

Discussion and Conclusion

Absolute chronology of rock art is an unsolved problem in Indian Archaeology. Besides, scientific techniques nowadays are being used in ascertaining the absolute date of rock art in western countries (Broadbent 1987; Bednarik 1995, 2002, 2007; Yates 1991; Francis *et al.* 1993; Watchman *et al.* 1997; Clogg *et al.* 2000; Rowe 2004; Trinks *et al.* 2005; Morwood *et al.* 2010). But, in India even though 1000 rock art sites are traced and studied, only one or two sites are dated by scientific technique. An attempt has been made to date the rock art specimen by radiocarbon from Bhimbetka, Jamjori and Hathitol (Madhya Pradesh). The rock art age ranges from 1100 to 5200 years ago (Bednarik *et al.* 2005).

According to relative dating of Indian rock art is dated as far back as 20,000 years BP approximately. But, the absolute dating of the specimens from the above mentioned places indicate younger date. Many scholars do not agree with absolute dating since the difference between the two dates is too wide to accept. Further, it is argued that there are some errors in the procedure of dating and result. Scientists say that the sample from pictures for dating should not be exposed to sunlight and rain or soot owing to cooking in shelters by local people etc. In India most of the sites are affected by one or many such factors. In the western countries for example Altamira, Lascaux, Chauvet: the paintings within the caves have generally not undergone such damages mentioned herein. They are dated by scientific technique.

The traditional method of dating the rock art is based on types of the pictures, style, superimposition, present condition and with other archaeological remains in the vicinity of sites; they can be arranged broadly in an acceptable sequence. Based on such method in the study area, among the 87 localities, 45 are classified as the Upper Palaeolithic/Mesolithic; 11 are having Neolithic/Chalcolithic and Iron Age/Megalith; and remaining 31 localities are having historical rock art pictures. In these localities,

more than half of the numbers belong to the Upper Palaeolithic/Mesolithic stage.

The pictures provide insights into the various cultural stages of humanization processes. The progression of wild to domestic animals can be understood through the study of biological behavioural factors. In the view of chronological scenario of domestic animals are in the study area like cattle, dog, elephant, and horse. Based on such detailed studies an attempt has been made here to classify the rock art of the study area into following cultural stages.

- Upper Palaeolithic/Mesolithic Stage
- Neolithic-Chalcolithic and Iron Age Stage
- Early and Late Historical Stage

- **Upper Palaeolithic/Mesolithic Stage**

The upper Palaeolithic/Mesolithic cultural stage rock art are significant features of the Prehistoric stage. Generally, the pictures are individualistic and abstract in few cases but they are realistic in this stage. There are certain noteworthy aspects of pictographs which are discussed below.

The rhombus is depicted in both pictographs as well as engraving most interesting among the pictures. The designs appear to be highly abstract and schematic. In the study area there are designs of rhombus in pictographs prominently depicted (Plate P30, Plate P34, Plate P31, Plate P35, Plate P36: see B191, B206, B213 B234 B237, B283, B292, B310). But, intricately engraved rhomboid design is found only in a shelter at Taṭakoṭi-7 (Plate P56). The rhomboid-spiral forms are said to be the result of the earliest attempts of prehistoric people towards schematization (Neumayer 1993). But, rhombus is not found in the eastern and southern parts of Karnataka and in fact in South India. Rhombus is not common in Indian rock art. In Indian context it reported from Chandravati in Rajasthan (Sonawane 1987). Thus it is clear that the depiction of the rhombus is unique feature of the study area.

There are only few rock art sites world-wide where rhombus is reported from Loughcrew in Ireland (Twohig 1981). Another site is located in Mezine valley, North Central Russia where an ivory bracelet of the Mesolithic stage is decorated with engraving of rhombus in series.

Most of the pictures of animals are probably belong to the Upper Palaeolithic/Mesolithic stage. The deer and antelope appear to be the most favorable of community. This is natural because they were more in number, easy of access and could be hunted more easily. It seems they constituted staple food for communities. The wild boars are found all over the study area in considerable numbers, somewhat difficult to hunt. These wild species are not found anywhere among the pictures in subsequent stages. The Malaprabha basin provides a favourable environment for not only human beings but also animals since human beings depended on the animals for subsistence. The animals and humans are equal in number and animals are invariably wild. The pictures indicate relationship between them.

Some of the pictures are indeed painted classically for example one at Thimmappa Guḍḍa. Here, the spotted deer has turned its head back and appears very natural (Plate P30 or B234). Similarly, another picture in Are Guḍḍa is so dynamic in displaying the galloping speed naturally; front legs are lifted up and bent backwards (Plate P31). This is comparable to the pictures (Wakankar and Brooks 1976: 42) in Bhimbetka. Another example is a tiger looking down at the spotted deer fallen on the ground upside down as if to make a final fatal attack (B236). Donkeys though very rarely depicted are of two kinds, one with stripes on the body (Plate P68) and other is more common variety (Plate P66). The donkey are shown bearing load on their back. On the hind part of the body in the outline some designs are depicted. Immediately right above the picture is Badami Chalukyan script in red-ochre colour. It is particularly noteworthy that there is an overlap of the right horn of the first donkey from the left on the second line of the last letter of writing (Plate P66). The horn is overlapping on the last letter of the writing or vice-versa then the relative period of the two can be known that Chalukyan but the characteristic style of the depiction implies that they are of the Upper Palaeolithic/Mesolithic stage. Certain animals and birds are such as gaur (Plate P67, Plate P71), striped hyena (Plate P67), wolf (B188), rhinoceros (Plate P27), wild cat (B202), tortoise (Plate P23, Plate P31, B294) and ostrich (Plate P28) are rarely depicted.

The long necked animal like giraffe (Plate B002c, B052zf, B055) is found in the study area. Such animals also reported in other parts of India. For example, the animal was first reported at Adamgarh, Pachmarhi, Brihaspatikund and Bhimbetka (Mathpal 1976-77).

The particular painting is most unusual of all in Are Guḍḍa (Plate P31) which is a rough trapezium shape with thick large eleven big dots arranged in three lines. This shape also might correlate with the valley which is horse shoe valley (Map 3.2) or more like a trapezium. There are total 11 rock shelters in this valley and are shown as 11 dots. This is a unique in the study area, which is generally uncommon elsewhere in India. Such evidence is very rare in Indian rock art. For example ‘S-Belt’ which is indicating the site distribution in Central India (Tiwari and Misra 2011).

The painted scene on the ceiling at Siti Ḍoṇe is measuring 10.8 m long and 6.9 m width and is one of the largest in India. It has a superimposed scene depicting wild animals with geometrical designs of the prehistoric period (Plate P24).

The depiction of human figures in the study area is having distinct style. Therefore it is designated as ‘Prehistoric Badami style of human’ (e.g. Plate P23, Plate P33) by the investigator. ‘These figures from Badami appear to be perfect examples of *shamans* in trance with elongated bodies and big eye. Big eye symbolize the fact that Shamans can see in darkness and far beyond the ordinary limits of human sight’ (Ghosh 2007). It may be also noted in such scene the weapons are shown only in the form of antler (available in nature) (B230), bow (B152). And in the vicinity of most of the shelters, waste flakes and artefacts of the mostly the Upper Palaeolithic or Mesolithic made on chert are found. Therefore, all such pictures of this category may be assigned to the late phase of the Upper Palaeolithic and Mesolithic. There are no engravings or bruising of animals and human of the Upper Palaeolithic/Mesolithic stage so far noted in the study area.

- **Neolithic-Chalcolithic and Iron Age Stage**

In this stage, the pictures of wild boar, deer, antelope, gaur, goat, donkey and wild cat are totally absent. The cattle population is in relation with human beings also remarkably increased by 50 percent, indicating domestication of cattle. This situation is supported by the archaeological remains. Neolithic-Chalcolithic stage had already domesticated cattle to a large extent. These animals were heavily used for food, milk products, transport, and tilling etc. Therefore, the cattle were constant companion with the people of this stage.

The designs are varied patterns such as vertical parallel and oblique lines, compartmentalized rectangle, triangle, and squares. However, in the eastern part of

Northern Karnataka particularly, geometrical designs are typologically many, generally belonging to this stage. Similarly, certain designs found for example the endless four or six knot designs, *chakravyuha* (labyrinth), spiral and two obliquely intersecting square with loops at the corner have not been so far traced in the study region.

The cattle are mainly represented in this stage. In the Iron Age, the lines of engravings generally are deep and wide (0.5-1 cm) for example at Ranganātha Guḍḍa in Taminhaḷ (Plate P53, Plate P54, Plate P55: see B020- B051). Engravings of this type are not been so far from the other parts of South India. In particular, the picture of cattle at Ranganātha Guḍḍa in Taminhaḷ displays unusually a herd of cattle facing them in opposite direction and there are as many as twelve in number both humpless and humped cattle (Plate P53, Plate P54). The camel is another unusual picture found in rock art (Plate P55). Perhaps, it is not so far known from any other site in South India. Another interesting picture is a group of animals comprising four cattle and dogs in bruising, the horn of the two are shown deeply convexd (Plate P51). The dog is more naturalistic, the waist is narrow and tail is curled upwards; the human standing with legs apart.

Some scholars are of the opinion that the Early Iron Age Megalithic builders were essentially nomadic people with tending cattle. Therefore, it is quite likely that pictures of these types are probably of the Early Iron Age. This may be the reason as to why cattle were far more in number in the rock art of this stage. Comparatively petroglyphs are considerably more in number than the pictographs in this stage.

One the picture where two animals are yoked to a cart (B208) in Hire Guḍḍa is noteworthy. The wheels of the cart have four or five spokes, very simple in depiction. The simple nature of the cart without the driver implies that it could be of the Early Iron Age. With regards to the spoked wheel of cart it is worthwhile to recall controversy about it and its relevance in the Proto-historic time. Some eminent scholars for example R.S. Sharma is of the strong view that Harappa's did not have spoked wheel carts. Further, they were of the opinion that the *vedik* people had the knowledge of wheel carts with spokes and horse. The depiction of cart is more common in Indian rock art (Neumayer 1991, 2010).

The cattle are the most dominant, especially humped bulls. There are also some

rare pictures; for example the crane catching fish is rather noteworthy (Plate P40), and the tortoise (B294).

- **Early and Late historic Stage**

Already by the beginning of Historical stage the tradition of art in general was nourished and patronised. This tradition was governed by systematic study and training according to certain theory and principles. There were regular schools of art for learning and the subject matter is generally thematic. But, this was prevalent among the learned people. But, at the same time the earlier rock art tradition was continued among the people at large, communities and tribes. For their ritual, hunting or perpetuation of their progeny primarily was continued for successful and connection with the celebration of festivity especially the harvest. The pictures are relating to this category in many shelters in the study area. It is interesting to note that some of the shelters already having the pictures of Pre-historic stage and in the same shelters may be belonging to later stages are found for example in Pillugundu (B002), Huli Phadi (B292-B307). In the Early/Late historical stage the horses became prominent and cattle next, elephants are rarely depicted and wild animals such as tiger, lion, wild dog, deer are still rare. There are 11 horses with riders in red-ochre colour. But most of the horses are shown in symbolic.

During the Early and Late historical, the pictographs are far more in number than petroglyphs. The depictions are both individualistic and group such as a warrior with shield & sword, a rider on horseback or other animals and group of humans engaged in dance hand in hand (B257); warrior with sword and shield riding a horse, attacked by another soldier with sword and shield (Plate P43) and battle scene (Plate P70 or B002). There are also some paintings of classical tradition such as a woman with headgear and ear ornaments. A noble lady seated with two attendants and three women (Plate P47a). One of them is holding a lotus and approaching the lady. A lady with lotus and note the *sindhur* on the forehead (Plate P47b). It is for the first time such pictures appear in classical tradition. Similarly, the picture of the birds (B096, B099, B129, B172), snakes (B002, B129), are unique depiction in typical classical tradition.

There are animals depicted in classical style such as dog (B185), conjoined elephant-bull (B101, B186) conjoined deer (B183) with a common head. The pictures of these kinds appear more frequently in the art of sculpture. Pictures from Dodda

Joger Phaḍi are in silhouette and the mode of their depiction is different from those of the remaining places, a person standing by the side of cattle (B177); two horse riders (Plate P45, B172); a row of people are playing musical instrument like trumpet, *veena*; and hand-bell/cymbal in action (B170). These all appears to be in performance mode. Six humans within a half circle in white (Plate P44); two human are holding/playing on musical instrument within a circle and one outside, all wearing skirts which are typical and form a class by themselves.

Further, some pictures of human figures in silhouette or thin outline holding weapons like sword obviously is of metal. But at the same time, cattle are represented in considerable number. Such pictures seem to indicate a society tending cattle and manufacturing tools from metals.

Horse riders, warriors, cattle riders holding weapons are evidently of historical period. In some pictures, the horse rider with weapons (B083, B172), battle ground within a fortification with trappings (B002), humans in silhouette in medium size wearing skirt (B168), *Nandi*, *Hanumān*, *Shiva* as *Bhikṣaṭana mōrthy* are thematically and stylistically of late historical period. Especially, the humans wearing skirt constitute stylistically a distinct class, comparatively speaking known for the first time in the study area and also in North Karnataka.

General Features

For the time being in India traditional method of dating has to be resorted too. Accordingly, attempt has been made to find out the cultural contexts of the pictographs and petroglyphs of the Malaprabha valley. Now, in a shelter there are many pictures probably of different cultural stages. There may be pictures of one particular period also. While dating, this situation these aspects should be kept in view. In the case of the former, picture-wise study has to be made to assign them to a particular cultural stage. For example *āne phaḍi* in Are Guḍḍa (AGD-1), Pillugunḍu (PLG-1), Kannergavi Guḍḍa (KGG-1), Taṭakoṭi (TKT-4), and Huli Phaḍi: the pictures therefore of a particular shelter may belong to different cultural stages ranging from Upper Palaeolithic to Late Historical. If there are pictures in a shelter of one particular characteristic style and features then all of them belong to a particular stage. Therefore, it is picture-wise, in most of the cases not shelter-wise; their cultural stage is ascertained approximately. In many shelters, pictures belong to more than one

particular cultural stage. Further, in some shelters are found many pictures of one stage or of many stages (e.g. B002). It can be assumed all the pictures of one stage are created during one time, and also not by one author. And the difference in date of those pictures of one stage may not be very wide. Hence, approximate date holds good.

Concluding Remarks

The present research is limited to area of about 3000 sq. km in the Lower Malaprabha basin. In the study area to my investigation, 15 sites were discovered and some research works published on the discoveries. 17 sites are newly discovered by the investigator. In all, there are 32 sites known till now. In most of the sites, there are localities with rock art pictures ranging from one to seven. All the localities are on the open sites. There are altogether about 823 pictures depicted. These pictures are of different style i.e. in outline, silhouette linear, stick figure, and X-ray together known as pictograph and petroglyphs comprising: engraving and bruising. Archaeologists have been recognizing another category known as cupules (formerly cup marks). Many sites with cupules have been traced in the study area.

The pictures in each of the locality of every site are documented systematically and methodically mentioning geo-coordinates, dimension, orientation, type, style, present condition, other archaeological evidence in the vicinity of the locality and natural resource.

Each picture in every locality of every site is briefly described highlighting their particular features. Both the documentation and descriptive analysis are supported with tables. The pictures are briefly discussed cultural stage-wise. In the light of their subject, style, superimposition, characteristic features etc. and as result of the discussion. There on, it has been provisionally possible to ascertain the broad cultural stages of the pictures into five stages: Upper Palaeolithic/Mesolithic, Neolithic-Chalcolithic, Iron Age, Early Historic and Late Historic.

The pictures are classified as type-wise and style-wise. The depiction of particular type of animal varies distinctly in style while depicting its physical characteristic features. For example in some shelters boars are depicted displaying its robustness and aggressive nature. In some other pictures such animals are drawn in which the particular characteristic features are mild. In the former the wild nature of

the animals is strikingly displayed and this is more or less common in many pictures from different localities. One may say that these pictures are of the same period but drawn by different people. They may belong to different species. They are distinctly varied in many respects.

Most of the pictures are of early period: Upper Palaeolithic and Mesolithic. In wider geographical perspective such pictures are not found in the other parts of South India with the exception of few sites in Andhra Pradesh. When pictures are reviewed against geographical perspective, it is found that cattle are most dominant in the eastern part of Karnataka. Whereas the wild animals and human figures with exaggerated body are exclusively found in the study area. The eastern part of Karnataka has numerous Neolithic and Megalithic sites in the vicinity of rock art sites. On the very few sites are found in the vicinity of rock art sites in the study area.

The study of cupules is gaining prominence since 1993. Among the cupules noted in the study area in one or two sites it has been possible to understand the purpose of their creation for example game board, sound creation, preparation of paint etc.

The present study is reporting new sites discovered as well as previously known sites in the study area. It also point out limitations of the work. Following aspects are not covered in the present study:

- a. Some of the animals could not be identified
- b. Significance of designs and their distribution pattern can further be explore
- c. To understand of the significance and features of ancient route
- d. Understanding palaeoecology of the rock art
- e. Absolute chronology of the rock art
- f. Site catchment of palaeochannel of the river and to understand the palaeochannel and human relationship through the ages
- g. Analysis of the pigment

These aspects need to understand thoroughly in future.