Newly Explored Abstract Rock Art on Sinhagad Fort and Catchment of The Deccan Trap Region

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Abstract: *Lands of Deccan have occurrence of human presence in different time it may convey rehabilitation in human development phase. Ancient humans understand the changes of nature and human life style which may observers at first sight. Besides, the depiction has witnesses' transmission of their activities and habitual nature to next generation. Rock art depictions are clearly indicated that the human life and activation part of passionate living. The abstract rock engraving has less meaning to understand activities and cultural scene, but it has impact and witnesses' cultural activities. Here we are noting some signs are depicted in black basalt platform in abstract forms on the top of Sinhagad fort and catchment of fort in Pune district of Maharashtra, India. Which is clearly indicated that cultural interface of surrounding area and its chronological setups to early historic and medieval archeo-historic importance.*

Keywords: Rock Art, Petroglyphs, Symbolism, Geometric Patterns, Mesolithic Tools, Conservation, Sinhagad

Introduction

The Deccan land of Maharashtra especially Sahyadri escarpments, are the unique characteristics of formation which gives a lot of footprints of cultural activities played on this area since different cultural period. The Sahyadri region is rich in different kinds of natural resources which can cater the needs of humankind. It provides suitable climate for human development. The zeolitic minerals which are trapped in amygdaloidal basalt fill the requirements of raw material for tools required for different human activities. A thick flow of compact basalt which is exposed on the surface is an excellent material for relief carving, paintings, drawings and figurines can be developed on a permanent basis.

Sinhagad Fort 18°33'N to 18°41'N Latitude, 73°75'E to 73°80'E Longitude, is situated in the Southwest fringe of Pune city, in the State of Maharashtra. The fort is approximately 35 K.M. distance from the main settlement of Pune City. It falls in the *Mutha* river basin and the channel of the same can be seen from the top of the fort. The

shape of the fort is triangular, similar to a blade of an axe. Elevation of the hill is 798 m and its east-west length is 1131 m. The fort is located 1310 m above the sea level (Khare 1984). Sinhagad and Purandhar were the two forts during the Maratha Period that acted as an important role in military architecture and warfare. The area covered by present day Maharashtra, Telangana, Andhra Pradesh and Karnataka is known as the Deccan region, named after the plateau on which these states are situated called the Deccan Plateau or the Deccan Trap. The geological formations around which the Deccan trap thrived were the formations of Basaltic bedrock, which was really favorable for excavating caves as well as using the natural defense to construct a chain of hill forts and fortresses (Mate 2015). Archaeological deposits of early historic caves and forts of medieval kingdoms era were present on the fort. The present paper deals with the abstract rock art found in the fringes of foothill to upland isolated region of Deccan land.

There are two localities of rock platforms that were observed, one at the top of isolated hill surrounded by fortified settlement of a well-known fort Sinhagad. Another locality is observed at the foot hill region of undulating to plain topographic Land. These two sites are divided by the *Gaud dara* ridge line (trending north south) and connected with *Dive Ghat* hill range trending south west to northeast direction. The first location lies between the *Kalyan Darwaza* and *Deo* tank on Sinhagad. The other site which is situated on the foot hill region is observed on Chavarjai hill that lies between *Gaud dara* and *Ranze* village. Both these sites come under the Haveli Tehsil of Pune district. Detailed explorations were carried out and minute observations of the documented sites were noted.

Landscape Characters

The study region is belonging to the part of Deccan land of southern Deccan land and politically it is a part of Haveli Tehsil of Pune district. Physiographical, the region shows interesting landform characters, which is discussed as below.

- The hills and ghat section on the leeward sites or western ghat belt are extending up to 16 to 30 km east of Sahyadri and is characterized by rugged topography cut by shallow and deep valleys crossed by medium to highly elevated hills range in different trends.

- The foothill region is formed by the denudation process, shows series of small to medium hill range stretch in to the valleys and large size ridges from the plateaus.

- The plateau region is high level shield grounds, showing more than 900 meters elevation and the medium level plateau shows elevation in between 600 to 900 meters above mean sea level. There are numerous hill ranges extending across the track marked a sharp line at various places. These landscape shows rolling topography with low elevated hills, sinking slowly in the plain with relatively broader valleys.

- The plains or flood plains this region is ranging from 510 to 560 meters AMSL. This region mostly includes isolated mounds, dissected hills, hillocks and river basins.

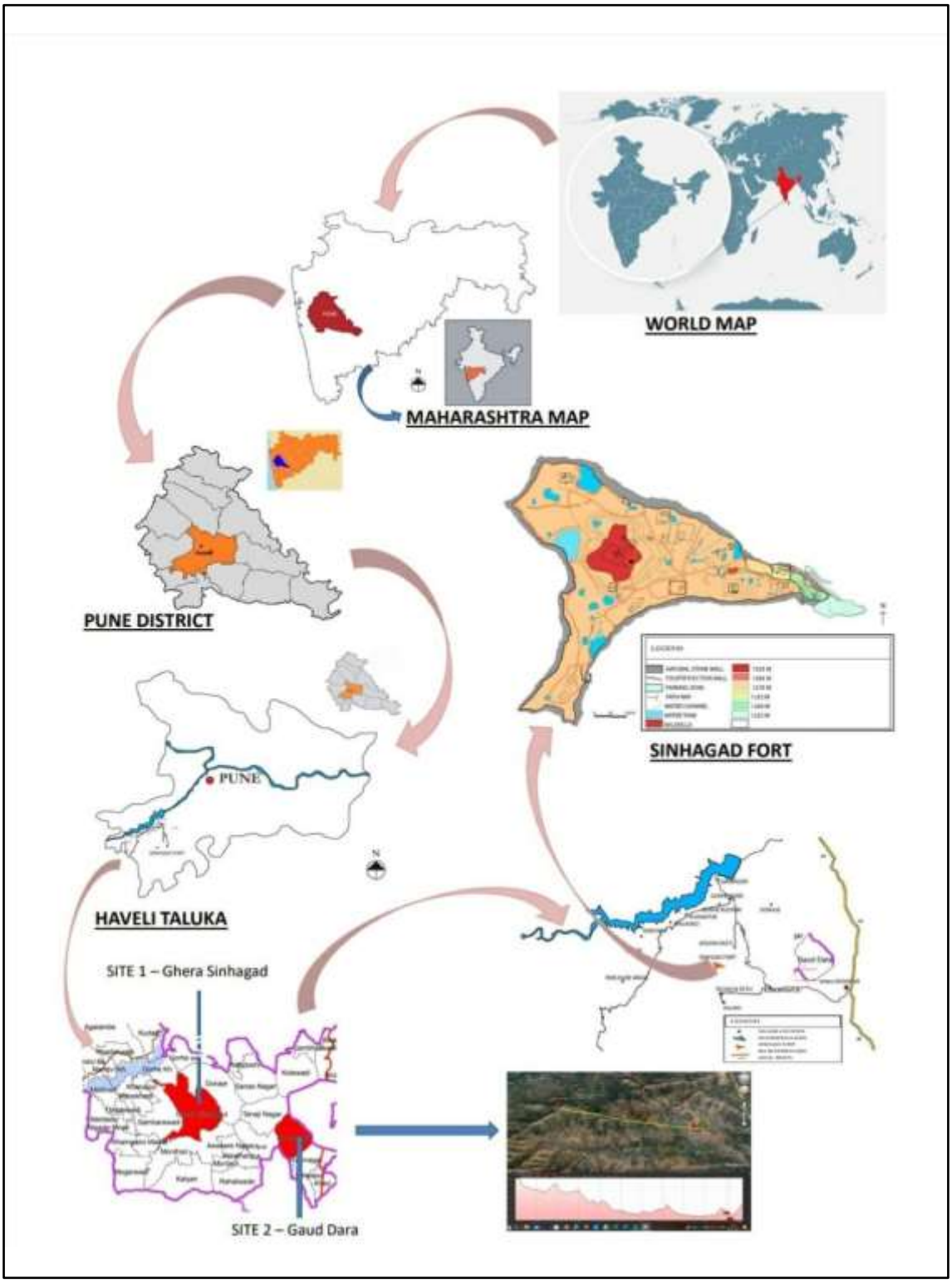

Figure 1: Location map of Sinhagad and Gaud Dara sites

Geology of the Area

The region belongs to Purandhar fort, *Diveghat*, and sub group of north Sahyadri group of Deccan trap formation, which belongs to the upper Cretaceous to lower Eocene age. It consists of Deccan trap basalt with inter-trappean belts which include simple flows of aphyric to plagioclase microphyric. At some places, as a result of physical and chemical weathering, the basalts are deep to moderately weathered and the loose sediments were developed.

Such sediment patches are observed in the depressions of river valleys as well as low lying areas in the form of thin to thick carpet of deposit. This area mainly consists of compact, amygdaloidal, tachylitic, volcanic breccia and numerous flows of vesicular basalts. Out of these basalts, the amygdaloidal basalt is rich in zeolites of mainly silicate, calcite and alkaline in nature, while compact basalt is predominant and due to its longer exposure to the atmosphere, the upper surface of the rock is weathered, resulting in the development of cracks, joints and fractures, at some places. In addition to this, at places deep weathering is developed due to surface exposures, resulting micro and mega cracks are developed on the surface of rock.

Study Area

The present study area is a part of the Southern Deccan Volcanic Province of Central western India, politically covering the southwestern parts of Pune district (Map 1). This includes two locations nearby Pune city, i.e. Sinhagad fort site on Sinhagad hill and other is Chavarjai hill range that lies between *Gaud Dara* and *Ranze* village. Both these sites come under the Haveli Tehsil of Pune district. These sites are well accessible by road from Pune city; Sinhagad fort and Chavarjaihill (Khed Shivapur) are 35 and 25km respectively.

As stated above, the study region is a part of Deccan trap formations of Haveli Tehsil of Pune region. Both the sites recorded here are close to each other but vary in topographical characters as well as they show slightly variability in climatic conditions. The important characters of these localities are they are rich in varieties rock art depicted in stone surface. Several circular motifs in the form of cup-and-rings depiction with varying numbers of concentric circles are also seen on this panel. Some rings are incomplete and at least one is Penannular with a central radial. Some cups are surrounded by a combination of full and gapped rings. As well as many diamond-shaped symbols are also found in the panel. We also find good parallelism for recorded contours; the central motif is a very unusual wide circle with a small central cup mark, surrounded by most cup marks. Such cup marks are the most common motifs in the world rock art and can be found singly, in groups, in lines, or associated with other designs, etc.

Rock Art Platform Sites at Sinhagad Fort

Front Side of *Deo* Tank Site: This site is observed on the southern tip of Sinhagad's peak, near *Deo* tank on the trigonal plateau, accessible from Kalyan Gate. It is present

on the geographical coordinates on 18˚36'30" longitude and 73˚75'39" latitude, 1250 meters above sea level. This location is surrounded by stiff cliff on the south western boundaries, plain plateau along the east, whereas deep gorge on the north, which running east to west and deeply dissected hills at the southeast. An exposed portion of basalt, which shows multidirectional joints which are dividing the block into different fragments of basalt. This low line cliff shows two ringed cup marks, one above the other in a straight direction and a series of cupules holes in a linear direction perpendicular to the ringed cup. These cupules are marked in three layers. Out of these three, the upper two are closely spaced while the third layer is at a double distance as compared to that between the first two. These linear cupules arrangements resemble the garlands because from left and right they are having curvature at the center towards downward direction.

Figure 2: Rock art platform observed at front side of *Deo* tank site, at Sinhagad

There is a chance that a part of this feature was extended on its right and left side but due to the recent activities of foot path or road construction, the site is disturbed, resulting in the unclear boundaries of the upper, left and right sides. Also due to the growth of grass on the surface of the site, there are chances of the part of the site might have been hidden under it.

Back Side of *Deo* Tank Site: The present site is located 18˚36'23" longitude and 73˚75'45" latitude, approximately 25meters back side of *Deo* tank, in south direction, near Gadkari Inn hotel. This site is observed on the sloppy surface of fresh compact basalt; where surface patch approximately having the dimension of 25x20 feet areas. The basaltic surface is moderate to deeply weathered, shows striations and minor to

major cracks on the surface of the rock. At place, the surface is bounded by scanty vegetations of thorny plants. A well carved rock art platform was found. This rock art includes tailed cup (near scale in photo Figure: 3); cupules, lined cupules (*Mankala*-Indian terminology) in single line, Vulva (single), jointed cup, couplers; roughing linns etc. features were observed.

Since the rock is moderate to deeply weathered in conditions, the present condition of the site is not satisfactory and its needs conservation. Most of the surrounding part of the rock art is gone by weathering action. The middle portion in the form of remnant is remaining and it shows the rock art features.

Figure 3: Rock art platform observed at back side of *Deo* tank site, Sinhagad

Site Near Tanaji Cliff: This site is located on 18˚36′53″ longitude and 73˚75′32″ latitude, at 1235 meters elevation along the extreme scarp of the fort, known as Tanaji cliff, known as *Kada* in local language, near Meditation Hall on the fort. The site is located on the table land of Sinhagad plateau; consist of thick flows of compact basalts with moderate to fresh conditions. The surface shows gentle to plain slope, with little inclination towards scarp, in the west. A circular, rocky patch of compact basalt flow, with slightly weathered surface with irregular cracks and joints shows high density of rock arts. The variety of rock art features includes geometric lines, parallel cupules, cup with tail, medieval post holes, decorative stone holes, geometric cup, jointed cups, and couplers, roughing linns (vulva), and jointed tails (flowers).

Figure 4: Microliths observed near Tanaji cliff site, at Sinhagad hill fort

In addition, this, the rock art surface is rich in Mesolithic tools, which clearly indicate the human activities during and after development of these features on this hill.

Rock Art Platform Sites on Chavarjai Hills: This hill range is present in between *Ranze* and *Gaud dara* village in Haveli Tehsil, District Pune. As stated above, this is a range from *Purandar-Diveghat* hill, which running nearly perpendicular to the Sahyadri escarpment. This is an oval shaped hill, resemble like foot like boundary, extending from north-northeast to south-southwest direction. The northern, western, and eastern side of the hill is having stiff scarp while the southern side shows comparatively slanting surface and the same ridge line is used as foot road, might be an old route. Along this route, four sites were observed. The details of each site are as given below.

Figure 5: Cup with tail motif on rock art platform near Tanaji Cliff, Sinhagad

Figure 6: Cupules on rock art platform near Tanaji Cliff, Sinhagad Fort

Site Towards Gaud Dara: The site is located on 18°35′03″ longitude and 73°82′96″ latitude, on the lowermost, 907mtselevation above mean sea level, on the southern neck of the hill, towards *Gaud Dara*. The site is spread about 25 x 12 feet, on the moderately weathered patch of pillow lava type flows of volcanic breccia. The slightly to moderately weathered basaltic flows surface shows slanting towards the east, with undulations at places, shows full of rock art features carved on the whole surface. The features are connected to the natural joints and water is collected through such

depressions and carries forward in the downstream by construction suitable drainage marks. These drainage marks on the lower areas are also connected with different type of rock art features. The rock art platforms show varieties of features includes, geometric signs, parallel cupules, cup with tail, jointed cup, grouped cupules, roughing linns (vulva), jointed tails, couplers etc.

Figure 7: Rock art platform observed towards Gaud Dara, Chavarjai hills

Figure 8: Micro tools and raw material observed on Chavarjai hill lower ridge site, Sinhagad hill fort

Site on lower ridge line: The site is located on 18°35′07″ longitude and 73°82′95″ latitude, 906 meters elevation above mean sea level, on the lowermost southern neck of the hill, towards Gaud Dara. The site is spread about 25 x 12 feet, on the moderately weathered patch of pillow lava type flows of volcanic breccia. The slightly to moderately weathered basaltic flows surface shows slanting towards the east, with undulations at places, shows full of rock art features carving on the whole surface.

The site shows different viz., geometric lines, parallel cupules, jointed tail, cups, grouped cupules, couplers, concentrated circles, cup with ring etc. The important evidence of human activity, i.e. a significant number of Mesolithic tools was recovered from the rock art surface of this site.

Figure 9: Rock art platform observed on lower ridge line, Chavarjai hills

Site on Lower Ridge Line towards Kondhanpur Road: The site is located on 18°35′05″ longitude and 73°82′95″ latitude, 905 meters elevation above mean sea level, on the lowermost southern neck of the hill, towards *Gaud Dara*. The site is spread about 12 x 10 feet, on the fresh to weathered patch of volcanic basaltic lava flows. These weathered patches are bounded with fractures which are coved with soil and resulting growth of grass vegetation. The western slanting weathered, rough, basaltic surface shows slanting, with undulations at places, shows isolated rock art features carving. These features include ladder with, cup with ring and tail, geometric pattern etc. on the surface.

Site on Western Lower Fringe of Ridge Line: The site is located along the south western side of the hill. The exposed rock patch is shows parallel extension to the trend

of the main hill. It is lies on 18˚35′23″ longitude and 73˚82′71″ latitude 904 meters elevation above mean sea level. The site is occupied nearly 15 x 30 feet areas extended in north south direction, on the moderate to gentle western side of the southern extension of this hill. This site shows varieties of rock art features, include geometric pattern, jointed tail, grouped cupules, couplers, concentrating circles, cup with ring, cup with tail etc.

Figure 10: Rock art platform observed on lower ridge lines towards Kondhanpur road, Chavarjai hills

Site on Western Lower Fringe of Ridge Line: The site is located along the south western side of the hill. The exposed rock patch is shows parallel extension to the trend of the main hill. It is lies on 18˚35′23″ longitude and 73˚82′71″ latitude 904 meters elevation above mean sea level. The site is occupied nearly 15 x 30 feet areas extended in north south direction, on the moderate to gentle western side of the southern extension of this hill. This site shows varieties of rock art features, include geometric pattern, jointed tail, grouped cupules, couplers, concentrating circles, cup with ring, cup with tail etc.

Rock Shelters: A group of rock shelters were observed and are located close to each other's, on 875 meters above mean sea level. These three shelters are small in dimensions and are facing towards west side. Out of these, the northern shelter shows 2feet height and 4.5 feet in width; the central shelter having 1.5feet height and 3 feet length, while the southern shelter shows 2 feet height and 7feet in length. All the shelters are found in workable position, because the wastage of some wild animal is observed at the gate of two shelters. Therefore, it is clearly indicated that, these

structures are also used in present day also. The surface is covered with grass and shrub etc. of huge vegetation; therefore, the tools were not clearly seen. But there are chances of human activities in and around the locality.

Figure 11: Rock art platform observed on western lower fringe of ridge line, Chavarjai hills

Figure 12: Rock shelter observed at Chavarjai hills

Chavarjai Temple: At the peak of this hill, on a upper plateau,a temple of Chavarjai is present. In this, the idol of Chavarjai is kept inside the cavity of two vertical thin, dressed stones covered with cap of flat surface.

Figure 13: Chavarjai temple at the peak of Chavarjai hills

This structure is resembled like chamber and cap stone of iron age site. This structure is open to the atmosphere. Therefore, this hill is called as Chavarjai hill. The annual festival of this goddess is on *Vijayadashmi*.

Characteristics of Rock Art

Each locality shows full of rock art features with significant number on the surface. The abstract rock art is the earliest known art, have been found on every continent except Antarctica, and were produced during all different eras of the of human development. The important features observed are as given below.

Cupules: Cupules have been described as the most common type of rock art in an attempt to provide a consistent name for a phenomenon which hitherto had been called "pits", "hollows", "cups", "cupules", "cup stones", "pit marks", "cup marks" - even "pot-holes". In the study area, at different localities both shallow and deep level cupules on the rock surface are observed.

These features are observed in single or in group. They are arranged in horizontal or vertical rows or in cluster or even scattered manner (Sahu2014). Basically, two types of cupules are observed. The deep cupules are generally big dimensional and observed on the especially fresh surface of basalt layer. The intensity of such feature is very less in number. While the shallow cupules are circular and oval in shape and are comparatively small size. Such cupules are observed in large number in Amravati district Maharashtra (Sahu 2014).

Figure 14: Cupule marks on lower ridge of Chavarjai hills

Penannular Rings/Roughting Linns (Vulva): This vision of signification of Penannular rings with meanings floating in a complex pool of cross-references, where these symbols are only anchored to human life through ritual and the body, is what one can led to through our experiences of altered regions and our study of rock art. Finally, maintaining this vision requires something that totally breaks the present boundaries of intellectual study: active involvement, the circle of the horizon. The network of meanings of these signs could also extend inwards beyond culture: to the eye, breast, nipple, navel, vagina, or neural structure.

The realistic varieties of these types of motifs are shown as a roughly inverted triangle of diamond shape with a short bifurcating line from the center touching the lower end open and also closed. (Sahu 2014). Any or all of these references could coexist simultaneously in the web of meaning. In Indian rock art context, it is female genitalia or known as vulva is one of the significant motifs observed on the rock surface. The examples of Vulva figures are notices from Europe, Africa, America, Australia as well as Asia covering a long span of time range starting from the Upper Paleolithic period (Marshack 1972). Most of these structures are prominently carved on the fresh surface of the basalt. Therefore, this structure is easily recognized in the group of other rock art features.

Geometric Signs and Symbols: Geometric sings and symbols appearance and emerges from rock platforms, and on either side of the opening, the carvings of geometric shapes begin as symbols.

Figure 15: Roughting linns or Vulva mark on lower ridge of Chavarjai hills

Figure 16: Geometric signs on Tanaji cliff rock patch on Sinhagad

In ancient Indian tradition, people worshiped all visible light-giving elements in space, including Astronomical signs the sun and moon, which were the most obvious sources of light and energy and the most visible aspects of the universe, hence the sun and moon symbols in ancient symbols as well as in the Vedic tradition (Abbas 2021). Simple linear lines are seemed to mark the beginning of the experience. These enigmatic and understated decorations continue, with a number of geometric signs - dashes, bars, lines, and series of dots - some using tools (Dubey-Pathak and Clottes

2019). They have been daubed strategically, sometimes opposite each other, sometimes on either side of a conspicuous fissure. Shortly, after this, the solar figures like sun mark, moon mark, zigzag lines, parallel liners are appeared, and the dialogue continues to unfold.

Cluster Cupules: In various archaeological contexts we find that depictions of cup marks and cluster cupules, but to some extent, help to infer their utility in the ancient past. But there are some universal parallels observed by different scholars around the world in observations made during actual field surveys, which indicate the universality of belief systems in different societies regarding depictions of cup qualities and their functions. Different explanations for the formation of small cupules on stone surfaces the most acceptable explanation is a fertility-related ritual. The phenomenon of cupules in association with microlithic tools found in this area has been noted many times by Indian scholars. (Polley and Ray 2013).

Figure 17: Cluster cupules on peak of Chavarjai hills

Jointed Tail: To some extent it offers a contrast for design of tails is in circular motifs are important but, in this case, cup marks play a more conspicuous role. Some of the tails extending down the rock, and others are joined in pairs. A few examples are enclosed by unusual designs. It is possible that this panel had a longer history, and it may include elements associated from the ancient period. There are cups and spirals seen on the site and jointed tails are correlate this in one stream, but a distinctive feature is the presence of 'jointed tails.

Concentrated Circle with Tail: Many of the motifs and symbols used on rock surface are applied as engravings such as concentric circles, cup marks, lines and spirals occur in and on monuments, usually on the upper face of stones and occasionally on uprights but also sometimes on rock outcropping close to a monument (Bradley 2022).These

designs include concentric circle with tail and spirals, but they lack artificial cups and are supplemented by connected arcs, circular designs, and an oval motif formed by numerous pick marks. These elements make use of the natural vesicles in the rock, and the basic layout of the two main panels is organized around the cracks or fissures and mineral veins visible in the rock surface. There are indications that the designs developed over time, and two different types of motifs concentrate rings and labyrinth type shapes located at the surface of the rock were masked by the construction of the platform. This was directly linked to two decorated friezes and contained a group of stone artifacts that could have made some of the images (Frodsham 2022).

Figure 18: Jointed tails on Tanaji cliff rock patch on Sinhagad fort

Cup and Rings: Cup and ring art is more prevalent, being found in these carvings are found in a much greater variety of locations, including on outcrops, boulders, cliffs and rock shelters, but are also associated with cairns, stone circles, and standing stones (Dukinfield Astley 2014). It uses mostly curvilinear motifs, including simple cups, grooves, rings, and variations of these are moderately decorated the cup. Most are found on horizontal or gently sloping surfaces, and natural features such as fissures may be incorporated into the design. They are fluid in their design and they tend to be

found in open, public positions. Certain shrines and rocks, with their cup- and ring-markings, in patterns of varying and intricate detail, may be called a distinct phase of culture. There is no doubt that such a stage of artifacts developed among some people in some districts. To be more precise, it has to be called local deity worship. Here we have only the preliminary stage observes the signs are using in a universal cult. (Dukinfield Astley2014).

Figure 19: Concentric circle with tail mark reported on ridge platform of Chavarjai hills

Figure 20: Cup with tail mark reported on lower ridge of Chavarjai hills

Cup with Tail: Such features are observed embedded on the freshly exposed large scale basaltic surface, boulder and isolated patches at both the main and their micro

localities. An unusual rock formations and cup with tail symbols are trending differential weathering may have provoked questions about the origin of these features forming rows, grid, rings, or crosses. There is growing archaeological evidence that such 'decorated' locations held potent social significance. It is extensively carved on surface of rock with spirals placed around natural fissures. The micro topography of natural elements and the adjoined associations of cups, tail and grooves, where the most intimate relationships between the carver and the natural world are revealed (Sharpe 2022). Some of these features are engraved at deep level and few are shallow level.

Results and Discussion

As discussed above the landscape of the site is a part of plateau land which develops very suitable conditions for the design of rock art techniques. The exfoliation produces large dome like hills, called exfoliation domes and rounded boulder, usually referred to, as spheroidal weathered boulders, which are observed on the surface. Due to such weathering, the boulders are rounded by the spelling off of a series of concentric shells, which is develop as a result of pressure set up within the rock by chemical weathering. Most of the rocks at exposure are broadly curved; resulting more or less parallel plains are developed on the surface.

In the present context, number of sites at two localities, viz. Sinhagad and Chavarjai hills were documented. All the sites are located on the suitable locations, where hard, fresh to moderate rock of compact basalts flows are exposed. Each locality is having some micro localities from where a variety of rock art features were reported. These features mainly include, cupules, vulva, geometric lines, parallel cupules, jointed tail, geometric cup, couplers, concentrated circles, and cup with ring, etc. In India, geographically the rock art is divided in to Northern zone, Western zone, central and Southern zone. Out of these zones, the Central India accommodates one of the richest regions of rock art (Abbas 2016). Most of these Central zone localities are belonging different cultural era.

The Indian rock art shows varieties of astronomical signs which are depicted on the rock surface. These motifs are gives enormous information about the culture, art-architect, techniques and environmental conditions. So, there is need of systematic and scientific documentation of heritages to extract the information. They are gives detail information about the trade and commerce, as well as trade routes in different locations.

Another importance of these sites is that a significant number of microlithic tools were collected from both the location and their sub localities. Because, the deeply weathered amygdaloidal basalt flows which are exposed on the surface and due to their surface weathering, two type of material is formed, i.e. black cotton soil and zeolitic materials. Such secondary minerals of hydrothermal origin are chalcedony, opal, quartz, and amethyst. The exposed silicate zeolitic materials not giving response to the weathering

and hence it is fresh condition. Therefore, the Mesolithic tools are observed at these localities indicates the human influence in these areas.

Ancient Trade Route and Present Sites: As we know, the Romans took a circuitous sea route around Africa to reach the Persian Gulf and further touch the western Indian shores and they reach at the important Ports on western coast of India, such as Barygaza (Bharuch), Shurparak (Sopara), Kalyan and Chaul. During this time, Kalyan was a major loading and off-loading Centrehence, it was connected to the important town of Junnar which was a trade center and capital via the great Naneghat pass. While, Pune falls right on the ancient Indo-Roman trade route, and we were unaware of any settlement from Pune which shows any connection to this trade route, till date. The recorded settlements are present on the ancient trade routes which start from ports of west coast, Kolhapur, Karad, Shirval and goes to Junnar. The remarkable thing is these peoples were followed by the same of *Satvahana* on which these sites are presents in early historic period for Indo-Roman trade activity. The different cultural evidences of labyrinths, caves, resting places, inscriptions and habitation sites are present on the same route (Patil and Sabale, 2021).

Looking at the summary of events that took place in and around the fort premises Early-colonial historic as well as other periods. Some of the rock surfaces on the southwest side of the fort are depicted with interesting abstract rock art. Some remains in use prior to the massively constructed monument suggest us that the region was inhabited from earlier times as it was an important stage in human development. Over time, skirmishes and bloodshed, the importance of the region continued to grow, shedding light on how rich and prosperous the region was in the past in the Deccan of India, and many foreigners worldwide have written about the fort in their accounts (Mate 2021).

Dr Arati Deshpande-Mukherjee of Deccan College studied 95 fragments of shell bangles to find a clue to their origin reported from Pune's urban excavations of Pune old town. Thus, one can reasonably surmise that the market for such crafted bangles was definitely not local in small settlement of Pune and operated across western India and along the international Indo-Roman trade route (Palande-Datar 2021). Hence, it is clear that sea trade connection of trade is also impacted various ports of Konkan, Kolhapur-Karad-Shirwal on the plateau and Pune was well connected by this old route. It may extend to Junnar-Kotul-Nashik trade route further north. As you know, the site of Junnar, known as the old city, can be recognized as the former capital and rests on a fertile climatic plateau below the high mesas and foothills of the Sahyadri range and is the largest complex of Buddhism, and rock cut architecture (Ray 1986; Shinde 2017, and Sabale 2012).

Conclusion

As the Western Ghats receive monsoon rainfall of 3 to 4 m/y, various topographic features such as cascades over waterfalls; the high valleys cut through and high-energy

streams are found in the lowlands. As a result, extensive tracks of black cotton soil are developed on the lower plateau and floodplain. In many cases structural lineaments accelerate channel incision. These geographical features are developing ample natural resources. Most river basins are more or less weathered and dissected, interspersed with mesas and minor buttes that have shaped human movement and settlement. According to Kale (2014), less research in relation to landforms of the Deccan Volcanic Plateau has focused on human habitation, i.e., human use of landforms.

Various rock art features recorded on basaltic rock surfaces include geometric lines, parallel cupules, paired tails, geometric cups, grouped cupules, couplers, concentric circles, cups with rings, etc., which brings us to the different cultural period of age. Meanwhile significant amounts of Mesolithic tools were found around most rock art features or sites. Based on the rock art features along with the tools. Another significance of these recorded sites is that all Satvahana are present on trade routes.

For evaluation of rock art dating precisely is extremely difficult; the abstract nature of the designs provides few clues and they are rarely found with other types of dateable evidence. It has been argued that the couplers tradition is a cultural phenomenon, but researchers now believe that it is rooted firmly in the earlier. Simple cup marks are known from undisputed earlier contexts, Cup marks and more complex motifs also occur in Upper Paleolithic Age monuments and in some instances, this may represent a reuse of stones which have been removed from their original context. Comparisons with other types of decorated artifacts from other sites may provide further clues to the approximate age of rock art are elaborately carved with geometrical patterns and designs resembling stylized Linear and patterns have also been found on pieces in various contexts. Many of these decorated objects can be considered special items, often found in what are considered to be ritual contexts. This may imply that the designs are related by more than simply a period in time or by geographical distribution. The relationship between the other rock patterns and abstract rock depiction traditions is unclear. There is a large degree of overlap, with other motifs occurring in other monuments, such as stone circles, and also in the landscape as at simple cups and cup and ring motifs are often found alongside the geometric designs of In general, the abstract rock art tradition in Deccan However, it is unlikely that abstract rock art was a uniform phenomenon, and the various practices probably had different life spans in different regions, with some motifs being more widespread or more persistent than others. To tell about the occurrence, origin, duration, its intensity, extension of features, direction along with the details of each area of such rock art drawing activities, still needs to be studied in detail.

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