

## ROCK ART IN KERALA-A REVIEW

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The study on the rock art of Kerala started as early as the 19th century CB. A remarkable discovery of engravings by Fawcett at Edakkal, Wayanad district, opened the door for further research on rock art. In the 20th century, a few scholars discovered more sites in the hilly parts of the region. A review of the research on the rock art in Kerala, especially theme, techniques, antiquity and interpretations is attempted here.

**Keywords:** rock art, engravings, Kerala, landscape, ecology.

### Introduction

The state of Kerala (Lat 8° 17' - 12° 47' N and Long 74° 00' - 77°24'E) also known as Malabar, is located on the southwestern part of India, surrounded by the Arabian Sea on the west and the states of Tamil Nadu and Karnataka, respectively, on the eastern and northern parts. This narrow state has a long coastline stretching from Thiruvananthapuram in south to Kasaragode in north, measuring about 580 km. Forty-four rivers, the Periyar and the Ponnani being the major rivers, water the region, and the climate is characterized by excessive rainfall with a hot summer season. The area is abundant with natural formations such as thickly forested high ranges (hills,) rugged lateritic midlands and narrow coastal plains. It is in the high ranges, one comes across a few of the natural rock shelters and caves that were converted into a picture gallery by the people of the bygone era.

### Rock Art Sites in Kerala

A brief description of the rock art sites in Kerala is presented here.

TABLE 1: LIST OF ROCK ART SITES IN KERALA

<i>Site Name</i>	<i>District</i>	<i>Category</i>	<i>Reference</i>
Edakkal	Wayanad	Engravings	Fawcett 1901
Marayur-3 shelters	Idukki	Paintings	Thampi 1976; 1983
Tenmala	Kollam	Engravings	Rajendran 1985
Ankode	Tiruvananthapuram	Engravings	Rajendran 1989
Tovarimala	Wayanad	Engravings	Gurukkal and Varier 1999
Matattala, Vaymala and Jellimala	Idukki	Paintings	Gurukkal (see this issue)
Ettukudaka	Kannur	Engravings	Damodaran et al 2006

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**Edakkal** (76.2355 E; 11.62666 N)

The “antiquarians” of the colonial period played a crucial role in bringing to light the archaeological wealth of Kerala. The honour of finding the first rock art site in Kerala also goes to one such antiquarian, Fred Fawcett (1901). Though appointed as the District Superintendent of Police at Calicut (Kozhikode), he took keen interest in studying the indigenous and prehistoric cultures. Along with ethnographic work that he carried out in Malabar, he studied the rock engravings meticulously. While on tour to document the tribal practices in the Wayanad region, he noticed the Edakkal rock shelters and visited the site with the help of his friend McKenzie (different from the famous Colin Mckenzie), who owned a coffee estate in Wayanad (Darsana 2007). He visited Edakkal three times from 1894 to 1896. In the study and understanding of Edakkal rock shelter and its archaeological legacy, Fawcett was assisted by Temple, Bruce Foote and Hultzsch (Fawcett 1901).

Fawcett’s work was meticulous as he painstakingly made a detailed sketch of all the carvings in the shelter. Interestingly, he had given photographs of the carvings which appears to be the first photographic documentation of a rock art site in India. It is to be remembered that more than 100 years back, Fawcett took the “photographs under great difficulties of light and position” (1901:413). His publication “with excellent photographs must be considered to be far ahead of his times when the technique of photography was still incipient” (Chandramouli 2002:18). Apart from the engravings, the Edakkal cave also yielded inscriptions of the historical period (Mahadevan 2003). In the later period, many scholars attempted to analyse the rock engravings of Edakkal and offer interpretations (Gurukkal 1995; Gurukkal and Varier 1999; Gopi 2004; Rajendran 2007).

**Marayur Group of Rock Shelters** (77.15 E; 10.233 N)

After Fawcett’s remarkable discovery of Edakkal rock engravings, not much archaeological research was undertaken in Kerala in the first half of the 20th century. In 1970’s, a research student from Deccan College, Pune stumbled upon three rock shelters, namely, Ezhuthala at Koodakkad, Attala at Pallanad and Purachi Ala at Champakkad in the high ranges of the Anjanad Valley in Idukki district—all decorated with paintings (Thampi 1976, 1983). Out of the three, Champakkad is the largest shelter, while the Pallanad has the maximum number of paintings (Gurukkal and Varier 1999). At these sites, evidence for superimposition of paintings of various cultural periods is noticed. Thampi also found microliths of chert-chalcedony from the floor of these caves and the region abounds with ‘megalithic’ dolmens of the Iron Age Early Historic period.

**Tenmala** (77.07338 E; 8.9634 N)

Another petroglyph site is located at Tenmala in Kollam district. The Mesolithic deposit at this rock shelter was excavated by Rajendran. The site is significant due

to the dating of the stratified mesolithic deposit, thus giving the only scientific date (C14 5210 ± 110 BP) to a rock art site in Kerala (Rajendran 1985, 1989; Gurukkal and Varier 1999). The cave yielded a few geometric pattern carvings of square, circles and triangles.

**Ankode** (77.0836 E; 8.4141 N)

Located at Perumkadavila, the site of Pandavampara at Ankode in Tiruvanthapuram district is adorned with deeply engraved motifs. The rock engravings here are believed to have been made using sharp stone tools similar to the ‘neolithic’ stone celts. The rock art site yielded stratified Mesolithic deposit. Though similar in style to the Edakkal engravings, the Ankode drawings are much smaller in theme and volume (Gurukkal and Varier 1999).

**Tovarimala** (76.2639E; 11.6255N)

Located at Wayanad district, the Tovarimala is a hilly plain of the Malavayal in the same region where the Edakkal cave is located. The site called Ezhuthupara yielded rock engravings very similar to the Edakkal engravings but less in terms of the volume and theme. However, the technique appears to be same (Varier 2006).

**Ettukudukka**

In recent years, engravings were noticed on the lateritic surface of a road at Ettukudukka, situated 12 km east of Payyannur in Kannur district (Sreelatha Damodaran *et al.* 2006). They can be called geoglyphs and similar engravings on laterite have been found in Goa (Shirodkar 1994). Though the local villagers reported the presence of such engravings along the road, they were destroyed due to human activities. When the state archaeology Department attempted to intervene to protect the site, the local people opposed the move.

**II. Themes and Techniques**

In Kerala, as elsewhere the rock engravings deal with the common themes such as hunting and dancing scenes, and geometric designs. A few of these engravings might have been associated with some unknown ritual aspects of the past people. Most of the rock art in Kerala are petroglyphs, while at a few places they are pictographic in nature.

The Edakkal carving belongs to a class of its own. Though the carvings depict the figures of humans and animals, they are made in such a manner that it requires extended vision to view and understand them. Fawcett reproduced the engravings with photographs and illustrations, and also studied them from an ethnographic point of view. He (1901) had noted the presence of *swastika* pattern, sun symbol and magic square among the designs. Most of the human figures are shown with massive headgears and raised hands. While describing the nature of execution of

the engravings, Fawcett endorsed the observation of Robert Bruce Foote that they were made by scraping the surface and not by cutting or chipping out.

The figure of a circle with a cross pattern inside is treated as sun symbol by Fawcett (1901: 413) while the later scholars have identified it with wheel, and thereby signify movement of people and goods (Neumayer 1991; Gurukkal 1995; Varier 2006). Neumayer views the symbol as a wheeled cart (1991:54). Varier equated the presence of wheeled cart with that of “an advanced stage of economic production and distribution” (2006:73).

Gurukkal (1995) analyzed the morphological evolution of engravings at Edakkal and identified six basic signs, namely, canoe, cross, triangle, square, circle and volute. According to him from these primary (canoe), secondary (cross, triangle, and square) and tertiary signs (circle and volute), all the drawings had emerged. Based on the use of medial signs to create a narration, he stated that the engravings on Wall No. 1 are relatively older, as they are made of simple primary signs. The engravings mainly showing the human figures on the wall No. 2 carved with the use of complex medial signs that depict ‘libidinous’ signs were ascribed to a later date. He argued that the engravings have to be viewed in a holistic perspective rather than in isolation. He perceived that the central figure in Wall No. 1 as that of a deity or a chief and the figures around him as ritual dancers. The representation of animals such as antelope, peacock, wild dog and elephant and the plants and the flowers are indicators of forest with some ritualistic values (Gurukkal 1995).

Mathpal (1998) who undertook a detailed study of the rock art sites in Kerala presents a comprehensive statistical analysis: 28 human figures, 19 animal figures and 400 abstract motifs among Edakkal engravings. He observed that most of the human figures are drawn in frontal posture while that of the animals in profile. He viewed them as distinct independent figures, lacking the idea of composition.

The paintings and engravings at Marayur group of rock shelters are varied in nature. For the paintings, red ochre, pinkish buff, black, saffron and brownish yellow were preferred (Thampi 1976; Gurukkal and Varier 1999). At Ezhuthuala, three-fourth of the 12-metre high cave shelter is covered with paintings, most of which are superimposed. The human figures are shown with arms raised and the animal figures consist of horse, bull, bison, elephants with and without riders (Thampi 1976). Nearly 100 figures are drawn, with the maximum height of a figure is 1.5 m and the smallest is 3 mm. The most important figure is that of a standing human with tiger stripe motif in the body (Fig. 1). It is not out of context to mention the prevalence of the popular dance of Pulikkali in Kerala (or Puliattam in Tamil Nadu), where the actors paint their bodies with the colours of the tiger’s stripes. At Attala, nearly 400 motifs are noticed; many of them (26) are humans in different postures (Mathpal 1998:35). A few consist of geometrical designs and animal figures. The paintings are executed in white pigment on the ceiling. Human and

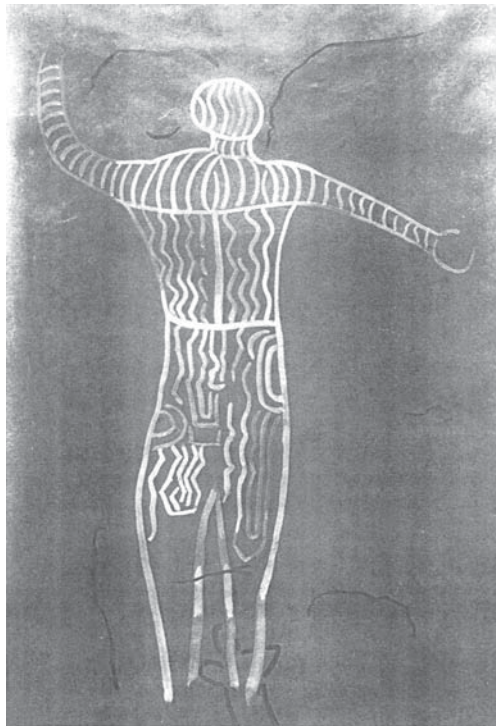


Figure 1: Painted Human figure, Marayur

animal figures are noticed at Puratchi Ala in white pigment. Interestingly, figures of a horse, and elephants with and without riders have also been painted.

At Ankode, deep engravings of geometric designs, human figures, and decorative floral motifs occur (Gurukkal and Varier 1999). The site yielded microlithic tools, based on which it can be surmised that the engravings are made with microliths, according to these authors.

The Tenmala rock shelter is devoid of any representation of human and animal figures. Only the geometrical motifs such as triangles, circles, and squares are noticed as incisions. The Mesolithic deposit found at the rock shelter pointed to the use of microlithic tools for execution of the incisions (Rajendran 1985).

The Tovari engravings depict mainly a few geometric designs. One such symbol demonstrates a square divided with lines in it and an extended stick with a tip, which was identified as a tool tipped with iron mentioned in the Sangam Tamil literature as '*irumputtalai yaatta netunkanai vizhukkol*' (Varier 2006). To enhance the power of the tool, the ritualistic *mandala* like square could have been engraved. The engravings could also be taken as the stylized version of the female reproductive organ, an interpretation based on the identification of a similar type found at a rock

art site in South Africa by Glyn Daniel (Varier 2006). The engravings could have been made by smaller stone blades, as most of them are narrow and shallow, while a few are made with the use of large tools.

### **Antiquity of the Rock Art in Kerala**

The antiquity of the rock art in Kerala is shrouded in mystery. No clear-cut dating method has been adopted, except in Tenmala that yielded a C14 date for the archaeological deposit. In all other sites, dates are arrived at based on stylistic features and the nature of motifs. However, they are not reliable. In some sites, evidence of superimposition is seen. At Edakkal, over the carvings are noticed the later inscriptions in Tamil Brahmi and Sanskrit (Fawcett 1901; Mahadevan 2003). While at Ankode, there is superimposition of paintings over the engravings. At Marayur group of rock shelters, there is an evidence for the superimposition of paintings stretching over three cultural periods. Hence, arriving at absolute date for the rock art in Kerala is elusive, though a relative dating is possible. The authors of the rock art also remain faceless.

For Edakkal, with its intricate carvings, the dating seems to be quite intriguing. Interestingly, Fawcett never categorically assigned any cultural period for the execution of the engravings at Edakkal. Fawcett while referring to the moulds that have grown under the carvings stated that they are “indications of an apparently great age for the carvings on the walls” (1901:413). However, many scholars in the later period have stated that Fawcett assigned Neolithic age to the Edakkal rock art (Mitra 1935, Gurukkal 1995, Mathpal 1998, Gurukkal and Varier 1999). While describing the nature of execution of the engravings, Fawcett noted Robert Bruce Foote’s observation that they are made by scraping in and not by cutting or chipping out. He discovered a quartz flake in the same hill and he produced a drawing of a polished celt that he had collected from the coffee estate of Colin Mackenzie. This prompted the later scholars to assume that he assigned Neolithic period to the engravings. He also noticed the presence of worked quartz (microliths) in stone cists along with iron and other objects in the neighbouring areas. He had observed that the evidence for the “makers of the carvings are to be found in numerous stone circles, situated to the west of Edakkalmala” (1901: 420-421). The recent explorations (Selvakumar 2005) too had exposed a few microlithic sites in the region.

If Fawcett had assigned any cultural period, it was indirectly only to the Iron Age-Megalithic period. It has been noted also that apart from stone celt, iron implements could have been used in the execution of petroglyphs at Edakkal. Though the discovery of the stone celt in the vicinity does not necessarily mean the Neolithic age, the engravings could indicate a greater antiquity for the site (Neumayer 1993).

Fawcett had attributed the engravings of a human figure with a bow and arrow to be the works of the ancestors of the *Mollu/Mullu Kurumbars* of the neighbouring

region, known as the Vedars. He further stated that the nine major figures of humans with huge headdresses could be performing the “ancient devil dance” (Fig. 2). He also added that the “carvings may be merely the work of any one of the “devil” worshipping castes or tribes of the neighbourhood in a past more or less-probably more-remote” (1901:416). Based on the study of the Kurumbar who revere the hillock with great fear and awe, he concluded that the carvings could be the works of the ancestors of the Kurumbar.



Figure 2: Engraving of Devil Dancer, Edakkal

Gurukkal (1995) viewed the wheel sign found at Edakkal as an indication of the movement of goods and people and had taken that as an indicator for the antiquity of the carvings and placed it in the post Neolithic period. As the theme is comprised of complex human and animal figures, he argued that the engravings could be dated to the transition period from the Neolithic to the post-Neolithic. He placed the main engravings of the Edakkal to the Neolithic period and the periphery images that have been later added to the Iron Age Early Historic (megalithic) period. Mathpal (1998) assigned a date of 3500 years BP for the Edakkal engravings based on stylistic features.

The many layers of paintings at Marayur group of rock shelters are dated to various periods. Thampi (1976) assigned paintings of antelope, cattle and horse to the mesolithic (7000 BC); human figures to the Chalcolithic (2000 BC) and armed rider on elephant to the early historic (300 BC). However, as there is no evidence of Chalcolithic culture in Kerala, the second phase is assigned to the Neolithic and third phase to the Iron Age. A painting of a human figure with wavy patterns inside is quite akin to designs on the russet coated painted pottery that are found in the early historic period, which is presumed to be of that period (Gurukkal and Varier 1999). (Fig.1) A similarity between the rock art motif of Bhimbekta and chalcolithic pottery was attempted earlier (Sonawane 1984). However, as there is no archaeological evidence for neolithic period in Kerala, this date is also doubtful.

Tenmala is the only rock art site in Kerala that yielded a C14 date (Rajendran 1989) for the Mesolithic deposit found in the cave shelter. The deposit is dated to 5210 ±110 BP and the same period is given to the engravings too.

From the above survey it is amply clear that a lot needs to be done to systematically date the rock art of Kerala.

### Interpretations

Fawcett made preliminary observations about the engravings that he had studied at Edakkal. As most of the human figures are adorned with huge headgears (Fig. 2), he identified them as the performers of devil dance that are widely popular in the regions of Kerala, Karnataka and South Tamil Nadu. The interpretation can be seen in the light of the *Teyyam* dance of Kerala. *Teyyattam* (a corrupted form of *Deivaattam*) is the ritual dance popular in North Kerala, where the male performers “metamorphosises” into a particular deity and dances in certain cult shrines (Kurup 1986; Dinesan 2006). The artists wear huge headgears and also decorated masks (Fig. 3). The artists are basically from the communities of the Vannans, Malayans, Velans, Koppalans and Pulayans, who are classified as scheduled tribes of the region. Fawcett’s view that the engravings could be the works of the ancestors of the modern day tribes of the region cannot be ruled out either. The interesting analogy between the Teyyam dance and the Edakkal engravings needs to be further studied.

Gurukkal (1995) viewed the engravings at Edakkal as the outcome of the contradictions in a society that witnessed the transition from the Neolithic to the Iron Age. Based on the study of Levi Strauss (1971) and Frederic Jameson (1981) who propounded that the creation of ‘gratuitous fantasy art’ is the result of “process of alienation and estrangement in society,” Gurukkal (1995) argued that the Edakkal engravings with massive decorative headdresses are the products of the society which faced insoluble problems and the communal need to overcome the issues with aesthetic imaginary art forms. He further argues that the earlier engravings were that of the Neolithic people, who under tremendous pressure from the metal-



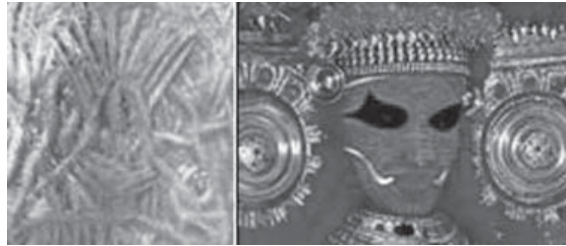


Figure 3: Edakkal Figure and Face of Teyyam Dancer Compared

using Iron Age people resorted to gratuitous art forms to get adjusted to the transition from one cultural component to another cultural module.

As the massive engravings at Edakkal are mainly done with patient scraping of surface with a tool, it must have involved the participation of a community. As the artists had left no marks on the practice they must have acquired anywhere in the vicinity, Gopi (2004) observed that the Edakkal cave artists could have used it as transitory shelter and he attributed them to have come from Tamil Nadu where such engravings are found at Perumukal.

While commenting on the Tovari paintings, Varier (2006) stated that the painting are loaded with abstract ideas compared to those of Edakkal, where the themes are ritualistic in nature. The theme of the Tovari engravings is specific centric. He compared the magic square symbols with that of the *tantric mandalas* of the later period. The engravings could have been used as representations of fertility cult laden with ritual meanings.

### Rock Art Themes as Markers of Cultures

The themes in the rock art help to understand the socio-cultural aspects of the people who made them. A few ideas and meanings can be discerned through the study and analysis of themes represented in the rock art.

It is interesting to note that the main themes in the rock art in Kerala are abstract in nature. A detailed statistical analysis of the representation of art motifs in Kerala rock art sites have been attempted by Mathpal (1998). Human figures occupy only a 12% of the total motifs, followed by animal figures (10%), while the abstract geometric motif accounts for 78% of the total art motifs. Human figures are shown in frontal position and the facial features and limbs are not clearly shown (Fig. 4). Out of the 68 male figures, a few are shown riding different animals (Fig. 5). Female figures numbering six are known only through broad waist and they are noticed only at Edakkal rock engravings.

Hunting is one of the main themes in the rock art. However, not all the animals are shown as being hunted (Fig. 6). Most of the animals are shown in profile and they are shown without eyes, ears and nose. Animals are shown in horizontal position, as noticed in other rock art sites of the world.

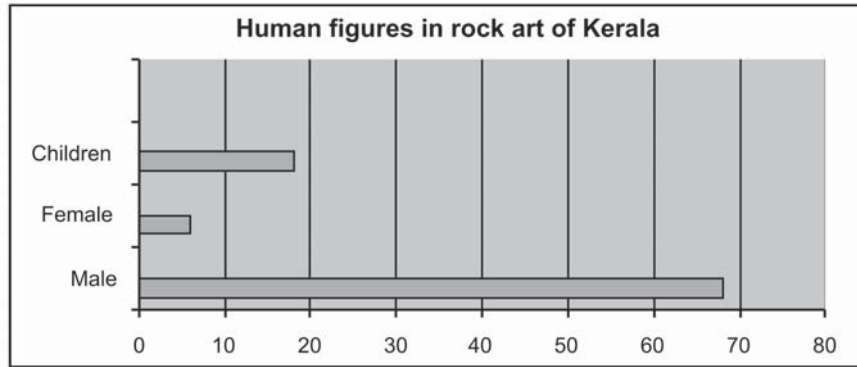


Figure 4: Human Figures in Rock Art of Kerala, (based on the data in Mathpal 1998)

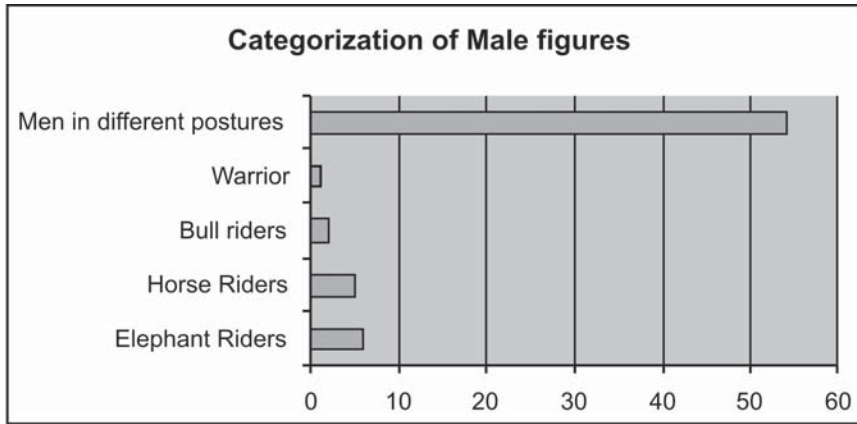


Figure 5: Categorization of Male Figures, (based on the data in Mathpal 1998)

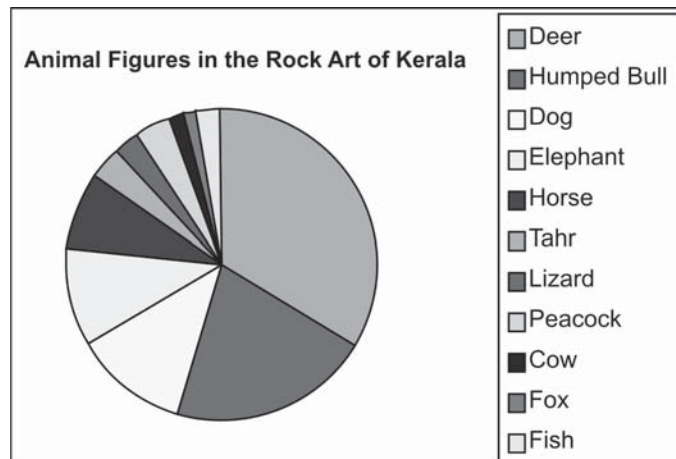


Figure 6: Animal Figures in the Rock Art of Kerala, (based on the data in Mathpal 1998)

Based on the depiction of animals in Bhimbetka and the upper Chambal Valley, Badam n.d) and Badam and Sathe (1991, 1996) and Badam and Prakash (1992) have reconstructed the Palaeoecological model for the entire region. Accordingly, fauna in the rock art was divided into three categories- a. Stream and Stream Bank community b. Megaterrestrial Community and c. Arboreal Community.

A similar attempt in the Kerala rock art sites reveals that the animals such as elephant, bull, deer, tahr and cow belonging to the megaterrestrial community accounts for a massive 75% of the total biota. The scavenging animals such as fox and dog along with the lizard account for a 13% of the total fauna depicted in the rock art. The last category of stream and stream bank community constituted by the fish motif is at 3%.

A thorough study and comparison of the biodiversity of the regions where the rock art occurs would throw more light on the palaeo climate of the region as well as the various dynamics of the site. A multidisciplinary study involving zoology, botany, anthropology and archaeology is the need of the hour to understand the rock art sites in a holistic perspective.

### **Landscape and Rock Art**

In the post- processual archaeological studies, the role of the landscape in the magnitude of site dynamic is given importance. The making of art in inaccessible heights could have been influenced by the location and the importance of the site by a given community. The spatial arrangement of other sites in relation to the rock art sites and natural spatial arrangement of the landscape could have contributed to the selection of a particular area for producing works of art. The landscape approach through which one sees the archaeological data from various landmarks in a given landscape can be applied in the study of rock art in Kerala.

Attempts made by Bradley (1991) in analyzing the significance of the rock art sites from landscape perspectives have yielded interesting aspects. A pilot study of rock art sites by using the landscape and palaeo-economic trends at the Neolithic Britain enforced the role of land resources, pathways and directions on the location of the sites and their themes. The rock art sites in Europe are located in those areas that have experienced non-sedentary way of life. In this context, the natural landscape plays an important role in the selection and execution of rock art. The dialogue between the archaeological sites and the natural landscape can be discerned through the mapping of sites.

The themes in the rock art at Galicia in Spain have been analyzed from landscape perspectives (Bradley *et al.* 1994). Here the figures of animals, mainly the deers have been drawn in profile and are mostly shown as if they are crossing the landscape at a particular point. The significance of the pathways and crossings was assessed by the pattern of crossings by the horses in modern day. The crossings are significant as important resource areas-for grazing, and shelter for the animals.

Based on pattern of movement of animals, the significance of petroglyphs across the landscape is assessed.

In this attempt, the local legends associated with the rock painting sites can be studied. A preliminary study of the rock painting site at the upper Palar Basin of Tamil Nadu revealed the symbolic significance of the site in relation to prominent landscape features-hill ridges, natural springs (Darsana 1997). The rocky boulders and other associated features are connected with the legends of Pancha Pandavas of Mahabharatha fame and they invariably lead to the rock art site and a permanent link has been created with the past. The selection of sites at inaccessible high ranges could have been motivated by functional (as resourceful) or symbolic (prominent landscape features along with locally important places) factors.

A similar study can be attempted on the rock art sites in Kerala. For this purpose, instead of viewing the rock art sites in isolation, the intra site and inter site variabilities have to be taken into account. By plotting and mapping all the important landmarks along with the themes of the rock art, a clear picture may emerge on the nature of the rock art.

In Kerala context, the study of the tribes living in high ranges with their concept of art can provide vital clues, as has been done in the upper Gundar basin (Selvakumar 2002). The ethnographic data can provide vital clues in the understanding of the rock art as an important cultural component.

### **Conclusions**

Though only a handful of sites are explored and studied in Kerala, there may remain a number of sites waiting to be explored. The recent discovery of sites with paintings in Kerala by Gurukkal (see this issue) is noteworthy. The existing ones face destruction due to the vagaries of the nature and human vandalism. As noted by Mathpal (2000) the "Eddakkal cave in the Wynad district of Kerala, having beautiful carvings is probably the worst example of vandalism". The visitors leave the names on the rock surface thus damaging the legacy of the past that has been left to us to protect and preserve for posterity. The local and state governmental organizations should join hands together in preserving the heritage. The congress of the Rock Art Society of India (RASI) held in October 2007 along with the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, and Malabar Institute of Research and Development Studies, Vadakara at Sultan Bathery emphasized on the larger role of the Archaeological Survey of India in protecting the site and its environs before they perish (*The Hindu Oct 28, 2007*).

Moreover, instead of studying the rock art sites in isolation, a holistic study i.e. regional approach of the entire region surrounding the rock shelters in totality is the need of the hour. Kerala has not progressed much in the study of archaeological sites (Darsana 2004). For example though Fawcett stressed the importance of the survey around the adjoining regions of the Edakkal cave, till today only sporadic

surveys have been carried out here. The documentation of the Edakkal along with the burial sites and other important landmarks in the neighbouring areas would throw more light on the hitherto unknown facets of the site.

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