

Rock-Art at Usgalimal, Goa: A Neolithic Open Museum

An Overview

In early 1990's, after the torrential rains caused the silt from certain segments of the rock-bed, along the northern banks of Kushavati River to be washed out, local farmers noticed some of the exposed carvings, *Goravarakhnyachim Chitram* - cowherds' pictures - in the local Konkani, and brought to the attention of the officials.

On visiting the petroglyphic site at Usgalimal (also called Pansaimol) in the district of Sanguem, the Team, assembled by the Directorate of Archives and Archaeology, set out to clean the c.3000 m² laterite bedrock to further expose over 120 exquisite pictograms. Although the area around this site presently has limited State government protection from further mineral exploitation, the immediate surroundings have not been well researched and the precise age determined. The authorities¹ initially estimated that humans most likely inhabited this area some 6,000-7,000 years ago, based on the finds of a few stone artefacts and the petroglyphs perhaps later. Since no carbonaceous artefacts (for radio carbon dating) have been uncovered, the exact date cannot be determined.

The semicircular flat rocky platform on the northern banks of the river, a tributary of the Zuari River, (15°07'14.5" N 74°07'59.4" E, at an elevation of 167 ft.) is located at the bend of the river turning southeasterly, and is enclosed to the north by a narrow canal resembling a moat. Presently, access to this site is by walking over the narrow log bridges (without railings) spanning the canal to the north and across the river.

This liminal island setting appears to have been community's sacred space to offer sacrifices to their gods and goddesses, perhaps for conducting rites of initiations into adulthood, birth and death rituals, socializing and story-telling.

The discovery of hundreds of unique carvings at one location, that lay buried for millennia, are now considered to be the oldest archaeological petroglyphic site in Goa and perhaps in India. These are now our prehistory books and a museum that tell us of pasts and hopefully offer insights into the present.

From the large number of carvings at Usgalimal, it is apparent that the undertaking must have taken a long period of time to carve with stone tools - before the age of metals - with a well-conceived plan and under some priestly leadership. It is also apparent that the stone carvers and megalith builders were endowed with a high level of intelligence and artistic talents and strived to

understand their world and know their Creator and idolize the dead heroes. The carvings must have been very important to the community that they took the time to etch it into rock, and were very familiar with their surroundings and the anatomy and behavior of the creatures around them. This is one of the reasons human ancestors in pre-literate times the world-over recorded their experiences on such durable media as stone and rock.²

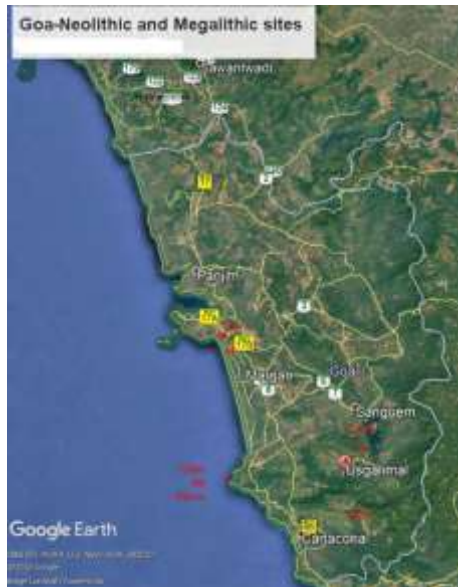


Fig.1 Map of Goa



Fig.2 Satellite photo of site on the bank Kushavati River

The corpus of carved images include snakes, bulls, dogs, goats and deer, peacocks, an eagle, fishes, earth mother, dancing humans, anthropomorphic and other unidentifiable entoptic or masked figures, and geographical and time markers. The human figures are concentrated on the eastern side.

With the advent of agricultural age, the nomadic hunters-gatherers cleared the virgin forests with their new invention: the stone axe and created farmlands which offered rich virgin soil to grow their crops, and still continue to fish, hunt and forage for fruits, honey, seeds, mushrooms, bulbs and roots, and raise their growing families, in the vicinity of the tributaries and sources of fresh water.

The centrally located large carved labyrinth, (partially visible in fig.2), symmetrically placed between two rectangular carved-out pools of water, fed by the river water, also adds to the possibility that it may have had religious significance.

The stepped pool to the East is approximately 5.23m (W-E) x 4.62m (N-S) in size. The pool to the West 3.81m x 4.75m and each step about 35.5cm long. In several cases the cuts are distinct but not dislodged from the mother rock. It is

apparent that the carved steps seen in Fig.3a would have been used by the worshippers to descend into the pools.



Fig.3 View from west of pools of water and the river



Fig.3a. A corner of the pool showing the carved steps



Fig.4 A view from the river facing north

Small Animals

Scores of small animals, mostly caprids, are dispersed throughout the rocky platform, but significantly, there are no discernable carvings of boars or pigs, elephants, buffalos, horses, nor hunting scenes, or weapons like bow and arrows, wheel or horse cart.

A segment of small-animals carvings between the large central carving and the labyrinth are depicted in figs.5-12 and the peacocks in fig. 13 and 14 at the northeast corner.



Fig. 5 Bushy tail deer



Fig. 6 Deer



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Most of the animals depicted appear to be males, from their prominent phallusus, and, are either facing in one direction or at each other.



Fig. 12 A Griffin-like animal-bird hybrid?



Fig. 13 A Peacock



Fig. 14 A hybrid bull-bird carving

Big feet

Two side-by-side giant feet (137cm long x 56cm wide) are also very conspicuous carvings at the northern edge of the eastern pool – that is abutting the river – as seen in the picture below to the left the labyrinth.

Such feet-carvings, seen elsewhere have been interpreted to represent a person's journey through the rock to another world or to those of the dead who cross over between worlds when their souls part their bodies. In analogy to the caves, the deep waters represent the underworld.³



Fig. 15 Giant feet and some animals acting as guards/attendants on either side. (Note the last two digits of the left foot appear as heads.)

The Stone Axe

In 2013, a polished stone axe-head, which closely resembles a modern iron axe but without a hole, was found lying on the grassy surface in the vicinity of the rock carvings. It is very smooth to touch and measures 20cm x 15cm and weighs about 1.87 Kgs. Except for some damage to the lower end of the blunt blade, it is in very good condition. The polished axe-head found at this liminal site perhaps also represented a symbol of power by religious leaders. It is also a close model of the axes forged during the Iron Age and later.

The invention of the axe, that started the “Farming Revolution” of the Stone Age, has been considered to be as important as the wheel and the steam engine of



the Industrial Age. This simple human invention made it possible for the nomadic tribes to transition to the Neolithic Age – to become the first farmers. The axe transformed the landscape from forests to agricultural farms. The abundance of food supply produced locally led to permanent settlements, larger families and structured societies.

Fig.16. Polished stone axe found at the Usgalimal (now housed at Pilar Museum, Goa)

The Labyrinth

This unique 3-dimensional labyrinth (fig.18) is considered to be the oldest in Asia by Labyrinthos, a publication dedicated to documenting similar engravings world-wide. At the Festival on Labyrinths at Hersonissos, Crete in 2013, the experts estimated that the labyrinth in Goa to be about 4500 years old.

Unlike a maze, with many dividing paths and dead ends frustrating the objective of reaching the center or the goal, the labyrinth at Usgalimal is a meandering one, with undivided continuous circular path - unicursal maze - leading to the center and back.



Fig. 17 Model of the labyrinth



Fig.18 Labyrinth at Usgalimal-Goa



Fig.19 Labyrinth at Cornwall, U.K. (Credit: Alistair Park)

After studying several models to decipher the carving at Usgalimal, the one that fits very closely is of a tightly-coiled python or a serpent with cup holes in the center and four creases or wrinkles at the folds, as seen in fig. 17. These “openings” at the folds could not be discerned readily, and, were most likely carved out so that the vivifying rain water or the sacrificial blood would flow freely throughout the labyrinth.

To Maria Gimbutas, a native Lithuanian, “the snake is the life force, a seminal symbol, epitome of the worship of life on this earth.... It is the energy exuded by this spiraling and coiled creature which transcends its boundaries and influencing the surrounding world They must have been guardians of the springs of life in prehistory, as they still are in the European folklore....”⁴ The similarity in design between the labyrinths in Goa and Cornwall, (fig.19), separated by nearly 8000 km is remarkable and it raises the question as to how this information was communicated in prehistoric times?

In 1852, Captain Meadows Taylor had studied the habits, beliefs and history of the tribe in the village of Jiwari in Deccan. He wrote that “the ancient remains at the village on the Bhima River ... appear evidently to belong to the same family as the Celtic and Druidical or Scythic of England and Brittany... as well in Denmark, Russia”⁵ The Druids viewed the Serpent with much respect, and

treated it with veneration ... and, as a symbol of the sun. The Persians also worshiped the Serpent, which they considered as a representative of their god Mithras.⁶

According to B.H. Baden-Powel...“there was an ancient serpent (and sun) worshipping race in Kashmir; that the people of Taxila, in Alexander’s time, were snake worshippers.⁷ Presently, in the Kashmir Valley and the Kangra Valley in Himachal Pradesh, there are several shrines in the vicinity of the springs dedicated to the snake gods, Shesha Naga, Vasuki, Karkotka and more. In Kashmir, the word for spring is also *naga*, who are considered to be the earliest inhabitants of that region. According to the local legend, King Lalitaditya is believed to have been born of a serpent Naga.⁸



Fig. 20 Carving at Usgalimal



Fig. 21 Picture in real life - (source Internet)

The exotic carving of rarely observed snake pairing fig. 20 is a testimony of the artists’ intimate knowledge of the animal behavior and their environment.



Fig. 22 Snakes on top of staff



Fig. 23 Flying snake? Enlarged from fig. 11

Earth Mother/Mother Goddess

The image of Earth Mother or Mother Goddess, carved on a large laterite rock bed of the Selaulim River bank in Curdi, in Sanguem taluka - not far from Usgalimal - is estimated to have existed for at least 2500 years. In 1988, before the tributary of Zuari River at Selaulim was dammed, the Directorate of Archives and



Fig.24 Earth Mother form Usgalimal with prominent vulva and compound heads of an animal and a snake or eagle.



Fig.25 Earth Mother from Curdi now in Verna

Archaeology, concerned that the prehistoric treasure would be submerged by the newly-created reservoir, decided to salvage from its watery grave and relocate the iconic megalith to Verna.^{9,10}

The anthropomorphic Earth Mother at Usgalimal is unique in that a human head is replaced or masked by that of an animal and above it, most likely an eagle with wings spread out over the stretched hands.

Mother Goddesses are fertility deities, are young, full-breasted and highly sexual, whereas, Earth Mothers are cosmogonic figures, the eternal fruitful source of everything. She is fertilized by the sun, rain and heavenly spirits through the prominently exposed vulva, to bring forth terrestrial life. Both carvings in Goa, with prominent vulvas, appear to be of the latter type.¹¹

Dancer and Storyteller



Fig. 26 Dancer - Lord who is half woman or a shaman representing both sexes.



Fig. 27 A dancer

The life-sized human figures of the dancer-story teller are located at the easternmost end of the site. In fig. 26, since the left leg is more muscular and half covered than the right it appears that the individual is androgynous - *Ardhanarishvara* - half man and half woman. As it also holds torches in both hands, the event appears to be at night.



Fig. 28. Drum-beats to accompany the dance

The audience, most likely would have sat on the grounds adjacent to the site, farther east at the bend of the river, separated by a narrow canal, as seen in the satellite photo in fig.2.

Another life-sized carving of a dancer in the same vicinity (fig. 27) is very close to the edge of the water. This figure can only be seen during the driest period of the year when the water level recedes.

The location of the carvings of these figures appears to be deliberate and planned so that the performers would be closest to the audience seating on the special ground further to the east facing westward.

Sky-watchers and Time Keepers

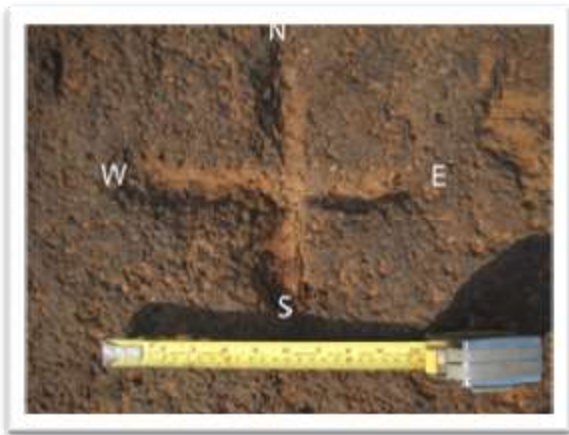


Fig. 29 Showing cardinal directions



Fig. 30 A possible Sundial

The above carvings indicate that the early settlers of this land were familiar with the directional concept of space, both from their observations of the movements of heavenly bodies, the sun and moon, and particularly, the fixed North Star (Polaris) that was easily visible every night from the petroglyphic site on the bank of the river.

The cardinal points of cross have been confirmed with the compass. The cup marks in a semi-ovoid arc in fig.30 are most likely the markings of the angle of the shadow measured during the course of the day, averaged over time. This should be further studied by modeling or on site.

Humped Zebu Bulls

At eastern end, griffin-like hybrid humped bull with phallus. (Note the hind legs that of a bird, fig.21). As the rising sun (dawn), it travels from east to west. Also possible, the bull may be carried by the giant bird, most likely a peacock, represented by another peacock just below.

A few of the other petroglyphs of the bulls are depicted below.



Fig. 31 Stylized bulls of different species at the extreme north-west end



Figs. 32 and 33 Other petroglyphs of stylized bulls



Figs. 34 and 35 Bulls with horns pointed inwards to almost a circle

Unlike the many humped and other types of bulls, with prominent phalluses, there is not one easily recognizable female species among the bovines or caprids.

Sacrificial Bulls

Evidence of bull worship has been found in almost every part of the ancient world - in Çatal Huyuk, Anatolia (modern Turkey), as early as c.7000BC and Crete in c.2000BC. Images of bull sacrifice have also been found engraved on Sumerian porphyry cylinder seals c. 2300BC. It is also documented in the cuneiform tablets, the epic poem of Gilgamesh, that ...”they butchered and bled the bull and then cut out its heart to offer as sacrifice before Shamash (ancient Mesopotamian sun-god).”



Fig.36 A bull with a collar around the neck



Fig.37 A headless bull

The petroglyphs shown above, present in great details very realistic images of the sacrificial bulls. There is also a channel or link connecting the headless animal near the pool fig.38 connected to the anthropomorphic one I fig. 30 (see figs.29 and 30).



Fig. 38 The headless bull linked to the large iconic petroglyph at right

Ritual killing of the Epaphos bull in Egypt was recorded by the 5th century BC Greek historian Herodotus. The priests lead the animal marked for sacrifice to the altar then kindled the fire and poured libations of wine over the altar so that it flowed onto the victim. The head was either sold in the marketplace (where there are Greeks), or hurled into the river, as no Egyptian would eat of the head of any animal. This was the curse they pronounced on the head.¹²

In late 19th century, Henry Whitehead¹³ spent several years in the southern part of India and wrote about similar sacrificial rituals in the villages he visited. Typically, “when the appointed day arrived, the buffalo is sprinkled all over with yellow turmeric, while garlands of margosa [neem] leaves are hung round its neck and tied to its horns. At about two p.m. it is conducted round the village in procession to the sound of music and beating of tom-toms.”

The carcass was later distributed and consumed by the villagers. The head was usually left outside the village boundary, believing that with it also averted the present and future pestilence. These rituals also helped promote fellowship and communal bonding.



Fig. 39

In the Persian religion, Mithra slays the bull from whose blood, when sacrificed, spring wheat and vine His devotees receive the blood of the bull as a symbolic rite ... to renew their souls.¹⁴

In fig. 39, the small footprint-like carvings, in groups of two's and three's, in the foreground, adjacent to and in front of the central petroglyph, appear to be seeds planted in rows with a digging tool, and are nourished with the fructifying

blood of the sacrificed animal flowing through the channel from the headless bull (near the pool) - analogous to the Persian rituals. Life nourishes new life.



Fig.40



Fig. 41



Fig. 42

Figures 39 to 41 are different perspectives of the same petroglyph normally seen from a different angle, as in fig.39. In fig. 41, the image, which resembles a human head, is a composite of several axes and tools arranged tightly as in a jigsaw puzzle, as seen in fig.42.

Furthermore, this face incorporates a peacock's head over the left eye, an inverted deer under the nose, with horns as the lips and, most interestingly, what appears to be a lighted candle. All this reveals a treasure trove of vital information in one pictogram. Like, the shapes of tools used, food consumed, and the wax candles as the source of energy. Wax, a byproduct from the much sought after honey, a sweetener, from combs by wild honey bees. In season, with growth of rhododendron flowers (and in plants of the Ericaceae family), the honey would possibly also contain a hallucinogenic substance (grayanotoxins or "mad honey"), which is much sought after and consumed even in modern times by the Gurung tribesmen¹⁵ in Nepal and several regions of the world during their seasonal celebrations.

Conclusion

The intricate and unique rock carvings at Usgalimal are a testimony to human habitation in Goa and the Konkan region from very early times. Initially, as migratory hunter-gatherers, during the Paleolithic Period (Early Stone Age, before 10,000 BC), they lived on wild plants, fruits, nuts, roots, meat and fish. The men hunting wild animals and the women gathering from nature's sources. After the invention of stone axe during the Neolithic Age or New Stone Age, approximately 10,000-2,000 BC) they became the first farmers in Goa. The Neolithic Revolution that started around 10,000 BCE in the Levant (Eastern Mediterranean countries) progressed to sites in the wider Fertile Crescent, and later to other parts of the world.

During this period the "new farmers" radically transformed the landscape of Goa by clearing the forests and building irrigation systems to grow the crops, and to develop permanent settlements in the vicinity of rivers and forests. Neolithic humans also domesticated cattle, pigs and goats as convenient food sources. The women - gatherers of plants, seeds and nuts - were most likely the first plant breeders to improve upon the wild varieties and initiated the Agricultural Revolution. Some of the tools that were used at that time are sickles or curved cutting knives made of flint, axes, querns and hammers made of polished stone. Many of these have been found in Goa. Thus, the Neolithic Age changed the course and history of the human race and the prehistory of Goa is documented and engraved in stone at Usgalimal.

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(<https://www.nationalgeographic.com/magazine/.../honey-hunters-bees-climbing-nepal/>)

(Besides honey, flowers and leaves azaleas and rhododendrons also contain grayanotoxin.)

Themistocles D'Silva (2019)