



REPLICATION OF ROCK PAINTINGS AT CHATURBHUJNATH NALA
ON BHANPURA PLATEAU IN CHAMBAL VALLEY, INDIA - PART 2a

Selection of the Stone Age Compositions and their study

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SUMMARY

Chaturbhujnath Nala, a rich rock art site, presents rock art of Mesolithic Stone Age (Broad Group I) and early Pastoral life (Broad Group II). In the initial stage of replication, we kept ourselves to the minimum compositions, hence selected six compositions from Group I and five compositions of chariots from Group II. The compositions which were clear to study, where one could have the basic understanding of the form, proportions, quality of strokes, brush movement and other details form the criteria to select the compositions.

We have to understand the concept, theme and technique used, selection of the pigment, selection of the site and spot to execute it, height of the composition from the rockshelter-floor, understanding the convenience for creating the composition, its visibility and viewing experience, tentative angle and position for creation, space and environment around it and possible technique and style of its execution. We observed that some of the compositions have been made at convenient positions while some are at difficult locations. It might have been easy to execute some of the compositions at their location, while for certain compositions it might have been difficult to make them. The viewing experience was also worth noticing for some of the compositions. We tried to understand that why a particular composition has been made at a particular location in a particular rockshelter. The study has been presented in two parts: Part 2a, that of Stone Age Compositions, and 2b, that of Chariot Compositions.

The present paper will present our observation and understanding of the cognitive development and spirit of adventure of the artists used in the selection of the spot for creation of studied Stone Age Compositions in the rock art of Chaturbhujnath Nala.

Keywords: Rock art, Replication, Chaturbhujnath Nala, India, Compositions, Study.

RIASSUNTO (SCELTA DELLE RAFFIGURAZIONI DI ETÀ DELLA PIETRA E LORO STUDIO)

Il ricco sito con pitture rupestri di Chaturbhujnath Nala presenta una fase riferibile al periodo mesolitico (gruppo I) e una fase del periodo pastorale (gruppo II). Inizialmente ci siamo confrontati solo con piccole composizioni pittoriche, selezionandone sei dal gruppo I e cinque dal gruppo II (in cui sono presenti rappresentazioni di carri). Abbiamo scelto le scene sulla base di alcuni criteri: chiarezza e facilità di lettura; forma ben leggibile, sia nelle proporzioni che nella qualità dei tratti; stato di conservazione tale da riconoscere il movimento del pennello e altri dettagli.

Il nostro obiettivo era comprendere il concetto, il tema e la tecnica utilizzata, la scelta del pigmento, la scelta del sito e del punto esatto di esecuzione, l'altezza della composizione dal pavimento del riparo, la comodità di creare la composizione, la sua visibilità e l'esperienza visiva, posa e postura da assumere per la realizzazione dell'opera, spazio e ambiente intorno ad essa e possibile tecnica e stile della sua esecuzione. Abbiamo osservato che alcune delle composizioni sono state realizzate in posizioni comode mentre alcune sono in posizioni più difficili. Per alcune delle composizioni in esame anche l'esperienza visiva è stata degna di nota. Abbiamo cercato di capire il motivo per cui una particolare composizione è stata realizzata in un dato luogo in un particolare anfratto roccioso. Lo studio è stato presentato in due parti: la parte 2a si riferisce alle scene del gruppo I (mesolitico); la parte 2b si riferisce alle scene con i carri.

In questi articoli cercheremo di presentare le nostre osservazioni come esse ci abbiano aiutato a comprendere lo sviluppo cognitivo e dello spirito di avventura degli artisti preistorici che hanno scelto Chaturbhujnath Nala per realizzare le loro opere.

Parole chiave: arte rupestre, replica, Chaturbhujnath Nala, India, composizioni, studio.

1. INTRODUCTION

Replication of rock art made by additive technique involves many aspects of preproduction and production processes which will be discussed in several parts. One of the important aspects is to select the compositions for replication. In the initial stage of replication, we kept ourselves to the minimum compositions, hence selected six compositions from Broad Group I (Mesolithic, hunting-food gathering mode of life) and five compositions of chariots from Broad Group II (early

Agro-Pastoral mode of life). The selected compositions were clear to study, where one could have the basic understanding of the form, proportions, quality of strokes, brush movement and observe other details. We have to understand the concept, theme and technique used, selection of the pigment, selection of the site and spot to execute it, height of the composition from the rockshelter-floor, understanding the convenience for creating the composition, its visibility and viewing experience, tentative angle and position for

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creation, space and environment around it and possible technique and style of its execution. It will help to evaluate the cognitive and cultural development of its authors.

2. STUDY OF THE SELECTED COMPOSITIONS

The study of the compositions was made in the RASI studio at Agra and Delhi with the help of enlarged photographs. We also grinded colour pigments to obtain colour and did experiments on making the brushes from different materials. It was followed by the detailed study on the site to have an exact idea of the location and position of the composition. The measurements of the size of composition have been given in terms of length x height.

We studied and observed the strokes and lines of the selected compositions from the photographs and on the site carefully. The point of starting and ending, then mixing it with the following lines, then systematic follow up of the lines to achieve the final composition. Quality, movement, thickness, direction and force of the strokes of the composition are communicating various information like gender, tentative age or age group, hierarchy, flow, motion, character, activity intent in the figures of the composition.

We also tried to understand the strategy and planning followed by the artist, so that we can replicate it similar to the original one as far as possible.

The study is in two parts: Part 1. Study of the Compositions of Period I, Mesolithic, and Part 2. Study of the Compositions of Chariots of Period II.

2. Part 1. Study of the Stone Age Compositions of Period I, Mesolithic.

2.1. Figure 1, Rockshelter No. D6 -10. Running Archers, Mesolithic (a composition of three archers)

Orientation of the shelter: Facing South.

Size of the composition: 45.5 x 22.5 cm.

Dimensions of the individual figures: (from left to right)

F1 - 19 x 19 cm (biggest in the composition).

F2 - 13.0 x 17.5 cm (medium in the composition).

F3 - 13.5 x 16.0 cm (smallest in the composition).

Stroke thickness of the composition: 1.0 mm average.

Viewing level: Below the eyelevel.

Composition Colour: Dark Brown.

Composition Position: It has been made on the roof of the shelter. Difficult to draw, while keeping the head tilted towards the roof with bent knees or oblique folded legs.

Composition execution position: Two workable possibilities which seems possible to be able.

Possibility 1, Standing position: The legs need to be placed at two different levels to maintain balance comfortably. The folded leg would be resting at the 135 cm from the composition, while the straight oblique leg was placed at the 160 cm.

Possibility 2, Sitting on the knees position: It is an uncomfortable position. The artist could not sit in that position for a long time. It is difficult to draw the figures while looking upwards on the roof with bent knees or oblique folded legs.

Observations: Hierarchy in the figures of the composition has been shown by the types and numbers of weapons the figures are holding, the type and style of loin cloth of the figures and the elaboration of their headgears. It is amazing to see that by the size/height and proportion of the compositions, the author was not only trying to communicate hierarchy but also the movement, motion and intending rhythm.

The techniques used for the composition to communicate vital information are worth mentioning. The thickness of the strokes, angle and quality imparts large amount of information about the compositions, such as maturity of the archers, age group and anatomical movement with reference to the age group. The quality of lines and the composition structure communicate the agility one might have around that tentative age and experience. One can see the anatomical details in the height, proportion and body contours. The angle of the limbs and their positions are in synchronisation with the body motion and group movement.

2.2. Figure 2, Rockshelter No. F1 – Women in rhythm, Mesolithic (composition of dancing lady)

a. Orientation of the shelter: Facing North.

b. Dimensions of the composition: The dimensions of the niche, 45 x 75 cm, and that of the composition, 12.5 x 19.3 cm.

c. Stroke thickness of the composition: 3.5 mm average.

d. Location: The composition is made in a niche, slightly below the eyelevel. Its location is more comfortable to view and appreciate the composition visually while standing close to it or sitting on the floor or from the distance.

e. Composition Colour: Red.

f. Visibility: It has been made inside a deep natural niche, protecting from rain water

seepage. It also provides a panoramic view like the Mona Lisa painting by Da Vinci (From all the angles it appears as if the dancing lady is looking at the viewer).

The composition appearance equally impressive right from 30° Northeast to 285° Northwest. It is because of the niche that we are able to get excellent panoramic view from quite a distance, up to 9.00 m of the composition. One can appreciate the composition from all the angles while walking, sitting close or far. It is unlike majority of the nearby compositions, where one has to bent down, sit under or slide under the narrow cavity of the shelter for viewing.

g. Position of execution of the composition: Comfortable position to execute, yet needs technical understanding of the surface to be able to draw the composition well in the niche, as the surface is not flat. For execution of the composition the legs need to be placed at two different levels. The folded leg would be at 110 cm from the composition (lower most level) and the straight leg would be at 135 cm. It is because of the different levels on the floor.

h. Appreciation of the composition (while studying the lines and strokes of the composition): the composition is three fourth facing, where the lower body appear to be standing in an angle but from the shoulder the upper

body seems to be facing towards the front. Although the composition appears to be very simple yet the technicalities to depict abstraction and other feminine details are outstanding. The starting point and ending point of the lines/strokes, the joint of the two strokes and angles of the lines are crucial to show/communicate critical anatomical structural details, body angles and twist, which makes a female composition graceful and majestic while dancing. The sophistication and grace of the composition comes from the delicate, subtle movement in lines and their joints. The composition is so perfect in its balance that even a slight alteration takes away its grace.

The structure of the composition is modern and abstract at the same time, playing with visual psychology (Gestalt law of positive and negative. Dondis 1974: 35-38). The empty space between her upraised arms gives impression of the head.

Because of the depth of the niche, it survived the dripping rain water. Hence, the quality of the survived composition is very good. The lighting due to concave niche is very good even at 4 pm on 17th April, 2021. Rather the niche surface is reflecting the light further enhancing the visibility of the composition.

2.3. Figure 3, Rockshelter No. B4. The load bearers, Mesolithic (A composition of five humans moving in the right. The last figure in the left is almost concealed underneath accretion)

Orientation of the shelter: Facing West.

Dimensions of the composition: 50 x 19 cm.

Thickness of the strokes and lines: 1.7 mm-3.4 mm.

Location: The composition figures are moving in the right in leaning forward position. The composition has been composed below the eyelevel in the small first floor of Rockshelter B4 (in its left side). From here one can have a beautiful view of the Nala and the forest. However, the location of the composition appears difficult to execute as the one is neither comfortably able to sit or stand facing the composition.

Composition Colour: Dark brown

Execution position: The composition is made at a height of 122 cm from the working floor level. It is painted on the right side of the wall, slightly above the eyelevel if seen while sitting on the knees. At present it is close to the edge of the roof, appear to be challenging and adventurous to execute the composition while sitting and looking upwards by bending the neck backward. Observations (while studying the lines and strokes of the composition): Figures in the composition are moving in the right direction. There are four clear figures and fifth one on the left side has predominantly been washed out. The figures have short legs and large head in proportion of the body with bulging load on their back. The entire body, head, arms, load and movement have been shown by an outline and a few thick lines at head give an impression of the arms holding the load placed on their back. The figures are leaning forward to balance the load on their back.

Focus of the composition is in the centre on the figure number 3. Its head and arms are in abstract form

(the stroke thickness of the suggestive arms ranges from 4.53 mm-15.33 mm) are well defined and are a bit larger as compared to the rest of the figures. The composition is dealt with an approach of abstraction, with minimal lines and strokes showing multiple information.

2.4. Figure 4, Rockshelter No. F1. Composition of a buffalo with large broad horns

Orientation of the rockshelter: Facing North-Northeast.

Dimensions of the composition: 27.0 x 9.9 cm.

Stroke thickness of the lines and strokes: Stretched legs 4.5 mm, tail 7.7 mm, horn 5.5 mm and body outline 3.5 mm. The body has been filled in with red colour after making the outline.

Viewing level: At the eyelevel (standing strait).

Composition colour: Red.

Composition Position: The shelter has large panoramic view. The composition is made in the 45 x 34.0 cm shallow niche. One has to stand facing towards Nala and tilt his head up towards the roof to see the composition.

The shelter has two levels. The composition is painted in the upper-level niche, which appears like a small first floor of the shelter. From the upper level there is a beautiful view of the nala and the forest. Yet composition's position appears to be difficult to paint where one is neither comfortably able to sit or stand facing the composition.

Execution position: The composition was made standing at a comfortable position with legs parted, one leg forward and another backwards. This position appears most comfortable due to the levels on the shelter floor. The folded leg would be resting at 125-128 cm from the composition. The strait oblique leg would be at 160 cm from the composition.

Observations: The composition is bold and the body is filled in with red colour showing the masculinity of the animal (buffalo). The quality and thickness of the strokes show the power and the majesty of the animal. The Artist was successful in delivering various information with minimal and calculated strokes. The strategic angles of the lines and form (representing the legs, tail, horns, concealed head) give an impression that the animal is looking to the backside with head concealed and the emphasis is on the huge broad horns. The strokes are not thoughtless lines, there are subtle curves, angles, intentional thickness provided to strokes to bring character and dynamism to the pose of the animal.

The unique characteristic of this composition is the huge horns of the animal. They draw viewer's attention instantly in spite of the simplicity of the composition. As we hold the gaze longer on the head of the animal appreciating the scale of horns we discover that the animal is looking away on the opposite direction of the viewer, and one of the hind leg has been stretched to balance the body weight of the animal, so also the tail has been upraised. The posture is captured beautifully with minimal strokes and force.

2.5. *Figure 5, Rockshelter No. B4. A rhinoceros, Pd1 Mesolithic (one animal)*

Orientation of the rockshelter: Facing South-Southwest.
Dimensions of the composition: 33.0 x 19.5 cm.

Stroke thickness: Body outline is in thin lines, 3.0 mm, and that inside the body are thick, 11.0 mm.

Execution Location: Above the eyelevel on the roof of the rockshelter.

Composition Colour: Red.

Composition Position: This composition is on the roof of the shelter. If facing towards the shelter and looking upwards the composition appears upside down. However, for the correct viewing and to appreciate the composition properly, one has to lie-down on the back, facing towards the nala and looking at the roof. This position is extremely comfortable; one can enjoy viewing and appreciating the composition for hours along with the nala and natural green landscape in front of the composition.

Position of execution: The composition is in the centre on the roof of the shelter. To execute the composition the artist has to stand facing towards the nala, fully tilting his head up looking towards the roof. The distance from the floor to the composition is 197 cm, making it extremely uncomfortable position to keep the neck tilted and arms up for long to execute the composition with precision having full control on the brush.

Observations: The shelter has a very big, long, large and comfortable roof richly painted mostly with the compositions of early period I. From the shelter one can have a beautiful panoramic view of the nala and the landscape. The floor is in large step-like rock formation inside the shelter providing many terraces to sit and sleep over it in the comfortable lounging position.

At the first glance, this specific composition of Rhinoceros seems out of place and upside down among other compositions. But once we find the right viewing angle, it appears as if it was made specifically to appreciate from that spot for one's delight. In deciding the position and angle of the composition the artist did not follow other artists, but went on to create his own viewing experience. It is strategically made with an understanding of having natural landscape in the background. Making it appear as if the Rhino is in the forest and the natural landscape with the nala as a part of the composition.

The built and the body structure of the composition is large and in the motion. The entire composition is drawn with two different thicknesses of the strokes (Gestalt law of similarity. Lester 2011: 46). The thin line is used to define the entire body form and thick strokes are to show the thick armour like skin of the animal. The slight angles and form of the small legs have been shown with deep observation, communicating how an animal with heavy weight and power would move with force.

2.6. *Figure 6, Rockshelter No. B7. Colour strokes, Mesolithic (free hand colour strokes, appearing as abstract form of bamboo forest or forest fire!)*

Orientation of the shelter: Facing South - South West.

Composition size: early strokes 43 x 30 cm, latter strokes 35 x 15 cm.

Stroke thickness of the composition: The strokes are going upwards, hence thick at the bottom and tapering upwards to thin top end. Early strokes are comparatively thin than the latter strokes. The thinnest stroke from the bottom is 5 mm and thickest one is 8 mm.

Composition Position: The shelter has the panoramic view of the nala. The composition can be viewed only when one is lying down on the floor and looking towards the roof.

Location of the composition: The composition is made on the roof of the shelter, above the eyelevel.

Composition Colour: Red and brown.

Execution Position: Lying on the back and painting on the roof appear fairly comfortable, however for short time.

Observations: The shelter has good shadow and comfortable temperature even in the noon in hot April. To see the composition clearly one needed light even in the afternoon.

Appreciation of the composition. The strokes are in the upwards motion from a thick brush of two different sizes and have been made at two different times. The strokes comparatively thin have been superimposed by the comparatively thick latter strokes. The brush must have been able to hold enough colour and could have moved effortlessly on the rough rock surface. These are confident strokes made with force. The study of the strokes reveals the structure of the composition. The strokes have been executed in a systematic and planned way. They exhibit alignment, pairing and sequence following the visual psychology (modern Gestalt law of proximity. Lester 2011: 46).). The thickest point of the stroke is more or less flat and it gets pointed upwards, showing the force with which, the stroke must have been made. The composition is in abstract form and could represent many concepts. It is a unique composition of its kind in the rock art of India.

3. OBSERVATIONS

- The compositions have been made on different uneven surfaces at different angles and heights from the floor. Study of the compositions on the site provided us a chance to understand the convenience or difficulty the artist might have faced while creating the particular compositions. The movement of the line and the thickness of the stroke also depends upon the surface and the angle of drawing.

- We observed that when the angle between the surface and the hand of the painter is about 180° or so, it is the most difficult position and exerts strain on the shoulders and the neck. As the angle decreases between the painter and the surface the complication and the strain level also decrease. The lying position is the most comfortable to execute the composition if it is made on the roof close to the shelter floor. With the increase in the height of the composition from the floor, the difficulty level increases.

- While making composition, if by mistake the stroke/line deviates from the desired direction, at

that point the artist has painted that particular portion thick to minimise the damage.

- Movement of the strokes depends upon the pigment, thickness of the brush, position of the surface and its texture.
- The position of the artist to make the figures and the height of the location from the floor determined the quality of the figures and composition. When the figure is made on the roof in standing position, The artist has to compromise with the quality of the figure, but that's not the case with the figures made while sitting or standing on the knees. In this position turning head and waist is comparatively comfortable, but looking towards the roof for a long time keeping the head high still exerts strain over the neck.
- The figures rich in artistic qualities are generally found on those surfaces which are vertical and its height is at the eyelevel. Apart from the vertical surface, such figures are found on the roof close to the floor and made in the lying position. These figures can be seen only in a lying position.
- The most comfortable and convenient angle to compose the figures is 90° between the surface and hand of the painter, either in standing, sitting or lying position.

4. COMMENTS

Each composition has its own specific features and story/message to communicate, however, its location in the rockshelter matters a lot.

The location of the compositions can be classified in to three categories:

- a) At eyelevel. Usually, the Mesolithic compositions are at eyelevel.
- b) Above the eyelevel
- c) Below the eyelevel

We realised that except in the case of 'a', in all other cases it is a tedious task to execute the composition. In case of 'b' the artist might have experienced a lot of pain in the neck because of looking upwards for a long time. In case of 'c' the artist has to stand either on the knees by bending the legs or sit on the knees. Both the positions are difficult and painful.

CONCLUDING REMARKS

We observed that selection and location of the Mesolithic compositions in the rockshelter was well thought out in terms of execution strategy and processes, the surrounding environment, visibility and effect of the composition on the visitors. The compositions are also well planned and thoughtfully created by the artist who was highly observant and was having analytical mind and great skills, deep understanding of the environment and structure in it.

The compositions are sophisticated and complex with applied technicalities of art and design, rich in information, analytical observations, anatomical and structural details gracefully manoeuvring simple strokes and lines. At some places, even with the limitation of the brush, the artist was able to execute powerful strokes and created soft and delicate lines. Force and power in the brush movement on hard rock surface seem surprising. It changed our perception of rock art completely.

These compositions had been made keeping in mind the following:

- Context (gender, age, clothing, weapon details, etc. to build a context of the composition).
- Surface (nature of surface, levels and textures).
- Structure (anatomical details, position and, angles of the figures).
- Viewing experience (positions, lighting conditions, proportion and size of the composition and effort required to view them building a context in itself).
- Environment (immediate surroundings and experiences).
- Narrative (the essence of the composition to generate an experience of the incident and concept).

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Fig. 1 - Composition of three running archers. CBN Rockshelter No. D6-10. Mesolithic.



Fig. 2 - Lady in rhythm (Dancing lady). CBN Rockshelter No. F1. Mesolithic.



Fig. 3 - A composition of Load bearers. CBN Rockshelter No. B4. Mesolithic.



Fig. 4 - Composition of a wild Buffalo with very broad and long horns. CBN Rockshelter No. F1. Mesolithic.



Fig. 5a - Composition of a Rhinoceros. CBN Rockshelter No. B4. Mesolithic.



Fig. 5b - Lounging is the proper position to view and appreciate the Rhinoceros composition.



Fig. 6 - A composition of freehand strokes in two layers, might be a representation of bamboo jungle in abstract form. CBN Rockshelter No. B7. Mesolithic.