
Archaeological Vestiges of Khandagiri and Udayagiri: Revisited

Dr.Rusav Kumar Sahu¹

¹Lecturer in History
Vikram Dev University
Jeypore, Koraput (Odisha), India
Email:sahu.roshank@gmail.com

Abstract: The twin hills of Khandagiri and Udayagiri (Lat. 20° 16' N; Long 85° 47' Elev. 287ft.) are located in the western outskirts of Bhubaneswar. The site is surrounded by Baramunda Bus-stand in the east, Patrapada village in the west, Jagamara village in the north and Chandaka reserve forest in the south. One can approach the site on the right side of the NH-5 leading from Kolkata to Chennai branching at Khandagiri Chowk in Bhubaneswar. The site is famous for the rich archeological treasures like the earliest rock-cut caves in Odisha, Hatigumpha inscriptions of Kharavela, earliest apsidal structure at the summit of Udayagiri hill like Besnagar and Satadhara in Madhya Pradesh and the earliest figurative representation of Surya and Gajalaxmi on the back wall of Anantagumpha.

Keywords: Besnagar, Gajalaxmi, Khandagiri, Odisha, Temple, Udayagiri etc.

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Introduction

Although the caves of Khandagiri (**Fig.1**) and Udayagiri were known to the poets, mendicants and religious people, the site was brought to the academic world for the first time by Andrew Stirling¹ in 1820. Thereafter a host of scholars worked in the various aspects of the rock-cut caves and inscriptions of Hatigumpha in Udayagiri hill. The inscription was first deciphered by James Princep² in 1837 and it was Bhagwanlal Indraji³ in 1885, who was credited with the first authentic reading of the inscription. Originally, there were several rock-cut caves, but as on today there survive 33 caves (18 in Udayagiri and 15 in Khandagiri) under the protection of ASI in various stages of preservation.

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However, the Digambara Jaina temple located on the summit of the Khandagiri hills is not a protected monument. On plan, the temple has a *vimana* and a frontal *jagamohana* stands on a high *pista* with a height of 1.20 mtrs. The temple is enclosed with a modern compound wall with an entrance in the north. With the discovery of the rock art and stone tools from the natural rock shelter Hatigumpha, the antiquity of the hillock dates back to the prehistoric period. The archaeological investigation has shed some new lights on the twin hills and discussed in two parts such as Prehistoric vestiges and Historic vestiges.

Prehistoric Remains

Stone tools

The survey on the twin hills of Khandagiri and Udayagiri yielded both heavy duty tools and microliths⁴. The heavy duty tools consist of hand axe and scraper (**Fig.2**). These tools are basically made out of quartzite and sandstone. The hafting tools like microlith consist of burin, lunate, crescent, blades, trapeze and are made out of different cryptocrystalline material like quartz, chalcedony and chert (**Fig.3**).

The Udayagiri hills yielded the maximum number of heavy duty tools along with flakes. This finding of large number of flakes of different sizes indicates that it may be used as a factory site. The raw materials of these tools are same as the stones found on the hill. But in case of microliths things are different. All the raw materials are not found in the hill, which suggests some kind of exchange tradition of tools and materials might have been taken place from outside the hillock.

These heavy duty tools and microliths are found at the different locations of the hill in an isolated manner. The northern and eastern part of Udayagiri hills yielded only the heavy duty tools assemblage and the southern part of the hill (near the Hatigumpha cave) yielded only the microliths. The Khandagiri hills also yielded few microliths and cores. In the exploration, one Hand-axe was discovered at the foothills of Khandagiri by A. K. Ghosh⁵ of Archaeological Survey of India in the year 1961-62. Scholars failed to notice the prehistoric materials due to the large scale quarrying activities in the hills for the long period of time and exploitation of the raw materials during the ancient and medieval period for building activities, which damaged the natural geological formation of the hillock.

Rock Art

Khandagiri and Udayagiri hill yielded both rock art and rock-cut art. The former is a prehistoric phenomenon, whereas the latter is a historic concept. In the twin hills only Hatigumpha (**Fig.4**)

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contained rock art that is a natural rock shelter. Oriented east-west and facing north, the rock shelter measures 16.75 meters in length, 8.95 meters in depth and 3.95 meters in height. The summit of the hillock has a strategic location with a total command over the surroundings an ideal location for the prehistoric nomad to watch the movement of animals in the vast surrounding plains.

In Hatigumpha a total number of 20 specimens of engravings and three specimens of paintings of the Neolithic-chalcolithic⁶ period have been discovered. The engravings otherwise known as petroglyphs include a host of motifs such as serpentine, triangle, heart pattern, foot mark, cupules along with a horned animal (**Fig.5**) found in the ceiling and wall of the rock shelter. These engravings were originally pigmented with hematite (*geru*) as evident from the traces of *geru* in the grooves of the engravings. The paintings in hematite include anthropomorphs and intricate patterns. A hematite quarry has been noticed on the southern slope of the Udayagiri hill. Hematite was mainly used by the prehistoric nomads for their rock paintings which is popularly called *pictographs*. Globally the hematite was used by the pre-historic men for rock paintings. But in Udayagiri hill, hematite was not only used by the prehistoric hunter gatherers but also used by king Kharavela in his Hatigumpha inscriptions and other caves like Rani-gumpha. This indicates that from the prehistoric time to the historic period, this quarry has been utilized and exploited by the people.

Thus the discovery of Rock art in the historically famed Hatigumpha not only pushed the antiquity of Hatigumpha to the prehistoric times, but also gives a new dimension to the study of rock art in the state in terms of its extension in the coastal Odisha and continuity of tradition from the prehistoric time till the early historic period.

Unfinished rock-cut caves

The survey yielded some unfinished caves in Khandagiri which were not numbered by the ASI. These caves are in a dilapidated condition. Some of the natural rock shelters have been transformed into the rock-cut caves where chisel marks are clearly visible. In Khandagiri the scholar documented 5 unfinished rock-cut caves and two small rock shelters in Udayagiri without any trace of human workmanship.

Historic Vestiges

Apsidal structure

Above the Hatigumpha in Udayagiri one can find the ruins of an apsidal structure. The ruins consist of laterite slabs within the apse-end is a circular wall. The plan of the entire complex is similar to

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the Buddhist *chaitya-grihas* of Deccan and Madhya Pradesh. The space between the outer walls could have been used as circumambulatory passage.

The length of the apsidal structure is 23.60 meters and is facing to the west. The breadth of the structure at the entrance is 13.25 meters. At the centre, the breadth is 13.20 meters. From surface level the height of the apsidal structure is 1.15 meters. The diameters of the shrine are 7.40 meters and the height of the laterite block measures 20 cm. The length and breadth of the laterite block measures 1.25 meters and 70 cm respectively. It varies from one laterite to the other. The width of the *Pradakshinapatha* (Path of Circumambulation) is 2 meters. Besides a large number of posts holes are found both inside and outside the structure may have been used for temporary roof. In the northern corner of the apsidal wall, there is a rock-cut drain to take off water from the circular structure.

Sun Motif and Sun-god

One of the earliest figurative representations of Surya⁷ in Odisha has been carved in the tympanum frieze of Anantagumpha in Khandagiri. Here Surya is depicted as a turbaned royal personage wearing heavy *kundalas*, a necklace and bangles. The turban is of typical Sunga style found in the terracottas of northern India. He is seated under an umbrella, with a female attendant holding a flywhisk on either side and driving a chariot drawn by four spirited horses. Only two horses are visible on the left half of the yoke. The other two on the right probably could not be carved for the want of space. The two-armed god holds a flower (lotus) in his right hand and the reins in the left. On the left corner of the part of entablature is a demonic pot-bellied dwarf in fleeing pose holding a banner in his right hand and a spouted pot in the left. A round symbol of the Sun in the shape of a circle with rays around it and a symbol of moon in the shape of a crescent with stars are seen behind the heads of the female attendants on the right and left of the god respectively. These motifs of the sun, moon and stars, no doubt, symbolise the stellar world and make it clear that Surya's chariot is moving through the celestial sky. It is also to be noted that the Sun-god is represented in this panel both in human as well as in symbolic form. The right part of the relief is probably broken out which should have the two horse figures⁸.

Debala Mitra rightly pointed out that the Anantagumpha has four tympanums over the door-openings. The first represents an elephant, the second tympanum is Surya, the third one represents Gaja-Lakshmi in a lotus pond and the fourth is a sacred tree in railing with worshippers. J.N. Banerjea also observes more or less similar composition and affinity with the Lalabhat relief

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specially marked by the presence of the goddess Sri Lakshmi disporting elephant. But he does not openly accept these features relating to the sunrise as we find here⁹.

Other abstract form of Sun-god is also carved in the middle of the back wall of Tattvagumpha (**Fig.4**), lower down the Khandagiri hills and Manchapurigumpha in the Udayagiri hills¹⁰. The twin hills are revered as holy places of Jainism right from the 1st Century BCE to the present day. Even then the Saura cult was popular here along with this faith in the early-historic period.

Gupta-Ganga and Rock-cut stepped well

Gupta-Ganga, a long natural tunnel is situated behind Devasabha at a lower level. At its rear end there is a small pool of water. The front of this tunnel is widely open and gradually it becomes narrower towards the end. Oriented to North-south Gupta-Ganga facing towards the west measures 4.42 meters. From mouth to the bed rock it measures 7.50 meters long. Beyond the bed rock it extends up to 4 meters and the height of the tunnel is 2.42 meters. It is located towards the southern side of Cave No-15 in Khandagiri. In front of the tunnel there is a grinding hole with a measurement of 21 cm diameter and a depth of 11 cm. This tunnel might have been used from the prehistoric period to the modern days.

The twin hill also yielded three rock-cut stepped well (**Fig.6**) of early medieval period particularly during the Somavamsis period which are now in a dilapidated condition.

Amalaka manufaring industry in Khandagiri

The survey yielded an *amalaka* manufacturing industry in Khandagiri¹¹. The scholar has found 136 pieces of stone of *amalaka*. Out of 136 *amalakas* 52 are full size, 22 are half size, 24 are quarter and 38 are fragmentary pieces. Out of 52 full size *amalakas*, 14 are lying on the surface. The diameters of the full size and smallest one are 50 c.m. each with the thickness of 27 cm. Again the diameter of the quarter size *amalaka* is 60 cm with the thickness of 34 cm. The diameter of the maximum number of full size *amalakas* diameters is 90 cm with the thickness of 40 cm (**Fig.7**).

This large number of *amalakas* in Khandagiri indicates that this was the manufacturing industry from which these were transported to Bhubaneswar to be used in the temple structures. Besides the *amalakas*, the scholar has found 53 stone slabs that were used in the temple construction. As far as the largest number of temple construction in Bhubaneswar is concerned, many Historians and Archaeologists believed that the stones came from the Khandagiri hills. The numerous stone cutting

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or chiseling marks are clearly visible in this hillock which testifies the facts. Again sandstones of similar structures and compositions are quite evident in the temples of Bhubaneswar.

Basically *amalaka* is used in the *mastaka* of a *Kalingan* temple not only to seal the superstructure but also to add glamour to the temple. However, in the notable *Khakhara* temple like Vaital, three *amalakas* are used in the *mastaka* of the *vimana* for which it is locally known as “*tinimundia deul*”. In the *panchayatana* temple like Brahmesvara, six *amalakas* are used in the *vimana*, *jagamohana* and four subsidiary shrines in the four corners of the main shrine. The *amalakas* are even used in the burial temples (*Gurvayatana*) of previous *matha Mahantas* found in the *matha* precincts. These temples were constructed by the disciples for their religious merit and contributions to the society¹². A large numbers of such temples are found in the Bharati *matha* precincts in the Old town area of Bhubaneswar.

For transportation of these materials there was a stream flowing on the foothills of Khandagiri which was called Yogonadi or presently Yokalandi which was a tributary of the river Daya flowing near Gandamunda. The name of the village suggests that it was a large water body. Through this river all the stone materials for temples in Bhubaneswar were transported from Khandagiri.

Conclusion

Today due to extension of the urban settlement and aridity of the climate, these rivers and the water bodies have dried up. But one can trace the contours through aerial survey. Further work in the site by way of intensive and extensive exploration and excavation will certainly testify and highlight the archeological importance of the site since the prehistoric times to the present day.

Notes &References

- 1.Sterling, A, *An Account, Geographical, Statistical and Historical of Orissa Proper or Cuttack*, Serampur: British Library, 1825, p. 311ff.
- 2.Princep, J, “Notes on the Inscriptions at Udayagiri and Khandagiri”, *Journal of the Asiatic Society of Bengal* (Old series), Vol. VI, 1837, pp.1072-91.
- 3.Indraji, B, *Actes du Sixime Congress International Des Orientalists*, part. III, section 2, Leiden, 1885, pp.152-77.
- 3.Sahu, R.K, *Archaeological Vestiges of Khandagiri and Udayagiri: A Study on Prehistoric Relics*, Unpublished M.A. dissertation, Utkal University, Bhubaneswar, 2006, pp.42
- 4.Dash, R.N, “Pre and Protohistory”, *The Cultural Heritage of Khurda*, Pub. By State level Vyasakabi Fakir Mohan Smruti Samsad, Bhubaneswar, 2003, pp.107.
- 5.Pradhan, S, “Prehistoric Antiquity in Hathigumpha, Udayagiri Hill, Orissa”, vol. XVIII, *The Journal of Orissan History*, 2005, pp. 1-7.
- 6.Mitra, Debala *Udayagiri and Khandagiri*, New Delhi: ASI, 1975, p. 54.

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- 7.Srivastava, A.L,“Iconography of Early Surya Images”, *Jnana-Pravaha*, Varanasi, 2011-12, pp. 100-101.
- 8.Banerjea, J. N, *The Development of Hindu Iconography*, Calcutta: University of Calcutta, 1956, p. 433.
- 9.Sahu, R.K, *Surya in Orissan Art: A Study of Art, Architecture, Iconography and Religious Practices*, Unpublished Ph.D. thesis, Utkal University, Bhubaneswar, 2015, pp.181.
- 10.Sahu, R.K, *op. cit.*, 2006, p.22
- 11.Pradhan, S, *Lesser Known Monuments of Bhubaneswar*, Bhubaneswar: Lark Books, 2009, pp. 14.

Images & Maps

Fig. 2 Hand axe & Hematite

Fig. 3 Microliths and cores



Fig:1- General view of Khandagiri Hill

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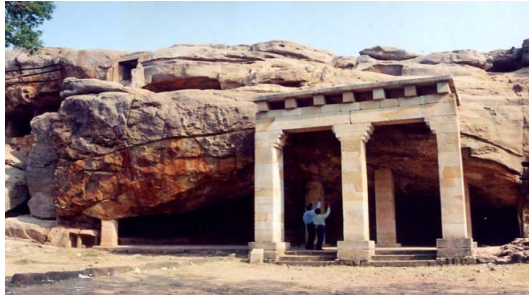


Fig.4 Hatigumpha, A Natural rock shelter

Fig.5 Pictographs or Rock art in Hatigumpha



Fig.6 Rock Cut stepped well

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Fig.7 Amalaka manufacturing site