cave 19 is a *vihāra* cave having an inscription recording that the officer in charge of the Sramanas (Buddhist Sangha) at Nasik excavated the cave during the reign of Krisna of the Satavahana family (Senart, 1905-6, no.22). Further, when the Kshatrapas, the rival ruling dynasty from the neighboring area took control of the area, Ushavadatta the son-in-law of the king donated for the excavation of cave 10 at Nasik (Senart, 1905-6, no. 10, 11) and also made a land donation at Karla cave (Senart, 1902-3, no. 13). When the Sātavāhana king Gautamipūtra Sātakarņi recaptured the area, the Sātavāhanas patronized the excavation of cave 3 at Nasik and recorded numerous epigraphic records of their donations, and history. They even continued the land donations that were earlier offered by the earlier Kshatrapa rulers. Another cave site that became a site of political contestation is Ajanta in the fifth century CE where Varāhadeo the prime-minister of the Vākātaka king Harisena patronized the excavation of Ajanta cave no. 16 and the local king patronized excavations of cave 17-20 (Mirashi, 1963, p 120-130) whereas a monk from the Aśamaka area patronized the excavation of Ajanta cave 26 at Ajanta (Chakravarty, 1931, p 118). It may

also be observed that though the royal officers and local rulers patronized the establishment of the Buddhist caves but the painted inscriptions inside the Ajanta caves also record donations by the Buddhist monks. Buddhist cave site such as Kanheri has several inscriptional records mentioning visitors to the cave site till ninth-century CE (Gokhale, 1991, p 56 & 109).

As noted earlier that the caves are located near the rivers/seasonal water streams, the arrangement of water cisterns were made in order to sustain during the non-monsoon times. The water cisterns were deeply excavated and could store a lot of water. This arrangement is commonly found in all the cave sites. Some water cisterns also have independent inscriptional records mentioning their patrons. The water cisterns have been an integral part of the Buddhist rock-cut excavations. It may also be noted that Kondivite caves (locally known as Mahākāli caves) in the suburb of Mumbai city have a brick *stupa* on the hilltop along with a big water tank. It's a unique example in the entire region.

4. DEVELOPMENT OF BUDDHIST CHAITYA CAVES IN HISTORICAL REGIONS OF WESTERN DECCAN

Buddhist cave excavations in western India started from the second century BC onwards. The residential purpose *vihāra* caves were simple in plan and design mostly a hall and residential cells around it. One of the important features of the early *vihāra* caves was that of having interior decoration whereas later *vihāra* caves have Buddha shrines along with the dwelling cells. The *chaitya* hall varieties that are observed in the Buddhist cave excavations belonging to early period are- i) apsidal pillared hall with vault roof, (ii) apsidal vault roof hall without pillar, (iii) circular domical hall with pillars, and (iv) rectangular hall with the domical *stūpa* chamber at the back (Alone, 2016, p 231). From the first century CE onwards, many cave sites have flat roof rectangular or quadrangular halls as standard *chaitya* design formats (Dhavalikar, 1984). Often the *chaity* halls are excavated deep inside the surface of the hillock and their excavation always began from the top. This technic remained dominant throughout the history of cave excavations in the western Deccan.

A) Mulaka Region

In the area of *Mulaka*, two important early sites are Ajanta and Pitalkhora. Both have an apsidal vault roof pillared hall with the stupa at the end (Pitalkhora cave no. 3 and Ajanta cave no. 10). The entrance of the chaitya halls is mostly having a dominant semicircular arched open *chaitya* window as façade. The façade was open and had wooden devices to cover. The interior hall had wooden ribs on the ceiling. On the other hand, in the subsequent century i.e. first century BC, when the Ajanta chaitya cave no. 9 was excavated, there is a visible change in the façade design. Instead of an open façade, a stone screen wall gets added and it also offers space to add decoration on the façade. This feature changed the nature of the façade designs in the cave excavations and later gets followed at Nasik, Bedsa, Karla, Kanheri, Ajanta, and Ellora.



Figure 1. Ajanta, plan (Source: Burgess, 1883), showing the caves excavated in the horse shoe shape at the bank of river Waghora.



Figure 2. Ajanta cave 10 & 9, general view (Source: author). Cave 10 on right showing open façade and cave 9 on the left show stone screen façade.

Ajanta had a modest beginning in the Mulaka region and went on to become the most important site in the area. Fig. 1 helps us to understand the plan of the cave excavations. The early phase of caves 9-13 are excavated at lower level whereas the later expansion of the caves started at the higher level and on both side of Ajanta cave 10 and 9. The earliest chaitya caves at Ajanta are caves 10 and 9 (Fig. 2) have paintings belonging to the first century BC. The fig. 2 show two different façade designs adopted at Ajanta in the early phase of excavation. A plaster had come off from the aisle ceiling of the Ajanta cave 10 and an old inscription was discovered which led to the conclusion that the paintings in the caves were added later. Among the themes that are depicted in Ajanta cave 10 are the pictorial narratives of Chaddanata Jātaka and the Shām Jātaka. Chaddanta Jātaka is the most popular Jātaka carved at other places such as Barhut, Sanchi, Amaravati, Goli and Sannati. In fact, at Ajanta, it has been painted not only in cave 10 but also cave 17 in the late fifth century CE. The pictorial depiction in cave 10 followed the Pāli version with the addition of the event of the king and queen going to the worshiping of the *chaitya*. In order to understand the reason for the addition of this event, the travel account of Xuanzhang is very important, which mentions that the *stupa* was erected in honor of the Bodhisattva Chaddanta at Sar-

nath (a place of the first sermon by the Buddha) during the reign of king Ashoka (Shwen and Pyen, 2015, p 180). It shows that the process of constructing the stupa started for the Bodhisattva heroes to the third century BC and also gets legitimized in the pictorial narrative subsequently. The pictorial narrative painted in cave 17 follows the textual narrative of the Haribhatta's Jātakamālā (Schlingpff Dieter, 1999, p 127). There are painted Buddha images on the pillars of Ajanta cave 10 & 9 datable to the third century CE along with the Dipankar Buddha images. The cult of the Dipānkar Buddha was popular in the Gandhara area and of all the Buddhist sites, many painted Dipānkar Buddha images are painted in early Ajanta caves mainly the caves nos. 9, 10 and 11 (Jadhav, 1992, p 151-155).

Ajanta caves are the only caves that are located on the bank of the river Waghora. Each cave had an independent entrance from the riverbed. The subsequent phase of Ajanta caves gets excavated in the fifth century CE. It also has rich paintings painted on the exterior and interior walls of the cave decoration. One of the important criteria to judge the late fifth century phase is by observing the influence of the *Vidarbha* sculptures. *Vidarbha* is located on the eastern side of the *Mulaka* region. The territory was under the Vākātaka dynasty, divided between two families ruling from Nandivardhan (present-day Nagardhan), and Vatsagulma (present day Vashim) The stylistic features developed in the eastern Vidarbha areas can be observed on the sculptures and paintings in certain motifs and treatment of volume of images in Ajanta cave nos. 16, 17, 20, 26, 1, and 2. For example, a sculpture dated to the first half of the 5th century CE from Mansar illustrated as Fig. 3 having a composite body of the human and birds, mainly having bird's legs and claws, smooth surface and a typical chubby quality is one of the striking features observed in Ajanta cave sculptures and paintings. The images on the doorframes of Narasimha temples at Ramtek, and the seated image from Mansar (generally identified as dwarf Shiva now exhibited in National Museum New Delhi (however, this identification is highly contestable) are pot-bellied, smooth surface, chubbiness; similar figural styles are observed in the sculptures carved on the ceiling in Ajanta cave 16 (Fig. 4) as well as on the façade of *chaitya* cave 19. The figural motifs of humans and birds are also found painted on the ceiling of cave 17 as well as cave 1.



Figure 3. Human and bird composite Sculpture, Mansar, Ramtek, early 5th century CE. (Source: author)



Figure 4. Ajanta cave 16, interior, human and bird composite Sculpture, late 5th Century CE. (Source: author)

The figural styles of Pavanar images are used in the paintings of Ajanta cave nos. 1 and 2. It shows how the guild of artisan from the neighboring *Vidarbha* region during the time of Vākātaka king Haiṣena migrated to the *Mulaka* region and worked at Ajanta. Their absorptions into the existing styles in the western Deccan become a new trajectory of development in the region of *Mulaka*, which is seen at other cave sites mainly Aurangabad, Ghatotkacha, and Ellora. Spink reduced the *Mahāyāna* development at Ajanta to the reign of Hariṣena (Spink, 2005). The dynamics in the historical region of *Mulaka* is phenomenal, the political and regional dynamics in the *Mulaka* region

witness growth of rival religious groups and their monasticism. There is a rise of the *Śaiva-Pāśupata* and the Jaina monastic cave establishments along with the Buddhists mainly at Ellora. Their life continued for a long and has produced competitive image iconographies. It may be observed that Ajanta is located on the bank of river Waghora, a continuous water source whereas sites of Pitalkhora, Aurangabad, and Ellora have seasonal water streams. All the caves at Ajanta have water cisterns excavated and rainwater was collected in these cisterns. A similar feature is also observed at many caves in Ellora Buddhist caves but no water cisterns are carved in many Hindu caves. The Buddhists and Jaina caves were monastic centers whereas the Hindu caves are excavated as places of worship, more like temples and not as monastic centers, despite the fact that it started as opposition to Buddhist monasticism. So caves being a site of worship, water cisterns were not a necessity. Nevertheless, there are many water tanks found on the upper level of caves 18-29 and before the Ganesh cave complex at Ellora, which might have been used as water resource.



Figure 5. Pitalkhora caves, general plan (Source: Deshpande 1959)

The other important early cave site excavated in the *Mulaka* region is Pitalkhora, ancient *Pitangalya* (Deshpande, 1959, p 66-96), located on the end of the hilly terrain while going from Aurangabad to Chalisgaon. Fig. 5 shows the excavation plan of the caves on the same hillock facing each other. In order to excavate the caves as grand excavation and a unique in its conception, scooping out huge hill rock was the first task. The caves are excavated very meticulously on either side of the water stream flowing between the deep cut of the hill hillock. The *chaitya* and *vihāra* caves are fine examples of carving technics and precisions.

The *chaitya* arches have been carved on the top upper surface of cave 3 & 4 that shows how the façade was conceptualized as a monumental one (Fig. 6). The *chaitya* cave is of apsidal vault roof pillared variety whereas the adjacent *vihāra* cave is a large hall and is excavated with a big plinth having the life-size elephant sculptures as if they are holding the entire *vihāra* on their back. Each elephant had the image of a rider that is no more intact. The most unique element found in the *vihāra* cave excavation is carving of the fountain. On the upper left corner of the *vihāra* cave, a cell is excavated and its top opening is on the surface

of the hill to collect the water. There are water channels carved all along the wall of the hall, which ends at the entrance. The cave gets divided into two floors like the ground level and the first floor. The entrance to the cave had the image of the female adorned with the elephants, popularly called as *Gajalaksmi* though such nomenclature has no backing of the Buddhist textual tradition. The motif is commonly observed at many Buddhist sites and is also found at Thanala Buddhist *vihāra* cave of the early period. Of late, the image is increasingly getting identified as perhaps the representation of the mother of the Buddha. The entrance is adorned with two standing guardian images. On the right wall of the entrance, there is a carving of the snake hood with interior holes (Fig. 7 & 8). The channels that originated from the left wall of the vihāra cave ends in the snake hood to form the fountain. This is the only surviving example of the fountain in the entire Buddhist caves in India. This fountain might be very active during monsoon and winter seasons but might not be active during summer due to the paucity of water. Besides neither the hilltop shows any evidence of preservation of the water or a construction of the water tank.



Figure 6. Pitalkhora general view of cave 3&4, showing monumental nature of carvings over the surface of the hillock. (Source: Deshpande, 1957)

There is no evidence as to how long the site remained active but certainly the monastic establishment was active even in the 5th century CE and might have been active for another three/four hundred years or so. The presumption is based on the active life of Ellora Buddhist caves had. There are a number of caves excavated at the opposite side of the main cave complex. Pitalkhora caves also have memorial *stupa* gallery like Bhaja and Thanala caves, a common factor among the early sites.



Figure 7. Pitalkhora cave 4 entrance showing the guardian figures at the entrance, and a snake hood with holes on the right side. (Source: author)



Figure 8. Pitalkhora cave 4, snake hood with holes for water fountain. (Source: author)

B) Māmala āhāra

In the area of *Māmala āhāra* consisting mainly of the present-day Pune district, Bhaja (Fig. 9) is the earliest cave site. Fig. 9 shows plans of few important caves at Bhaja and focuses mainly on the plan and elevation of the *chaitya* cave of vault-roof apsidal pillared hall like Ajanta cave 10 but has been profusely decorated. There is an attempt to maintain the symmetry in the space structure of the façade, but it does not follow

the same in the decoration of the motifs. The façade was open like Ajanta cave 10, and Pitalkhora cave 3. It had wooden fixtures that can be easily understood through the remains of the grooves on the sidewalls of the façade. The Bhaja *chaitya* cave is carved a little deep facing west to protect from the monsoon rain. It is difficult to make out the ancient habitation due to continuous tilling of land for agriculture in the present-day village settlement. But it is likely that there

must have been a settlement just at the foothill of the cave. Bhaja also has a memorial *stupa* gallery. Numerous water cisterns are also excavated at Bhaja. Bhaja emerged in 2nd century BC and subsequently in the 1st century BC, Bedsa caves located at the backside of the

Bhaja hill emerged in the area. As can be seen in figure 10, Bedsa is a small monastic site with minimal cave excavations but is very pivotal in the development of architecture and sculptures.



Figure 9. Bhaja caves, plan, showing chaitya cave and the adjacent vihara caves along with the memorial stupa gallery. (Source: Burgess 1880).



Figure 10. Bedsa caves, plan showing both the chaitya and vihāra caves. (scale: 50 feet to 1 inch, Source: Burgess 1880).

Bedsa develops a different plan of the *chaitya* cave. The large mass of the hillock left in the front of the cave would indicate how excavation was planned and how artisans had to remove such a large mass from the hill. Apart from the traditional apsidal vault roof pillared chaitya plan, the stone screen wall façade along with the front hall with front pillars are the new additions. The plan of the cave serves important means also to protect from the monsoon showers. It emerged as new addition. The cave is situated near the natural pass that connects Thanala caves and coastal areas. The cave excavation is dated to the 1st century BC. So far, no ancient settlement could be discovered and this is due to continuous tilling of the land for agriculture purposes. The other unique element at this site is apsidal *vihāra* cave for the residential purpose, which remained the only example in the history of the Buddhist caves.

In the subsequent period, excavation at Karla situated opposite side of Bhaja village began with cave no. 11, a *chaitya* cave datable to end of 1st century BC, now collapsed and is an open hall. The *vihāra* caves have been excavated above this cave. Subsequently in 1st century CE, Karla *chaitya* cave no. 8 (Fig. 11 & 12), was excavated. It was the most ambitious cave excavation that was initiated by the trader Bhutapāl from Vanvasi i.e. ancient *Banavāsi* (Senart E, 1903, no.1; Luders 1910, no. 1087) in the northern Karnataka, and all other people joined to finance the cave excavation.



Figure 11. Karla chaitya Cave 8, entrance showing the pillar in the front followed by a stone screen wall to protect the cave from monsoon showers. The Hindu temple shrine is added in the front in the late medieval period. (Source: Park Sun Kwan).



Figure 12. Karla chaitya cave no. 8, plan and elevation. (Source: Burgess 1883). The plan shows addition of pillars, stone screen wall in the conception of the chaitya plan.

The cave is located at a considerable height. Monsoon stream near the cave site becomes conspicuous. The cave is the biggest Buddhist *chaitya* cave in terms of its dimensions. It has numerous donation records that throw light on the nature of collective patronage. The cave is typical vault roof apsidal pillared hall having addition of the front courtyard as well as a hall like Bedsa. However, there are additions to the plan of the front part. A courtyard space is carved with two side pillars and a huge stone screen wall was carved in the front first. It is evident that the artisans were aware of the monsoon showers and in order to protect the cave, they planned to excavate the stone screen wall, a well-planned method adopted, having rectangular vertical openings to facilitate dual purpose for facilitating the air and light and protection from rain. The front hall of the cave is decorated with a series of *chaitya* arches along with the big *chaitya* arch window. The *chaitya* arch is placed on the horizontal lintel carved with a series of *chaitya* arches and the space between the doors is carved with many couple figures. They are highly pronounced and bears heavy volume. They represent the best specimen of sculptural examples of early western Indian Buddhist caves. The original wooden umbrella on the stupa and wooden ribs on the ceiling are still intact. Bhaja chaitya cave also has similar wooden ribs. Politics of patronage is visible here too. The Usavadatta, the son-in-law of the king Nahapana from Kshatrapa dynasty when controlled the areas of western Deccan, made donation of land to the Buddhist Sangha at Karla and when the Sātavāhana dynasty regained the territorial control, they too continued the land donation. The cave site has numerous cisterns excavated. Rainy water stream flows from the top of the hill becoming a waterfall near the cave site. Karla caves are excavated at considerable height. Generally, it is presumed by scholars that the cave served as an important place even for the traders to take a rest and move on for the onward journey. Going by geographical condition, it is difficult to imagine that the traders coming from climbing up the hill from the coast would again prefer to climb up further with his trading goods to have a shelter in the cave monastery. Nevertheless, Karla remains a unique example for attracting many donations from outside as well. The trading network might have been responsible for some traders to donate at Karla and at other places, but it is not a singular factor responsible for the proliferation of the cave excavations. Just beyond Karla and Bhaja, a small Buddhist cave site of Shelarvadi is located, close to the present national highway between Pune and Mumbai. On the

foothill of the cave, a cistern is excavated for the water storage in all probability for the caravan or commuters on the route. It is also interesting to observe that there are two groups of cave excavations, one group with just 2 or 3 cells overlooks the Indrayani valley on the northwest and the other with 8 caves facing the valley of the Pavana to the southwest (Nagaraju, 1981, p 294). The *stupa* in the *chaitya* cave is converted into the *Śivalinga*, showing how the Hindu/Brahmanical camp overpowers the site in the later times.

The other important cave site in the area of *Maīnala āhāra* is Junnar where the earliest group of caves Tuļajā has circular *chaitya* cave with pillars. The other groups of caves at Junnar are Shivneri, Mānmōdi, Bhimāshankar, Ganesh Pāhār. The town of Junnar is close to Naneghāt, the ancient pass that connects the coast and the upland. It is very distinct as the entire natural pass is carved with steps and the climbing becomes relatively easy and safe. Being a strategic location, the Sātavāhana dynasty made their portrait gallery and also recorded the Vedic sacrifice according to the ritualistic practices of the Brahmanical religion (Sircar, 1968, p 195). There was a big settlement at Junnar and also had satellite villages around the town as per the discoveries made by late Jadhav (1981). It goes on to show that the Buddhist monastic community was dependent on the offerings made by the local population. Remarkable development of the flat roof quadrangular *chaitya* variety and a blind *chaitya* arch window was developed at Junnar (Alone, 1997, p 107-124).

C) Aparaīnta region

In the area of *Aparanta*, the earliest cave dated to second century BC is Thanala located near the natural pass that connects the Bedsa caves on the other side. The *chaitya* and *vihāra* caves are excavated adjacent to each other. The Fig. 13 showing the plan of the early *chaitya* and *vihāra* cave.



Figure 13. Thanala, chaitya and vihāra plan, The plan shows the smaller dimension of the chaitya hall whereas the excavation of the cell on the left side wall shows intruding the back side of the chaitya hall indicating the excavation of the vihāra progressed after the chaitya cave. (Source: Cousen, 1891).

The *chaitya* cave is of vault roof apsidal pillarless variety. The adjacent *vihāra* cave has interior decoration and several relief sculptures are carved under the *chaitya* arches, they include the image of a so-called 'Gajalakṣmi' and a snake with raised hood. Decoration on the ceiling is conspicuous, indicating that there was something kept beneath it. The plan clearly shows how excavation of the *chaitya* was made first and the *vihāra* cave excavation progressed afterwards.

The conception itself appears to be a well planned. Deshpande (1981) discovered remains of a *stupa* erected on the floor and a memorial *stupa* gallery along with a relief *chaitya* arch façade design on the back wall in the adjacent cave during archaeological clearance. Carvings of the memorial *stupas* show their chronology through the differently applied decoration and nature of umbrellas along with their placements. Several water cisterns are excavated at this site

to face hard summer months. A seasonal water stream flows in the middle of the hill and is located on the one end of the cave site. The site of Thanala remained important but no cave excavations belonging to the *Mahāyāna* times is found which would indicate that perhaps the site remained secluded in later times and its importance might have reduced further.

The next important cave site is Kondivite (Fig. 14), which is almost as old as Thanala. The site map (Fig. 14) shows how cave excavations are planned on the both side of the hill. The hill face facing east have more excavations where as the one facing west has limited cave excavations. Both the side of the hill have water cisterns.



Figure 14. Kondivite caves, site plan and remains of circular structure on the hilltop (Source: Burgess 1964).

As noted earlier, Kondivite cave site has a unique distinction having a brick *stupa* on the top of the hill and a water tank. The early excavation consisting of the flat roof hall and a domical *stupa* chamber at the end is the only such example in the western Deccan. An inscription in the *vihāra* cave no. 12, records donation by a person coming from Paithan located in the *Mulaka* region (Deshpande, 1985, p 85-86), an ancient capital city of the Sātavāhanas. Several cisterns are located at each cave would indicate how the water preservation method was adopted to support the monastic establishment.

Kanheri is located in the Aparānta/Konkan region in the city of Mumbai and the inscriptional evidence indicated that it is the only site in the entire western Deccan starting from early centuries of Christian era and went on till 9th-10th Century CE as has been proposed by Gokhale (1991). The cave site is situated in the city of Mumbai and is not very far off from the ancient seaport of Sopara. It has as many as 108 cave excavations. The earliest caves are dated to the 1st century CE and from there onwards, we see a large number of excavations proliferated all across the hillock. There are many water cisterns carved all across the caves. At the same time, we also have inscriptional evidence, which mentions a dam constructed, between the two hills that shows how the water arrangement was made in the cave complex. The inscription in the 2nd century CE records the construction of a reservoir by trader Punna (Gokhale, 1991, no. 32, p 84). Kanheri cave no. 3 is an important chaitya cave excavation dated to the late 2nd century CE (Fig. 15 & 16).



Figure 15. Kanheri chaitya cave 2 & 3 plan (Source: Burgess 1880). The plan of the chaitya cave 3 is derived from Karle chaitya cave, adding big courtyard space.



Figure 16. Kanheri cave 3, front view, showing stone screen was before façade, late 2nd century CE. (Source: author)

The plan of the cave seems to have been derived from the plan of the Karla chaitya cave no. 8 with few additions. The courtyard area has been carved deep, chambers are excavated in the court vard on the left side of the cave and like Karla, a stone screen wall is excavated in front of the façade to protect from the Monsoon showers. There is a brick *stupa* constructed in front of the cave no. 3 assigned to late fifth century CE as it is dated to late fifth century CE due to mention of the Traikutaka dynasty and the date mentioned considered to be in Kalachuri-Chedi era (Gokhale, 1991, no. 14, p 59-62). The adjacent cave no. 2 (Fig. 15) is earlier than cave no. 3. Cave 2 consists of the flat roof rectangular *chaitya* caves and an open hall. Both cave no. 2 and 3 have many Buddha images carved. Their chronology differs from Ajanta images and many may be dated to late 4th fourth century CE on the basis of the stylistic and paleographical date of the inscription. The Kanheri copper plate inscription earlier dated to Kalachuri/Chedi era will have to be dated prior to 400 CE following the discovery of the dated inscription of the Konkan Maurya at Vada, the then political dynasty ruling in the region (Ramesh, 1998, p 575), paleography of the inscriptions will have to be dated accordingly. Some images belong to early fifth century CE, thus earlier than the Mahāyāna cave excavations at Ajanta dated to second half of the fifth century CE. Kanheri cave hillock has caves excavated at the tiered level and one can also observe small water channels all across the hillock going in the cisterns of the respective caves. Thus, it is evident that the water management and the use of water was a judicious process the Buddhist community followed at Kanheri.

Elephanta is an island near Mumbai, currently approached through the southern end of the Mumbai city where Gate Way of India stands. But actually, the site of Elephanta was approached from the coastal area currently under the modern port JNPT. The site was named after the discovery of the elephant stone image on the island, which is currently housed in the garden of the Bhau Daji Lad Museum in the city of Mumbai. The site is known for the Brahmanical caves dated to the early 6th century CE. Island being cut off from the mainland, dependency on water within the island becomes more important. There are big water cisterns carved along with the cave. The adjacent hill of the cave excavations has caves as well as brick structures, mainly the brick *stupa* (Fig. 17). The brick stupa is the Buddhist stupa which would indicate that the Buddhists were the first ones to establish their monastic complex and later the Brahmanical camp made cave excavations. There are open water tanks/cisterns excavated on the hill near the brick stupa structure (Fig. 18). They were meant to preserve water for the Buddhist monks who were residing in the monastic complex. The site is unexcavated even today.



Figure 17. Elephanta Buddhist brick stupa. (Source: author)



Figure 18. Elephanta, water cisterns near the stupa. (Source: author)

5. CONCLUSION

It may be observed that the Buddhist monastic communities survived during the hard summer

months and throughout the year by making use of the water resource naturally available and by constructing the water cisterns. In the historical region of Assaka/Mulaka, Ajanta became pivotal whereas in later times Ellora gained prominence. The cultural and regional dynamic in the Mulaka area was also related with the political conditions of that time. Rock cut excavation activities at Ajanta progressed in three phases. There is no definite evidence to presume the decline of the monastic establishment at Ajanta. On the other hand, Pitalkhora located on the seasonal river stream and has the exemplar of carving a water fountain way back in the 2nd to 1st century BC. Ajanta is the only cave site having independent access to each caves in ancient times. The magnanimity and monumental nature of Pitalkhora caves is too large and unique in terms of its environmental settings whereas Ajanta had no such claims. But in the 5th century CE, the dynamics of the political geography also affected the working and preference of the two sites. Patronage and preference emerged as one important key factor whereas as archaeological profile of the two sites remain intact but moved away its importance from one site to another site and maintained equilibrium in their environment settings. The cultural geography of Mulaka area goes under drastic changes. The area is an example of contestations and consequently there is also change in the life of these cave sites. The other important cave sites such as Aurangabad, Ellora and Ghataotkacha moved swiftly

from the dynamics of Ajanta. Ellora became religiously important. The caves of Ellora show competitive aspects between the two religious groups but at the same time became a sacred site. In the *Aparaīnta* region, monastic establishment at Kanheri sustained for one thousand years whereas site such as Elephanta show how water sustainability was carried out in the island area. The region of *Aparānta* also developed like a historical site of religious contestations such as Ellora.

REFERENCES

- Alone, Y. S., (1997), Forms and Patronage in Junnar Chaitya Caves, in *Bulletin of the Deccan College Postgraduate Reasearch Institute*, Pune, Vol. 56-57, pp 107-124.
- Alone, Y.S. (2016), Buddhist Caves of Western India, Forms and Patronage, Kaveri Books, New Delhi.
- Bikshu Dharmarakshita (editor & translator), (1983), Suttanipata, Motilal Banarasidas, Hindi.
- Burgess, J., (1964) (first published 1883), Report on the Buddhist Cave Temples and their Inscriptions, Archeology Survey of Western India, Vol. IV, reprint, Varanasi.
- Burgess, J. & Bhagwanlal Indraji, (1881), *Inscriptions from the Cave Temples of Western India, Archaeological Survey* of Western India, X, Central Archaeological Library, New Delhi, Book Number: 22087, https://archive.org/details/in.gov.ignca.22087/mode/2u.
- Chakarvarty P.N. (1931), Inscriptions. In: Yazadani G. M. (ed), Ajanta, Text & Plates, Vol. IV, p-114-118.
- Dehejia V. (1972), Early Buddhist Rock Temples, Themes and Hudson London.
- Deshpande, M. N., (1959), The Rock-cut Caves of Pitalkhora, Ancient India, Vol. XV, pp. 66-93.
- Deshpande, M. N., (1981), *Thanala Va Panhalekaji Yethil Boudha Leni Va Natha Sampradayavar Nava Prakash*, 'Hutatma Pingle Lectures', Vidarbha Samsodhana Mandal Nagpur.
- Deshpande, M. N., (1985), Early Inscriptions at Kondivite', Andhra Pradesh Journal of Archaeology, Vol. III, pp. 85-86.
- Dhavalikar, M. K., (1984), Late Hinayana Caves of Western India, Deccan College Pune.
- Gokhale, S. (1991), Kanheri Inscriptions, Deccan College Postgraduate Research Institute, Pune.
- Huntingford, G. W. B., (1980), The Periplus of the Erythraean Sea, London.
- Jadhav, S. V. (1981), *Rock-cut cave Temples at Junnar: an Integrated Study*, Ph. D. thesis, unpublished, University of Pune.
- Jadhav, S. V. (1992), The Cult of Dipankar Buddha at Ajanta, In: *The Art of Ajanta New Perspectives*, vol. I (eds) Ratan Parimoo, Deepak Kannal, Shivaji Panikkar, Jayram Poduval, Indramohan Sharma, Books & Books New Delhi, pp. 151-155.
- Luders H, (1912), Appendix to Epigraphia Indica, Vol. X.
- Mirashi V V, (1963), *Corpus Inscriptionum Indicarum*, Vol. V, Inscriptions of the Vakatakas, Archaeological Survey of India publication, Mysore.
- Nagaraju, S., (1981), Buddhist Architecture of Western India, Agam Kala Prakashan, Delhi.
- Ramesh K.V. (1998), Vada Inscription of Suketuvarman, Saka 322, *Epigraphia Indica*. Vol. XL, 1973-75, Part 2, 51.
- Ray, H. P., (1986), Monastery and Guild, Oxford University Press, Delhi, p 161.
- Sarma I K and J Varaprasad Rao, (1993), Sātavāhana Inscription from Sannati excavations. In: Early Brahmi Inscriptions from Sannati, Herman Publishing House New Delhi, pp. 63-81.
- Schlingloff Dieter, (1999), A Guide to Ajanta Paintings, vol. I, Narrative Wall Paintings, Munshiram Manoharlal, Delhi, p. 127.
- Senart E. (1902-3), The Inscriptions in the Caves at Karle. In: Epigraphia Indica, Vol. VIII pp. 60-65.
- Senart E. (1905-6), The Inscriptions in the caves at Nasik. In: Epigraphia Indica, VIII, pp. 59-96.
- Shwen Tsad and Pyen Chi, (2015), Mahā Thād Rājvansh Kāl Mē Paschīm Kī Tīrtha-Yātrā Kā Vrutānt, (in Hindi), Videshi Bhasha Prakashan Gruh, Beijing, PR China.
- Sircar D. C. (1968), The Satavahanas and the Chedis, In: Majumdar R. C. (ed.) *The Age of Imperial Unity*, Bombay.
- Spink, W (2005), Ajanta History and Development, Brill Indological series.