

# Elephants in Art, Architecture and History of Orissa

*Debabrata Swain*

Since time immemorial the elephant has been an integral part of Indian culture and heritage. The Vedic 'King of Gods' (Indra) assumed a distinctly Indian character after localization in the land of the 'Five Rivers'. He ultimately stepped from his chariot, drawn by the steeds of the Aryan horse tamers and mounted an elephant. Sen (1972) states that it is indeed curious that Indra who was conceived as being borne on a golden chariot drawn by two or many tawny steeds, abandoned his old vehicle and preferred an elephant as his *vahana* or carrier. Craven (1976) observes that hymns in Rigveda, the first and chief book of the Vedas compiled sometime between 1500 and 500 BC, were especially directed towards Indra, the God of the heavens and the warrior king, who rode a white elephant and used the thunder bolt, *Vajra*, as his principal weapon.

## **INDUS VALLEY CIVILIZATION**

The Indus Valley Civilization (c.2500 to 1500 BC) of which impressive remains have been discovered at Mahenjodaro in Sindh and Harappa in Western Punjab (Pakistan) provides the earliest picture that we have of India's past. Excavations at these places have revolutionised the knowledge of India's historical beginnings. A very careful representation of elephant on seals and on copper

plates makes us believe that the living species of the mastodon either attracted the admiration of the people of the valley for its gigantic structure and strength or where depictions of elephants appear on amulets they were propitiatory in nature (Sen, 1972). An outstanding icon in Indian art appears in the Harappan culture for the first time on a famous seal from Mahenjodaro. The seal shows a central figure seated on a low throne in a yogic position, along with which appear the elephant, tiger, rhinoceros, buffalo and deer and two exceedingly stylized human figures (Craven, 1976).

## **ASHOKA AND THE KALINGA WAR**

The history of Indian Art and Architecture is obscure between the Indus Valley period and the 5th century BC i.e., between the period of Aryan conquest (c. 1500 BC) and the advent of the historical Buddha (c. 566-486 BC). The Greek diplomat Meghasthenes (4th Century BC) has left an account of the architectural design of the city of Pataliputra, the capital of the Mauryan Empire. The architecture of the Ashokan period (c. 273-237 BC) gains in magnificence, as for the first time stone was used instead of wood (Ministry of Information and Broadcasting, 1969). Little is known of the early part of Ashoka's reign,



Plate-1 Elephant motif half hewn from a huge stone near Dhauli, Bhubaneswar-- the earliest sculpture of Orissa, 3rd century B.C.



Plate-2 Infuriated wild elephants attacking a party of one man and ten women (partly shown in the picture) in a lotus lake in Rani gumpha- Udayagiri caves, Bhubaneswar, Orissa, 1st century B.C.



Plate-3 The Story of Udayana and Vasandatta in the *Ganesh gumpha*—Udayagiri caves, Bhubaneswar, Orissa, 1st century B.C.



Plate-4 Two elephant guards in front of Ganesh gumpha-Udayagiri caves, Bhubaneswar, Orissa.



Plate-6 Elephant and giraffe in the royal court— Sun temple, Konarka, Orissa, 13th century AD.

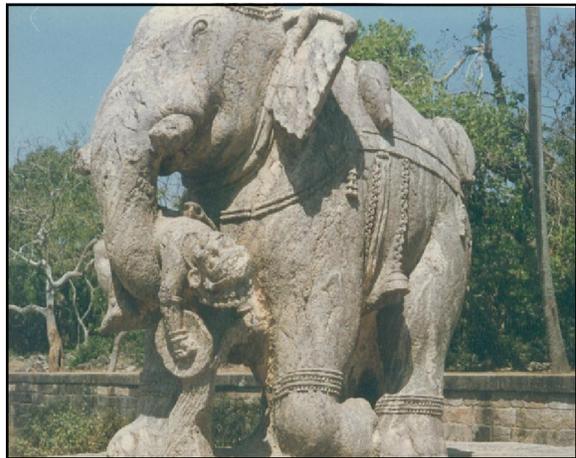


Plate-7 Free standing elephant in the northern courtyard of the Sun temple, Konarka, Orissa, 13th Century A.D.



Plate-8 Sexual union of elephants— Sun temple, Konarka, Orissa, 13th century AD.



Plate-9 Elephants being driven into stockade for elephant catching— Sun temple, Konarka, Orissa, 13th century AD.



Plate-10 An elephant in the stockade— Sun temple, Konarka, Orissa, 13th century AD.



Plate-11 Folded movement of elephant legs— Sun temple, Konarka, Orissa, 13th century AD.



Plate-12 Warriors on an elephant— Daksha Prajapati temple, Banapur, Orissa, 13th century AD.

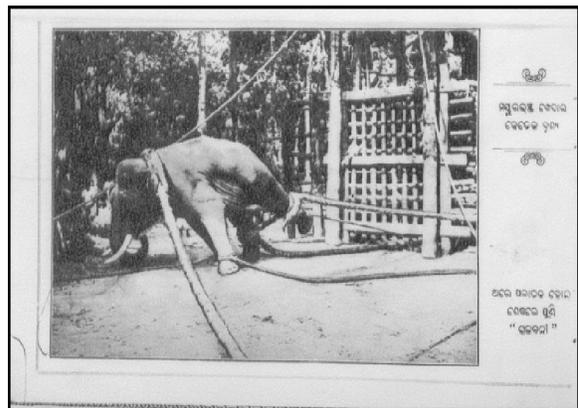


Plate-13 An elephant caught in *Kheda* in Mayurbhanj ex-state, Orissa.

except that of the eighth year, which was the turning point. In one of his edicts it is said: 'Kalinga was conquered by his Sacred and Gracious Majesty when he had been consecrated eight years. One hundred and fifty thousand persons were thence carried away as captive, one hundred thousand were there slain, and many times that number died' (Nehru, 1946). The horrors of the Kalinga war changed the course of human history and the message of Buddhism reverberated in the ears of the emperor who gave up his ambition of *Digvijaya* in favour of *Dharma Vijaya* and became Dharmashoka from Chandashoka.

### EARLIEST SCULPTURAL ART OF ORISSA

There is a sculpture of an elephant half hewn from a huge stone near which Ashoka wrote his Fourteenth Rock Edict at Dhauli near Bhubaneswar (the present Capital city of Orissa), the site of the great Kalinga War (Plate-I). This is the earliest specimen of sculptural art in Orissa (4th century B.C). One edict there (3rd century BC) documents not only Ashoka's conversion, but also his missionary zeal for the nonviolence of Buddhism. The bell capital discovered at Ashokajhara (Bhubaneswar) has a winged elephant along with other decorative figures on the frieze. Panigrahi (1986) argues the bell capital to be of Ashoka's period (c. 273- 237 BC).

### ELEPHANT SYMBOL

There are several myths relating to elephants in Indian literature. The most popular belief indicating the sign of conception in womanhood by the visit of a snake in her dream (traceable not only in India but also in different parts of the world with slight variations) was directly transferred to the elephant (Zimmer, 1962). Thus, in the Buddhist legend the future Buddha is said to have left Tusita heaven and was conceived by his mother Maya or Mahamaya in

a dream who saw him descending from the heaven in the form of a white elephant. Sen (1972) observes that a similar type of legend is also connected with the birth of Mahavira whose mother, Trisala, is reported to have had a dream of a four-tusked elephant when she conceived the said saviour. But, as the elephant ultimately became the symbol of Buddha who is said to have descended to the earth in the form of an elephant—a saddanta according to tradition, it ceased to be a sign of conception for the common woman although it still remained the symbol of fecundation for the divine female. The elephant figures at Dhauli and Ashokajhara were intended to remind the people of the birth story of Gautama Buddha. In fact, the great stupa built at Dhauli by Buddhist monks from Japan in the early nineteen seventies depicts on its wall the dream of Mayadevi and the birth of Gautama Buddha.

Thus, the elephant has been represented as raining clouds, the *Vahana* of Indra, fertility of crops, the conception of womanhood, the sign of fecundation of mother goddess and her *Vahana*, the guardian of quarters, the symbol of the Sun and also of the Buddha and Mahavira.

### KHANDAGIRI AND UDAYAGIRI CAVES

It is in the caves of Khandagiri and Udayagiri (near Bhubaneswar), that the rock-cut mode found its supreme expression. As known from the Hatigumpha (a cave named after the elephant; Hati elephant and Gumpha = cave) inscription (Udayagiri), most of these caves belong to the 1st century BC and were excavated during the reign of Emperor Kharavela, the greatest ruler of ancient Kalinga. All the caves, locally called *Gumphas*, were intended as dwelling apartments for Jaina monks. In keeping with the rigorous asceticism of the Jaina faith, these dwelling cells are quite simple. In some caves the ceiling is so low that one can hardly stand erect and the

entrances are so small that one has to crawl to enter the cave. The rear end of the floor inside the cell is slightly raised to serve the purpose of a pillow.

Out of about eighteen excavations in the Udayagiri and fifteen excavations in the Khandagiri, important elephant friezes are seen in Rani Gumpha, Manchapuri Gumpha and Ganesh Gumpha in the Udayagiri series and Ananta Gumpha in the Khandagiri series. The facade of the Rani Gumpha, the most beautiful of the caves, depicts infuriated wild elephants attacking a party of one man and ten women in a lotus lake. The relief delineates with remarkable success (Plate-2) the feelings and action of the panic-stricken group.

An interesting panel in the Manchapuri cave depicts a royal procession towards an object of worship. The king, as evident from his turreted crown, is on an elephant. He is proceeding with folded hands along with three other persons. Two flying Gandharvas above provide heavenly music and a flying Vidyadhara is seen carrying a tray of flowers in his left hand. It is possible that the scene represents the worship of Kalinga-Jina by Kharavela (Behera, 1991) who, as per the Hatigumpha Inscription, brought back Kalinga-Jina after defeating King Bruhasatimitra of Magadha.

The story of Udayana and Vasandatta is depicted in the Ganesh Gumpha (Plate-3). The artist has chosen the crucial moment of the dramatic flight of King Udayana with princess Vasandatta on an elephant. A party of soldiers is chasing the elephant from behind. On the back of the elephant are three persons of whom one is a woman, perhaps Vasandatta. The central figure is shooting arrows at the soldiers while the figure behind him is throwing coins from a bag to dissuade the soldiers from pursuing. A soldier is

seen prostrate on the ground apparently to collect coins. The next sequence shows the persons alighting from a kneeling elephant. Thereafter, they are proceeding to the right. Finally, the chief man with folded hands seems to be consoling the woman who is shown in a half-reclining posture. The entrance of the Ganesh Gumpha is flanked by two elephants placed in a later period (Behera, supra) (Plate-4).

The Ananta Gumpha, the most beautiful cave of Khandagiri, depicts auspicious motifs such as a four-tusked elephant (Chaturdanta Gaja) and Shri anointed by elephants (Sabhisekha Shri), all related to the dreams of Trisala before giving birth to Mahavira, the famous Jain-Tirthankara (Behera, supra).

All these motifs of elephants carved on the tympana of the caves indicate the possible use of elephants by the royalties in wars, processions etc., and the religious significance attached to the elephant and the elephant symbol. The preponderance of elephant motifs indicates the availability of quite a large number of elephants in the wild as well as in captivity. The sporting of elephants in the lotus lake is indicative of people-elephant conflict that existed even in the 1st century BC of Orissa's history.

#### **MOTIFS IN THE 7TH TO 13TH CENTURY AD**

It is difficult to give a coherent history of sculpture after Kharavela till about the 7th century AD. It seems that during this period Bhubaneswar retained its role as an artistic centre. A few railing posts were discovered near the Bhaskareswar temple in Bhubaneswar and are kept in the Orissa State Museum, Bhubaneswar and the Ashutosh Museum, Kolkata. The sculpture on these railings is limited to decorative male or female figures. Between the 7th and 13th centuries AD, innumerable temples

were erected in Orissa. The sculptures of the earliest group of extant temples, such as, Satrugneswar, Parsurameswar and Swarnajaleswar, all in Bhubaneswar and the Shiva temple in Badgaon, Ganjam, are quite simple and being done in low relief seem encrusted on the temple surface. A few elephant figures depicted on these temples are important from the natural history point of view. An elephant frieze on the relief of the Parsurameswar temple (650 AD) depicts the catching of an elephant possibly by noosing and its training. In the 11th century the art of sculpture was highly developed. Some of the finest temple sculptures of Orissa are found in the Rajarani, Brahmeswar and Lingaraj temples of Bhubaneswar.

Large numbers of elephants are depicted on the walls of these temples, the most important being that of the Lingaraj temple (c. 1000 AD). The elephant figures commonly denote royal processions while sculptures of elephants in singles and twos are occasional. In the 12th and 13th centuries, the standard decorative details became magnificently more luxurious which is evident from an analysis of the details of the temple culture of Bhubaneswar and of the other parts of Orissa state. The decoration of the outer walls of the Jagannath temple (12th century AD) of Puri closely follows that of the Lingaraj temple (Behera, supra). It is also true in the case of elephant motifs on the Jagannath temple. A series of elephant processions are seen on its outer wall.

### **KONARKA TEMPLE OF THE 13TH CENTURY AD**

It is the sculptures of the 13th century on the Sun temple (Plate-5) at Konarka (40 km from Bhubaneswar) on the coast of the Bay of Bengal) that represent the epitome of Orissan sculptural art. The temple is lavishly ornamented from the bottom to the top. Percy Brown (Behera, 1991;

1996) aptly remarked: "Few buildings can boast of such an unrestrained abundance of plastic decoration as this vast structure, every portion of the exterior being moulded and chiselled either in the form of abstract geometrical ornament, conventional foliage, mythical animals, fabulous beings - half human and half serpent coils, figures satanic and figures divine, of every conceivable motif and subject known to the Indian mind and in a technique which ranges from pattern cut with minute precision of cameo to powerfully modelled groups of colossal size".

The richness and exuberance of animal carvings that we notice at Konarka represent an extraordinary achievement. All types of animals have been depicted both known and unknown e.g., horse, lion, snake, bull, camel, deer, crocodile, monkey, varieties of birds, elephants and their various combinations. Even a giraffe has been shown in the royal courts (Plate-6) probably that of King Narasingha Deva I (AD 1238-1264), the builder of this great monument. Though this animal was not known to have existed in India, it might have been imported from Africa, showing the trading links of Orissa far and wide. However, out of all the animal motifs, that of the elephant requires special mention in this context. Of course, it will not be out of place to mention here that the number of elephants shown on friezes surpasses all other animals. Hence, the elephant motifs both from the religious and artistic point with special reference to its natural history need to be discussed.

The selection of a symbol to represent a particular theme in art depends on the taste and knowledge of the artist and its relevancy to the subject matter (Sen 1972). Of all the implications of the elephant symbol, the animal as the *Vahana* of Indra took a distinctive role in the religio-mythical tales of India and also in art, making its

role as carrier of the mother-goddess a secondary one. That is why, Sen (supra) states that artists preferred to associate the elephant with the mother goddess, not primarily as her *Vahana*, but as the symbolic source of fecundation by representing two or more elephants flanked on either side of the mother- goddess and bathing her with the waters of life. This is exemplified in the Gajalakshmi motif seen in different temples, the earliest in Orissa being in the Parshurameswar temple (7th century AD), Bhubaneswar. But the common Gajalakshmi motif is found to have been altered in a decorative panel of the Sun Temple (13th century AD) at Konarka into that of a sitting female figure with legs wide apart accompanied by an elephant pouring waters of life' into her sex organ with its trunk- a highly suggestive symbol of the fecundation of womanhood by an elephant though a rather unconventional one (Behera, 1996; Sen, 1972). Neither does this woman look like a goddess, nor is the elephant represented equal in size to her.

The Gaja-Simha or the "Lion standing on elephant" motif is another interesting device, which is notably alike for its symbolic significance and imaginative handling. The gigantic pair in front of the Natamandira of the Sun temple shows this motif at its best. The rampant lion, with open mouth, lolling tongue, flamboyant manes, protruding eyes, stands over the recumbent elephant that in turn keeps a human beneath its trunk. The majesty and vigour of the lion in contrast to the attitude of helplessness of the elephant are well expressed by the sculpture. The motif symbolizes the pious human being fighting for liberation from the bonds of Nature. Such motifs in different forms are common in different temples of Orissa.

The great sculptors of Orissa had observed the gait, movements and the anatomical features

of animals very minutely and produced innumerable superb animal figures. The free-standing elephants in the northern courtyard of the Sun temple are distinguished by the dignified bearing and large volume (Plate-7). Elephants appear in a number of situations, e.g., they move in military processions, carry their masters, trot in the jungle, their sexual union and being driven into the stockade for elephant catching (Plates-8 to 10). In all these situations they have been copied from nature. It is interesting to note here that elephant behaviour was so minutely observed by the artists that in depictions of elephant processions one can easily mark lefty and righty (like left handed and right handed human beings) from the folded movement of the legs (Plate-11).

#### **OTHER TEMPLES OF THE 13TH CENTURY AD**

The richness and exuberance of carvings that we notice at Konarka are also seen in other temples of the 13th century, e.g., Dakshaprajapati (Plate-12). The important elephant motif of the Dakshaprajapati temple of Banapur (Khurda district, Orissa) from the natural history point of view is the exchange of greetings between the members of a pair of elephants. There is the popular Simha-Vyala figure standing over a recumbent elephant. It appears that the artists took fancy in combining features of large cats with other animals (locally called vyala or vidala). Various types of vyalas occur in the Jangha of the temples of later periods. The popular devices include Simha-vyala, Gaja-vyala, Aswa-vyala etc. The Gaja-vyala is an imaginative combination of lion and elephant. The body, tail and paws are of the lion but the face is that of an elephant.

One interesting sculpture, now preserved in the Ashutosh Museum of the Kolkata University and another discovered by Dr. K. C. Panigrahi (Panigrahi, 1986) and now exhibited

in the Orissa State Museum, Bhubaneswar, belonging to the medieval temples of Orissa, depicts a series of boats in which elephants are being carried apparently to a distant land. Only a part of this frieze has been preserved. Zigzag lines with half-shown fishes, crabs and crocodiles indicate the waves of the sea.

### **SYMBOL 'GANESHA'**

The motif of Vighna Binashaka, Ganesha or Ganapati, is an ingenious composition in conjoining the head of an elephant with the body of a human and it occupies the foremost position among all the hybrid representations, not only in Indian art but in the art of the whole world. Sen (1972) suggests that the worship of Ganesha was originally a practice of worshipping the elephant, which probably arose in regions populated with many wild elephants. But when due to deforestation, climatic changes and other factors, such danger was no more, devotees had to attribute other qualities to the deity for retention in their pantheon. The earliest representation of Ganesha seems to be that of the Amaravati coping (Maharashtra) and it is, therefore, highly probable that sometime about the 1st century AD the figure of Ganesha was improvised by some artist in the south (Sen, supra).

The extant reliefs and single sculptures of Ganesha give us an idea about the iconography and typical Orissan mode of representation (Behera, 1983). Ganesha usually appears as a *Parswadevata* in Siva temples and his depiction without the carrier- mouse seems to be an earlier convention. Panigrahi (1961) states that the mouse as the distinctive feature of Ganesha first occurred in the Mukteswara temple of Bhubaneswar, which was probably, constructed not later than the first half of the 11th century AD. But mouse had not been associated with the South Indian

images of Ganesha before the 12th century AD (Sen, 1972).

### **ORISSAN HISTORY**

Kharavela, the mighty ruler of Kalinga (1st century BC), had a large army, consisting of cavalry and elephants. With his mighty forces, Kharavela could extend the territory of Kalinga from the River Ganga to River Godavari as evident from the Hatigumpha (elephant cave) inscription in the Udaygiri hill near Bhubaneswar. The monarchs of Kalinga, on account of their large elephant army, were styled in their inscriptions as 'Gajapati' or Lord of Elephants'. Das (1986) states that Chodaganga Deva (1078-1150 AD), the founder father of the imperial Ganga dynasty of Kalinga, is styled as *Nava navati sahasra kunjaraadhiswara* (Lord of ninety nine thousand elephants) and Kapilendra Deva (1435-1467 AD), the founder of the Gajapati dynasty, inherited two hundred thousand elephants at the time of his accession to the throne.

In the Arthashastra of Kautilya (c. 300 BC) the elephants of Kalinga are admired as the best of the type in India. For at least seven centuries after Kharavela there is no account of the historical events of Orissa. Yuan Chwang, the Chinese pilgrim, visited Orissa and the neighbouring countries in AD 639. It appears from his account that Kalinga produced large dark elephants, which were prized in the neighbouring countries (Panigrahi, 1986). The Muslim geographers of the ninth and tenth century AD also testify that large elephants were one of the chief commodities of trade in Orissa of the Bhauma period (AD 736-940). The geographical work of Ibn Khurdahbih (9th century AD) mentions that elephants were carried in fresh water (evidently the rivers) to the *Samudra* or sea from places 15 - 20 days distant from the latter. Ibn Rusta, another Arab geographer who completed his geography in AD

920, also speaks of Orissan elephants as the tallest elephants of the region. The latest Muslim geographer, the anonymous writer of Hudud-al-alam, who began his work in AD 982-983 for Abul Harith Muhamad Iban Ahmad, prince of the province Guzgan or Guzganian which lies in the North - Western part of present day Afghanistan, mentions about Orissa, "Extremely large elephants are found there, such as in no other place of India" (Panigrahi, supra).

Elephants of Orissa were so much prized that in AD 1353 Shamsud-din Ilyas Shah invaded Orissa and he retreated only after obtaining a few elephants. In AD 1361 Sultan Firuz Shah Tughluq invaded the Ganga Kingdom during the reign of Bhanudeva III. The Sultan concluded his victorious campaign by an elephant hunt at Padmatola in old Baramba State. Bhanudeva III made a treaty with the Sultan by offering twenty big elephants and agreeing to supply annually to the Sultan a number of elephants as an annual tribute (Panigrahi, supra). During the reign of Bhanudeva IV (AD 1414-1434), the son of Bhanudeva III, Orissa was raided many times by outsiders to obtain elephants. Citing Muslim chronicles Panigrahi (supra) states that Hushang Shah, the Sultan of Malwa, was in need of elephants for his war with Gujarat and since Orissa was the fabled country of the best elephants, he led an expedition to it in the guise of a dealer in horses. The Sultan brought with him horses of different colours which the king of Orissa prized most. When Bhanudeva IV with a small band of followers wanted to examine the horses brought by Hushang Shah, the King of Orissa was treacherously seized and made captive and was not released till he promised to give the Sultan some of his best elephants.

A rough survey indicates that about 50% of the people of Orissa still bear military titles. The title 'Sahani' was given to the commander of

the elephant force and is in vogue to this day (Panigrahi, supra). Another interesting fact we find from history (Trautmann, 1982) is that Orissa was importing elephants from Sri Lanka during the Mauryan period (3rd century BC). At the same time, we learn from the records of various historical events that elephants were being exported from Orissa. The import of elephants in the third century BC can be explained by the fact that the demand of elephants by the Orissan army was so large that it could not be met from local sources.

### ELEPHANTRY AND ELEPHANTOLOGY

There are two war literatures in Orissa, one of Sarala Dasa and the other of Godavara Mishra, which furnish information on the military system of the Gajapati kings. Sarala Dasa, a contemporary of Kapilendra Deva (AD 1435-1467), has sincerely attempted to depict the role of elephantry and other wings of the military in his Oriya war literature named the 'Mahabharata'. The 'Harihara Chaturanga' of Godavara Mishra is more explicit and systematic than the earlier text of Sarala Dasa. The author was a minister under Prataprudra Deva (AD 1497-1540). In the first chapter the author stresses the importance of elephants in a battle. The poet writes in Sanskrit:

*"Sahi raja yasya chambah sa tamuryatra hastinah,  
Tasmattam vibhriydraja yuddhyogya guna vatah."*

(He is verily the king who has an army and that indeed the army which comprises elephants. Hence the King with qualitative disposition should possess an army capable of encounter.)

*"Rastriyatha sasankena youvanena yatha striyah,  
Tatha sena gajendrana taya raja cha sobhate."*

(A king shines forth with the army, comprising elephants, as the night is pleasant with the moon and as the women in youth.)

The poet also went further to prescribe the methods of capturing, taming and maintaining elephants for the purpose of war. The entire chapter containing 813 hymns is devoted discussing elephants and their use in the army.

Brundabana Nathasharma, a renowned writer of Deogarh in Western Orissa, wrote a series of essays on elephants and elephantology in a weekly 'Sambalpur Hitaisini' published from 1889 to 1923. Nathasharma's article on Hastitatwa (Elephantology) was published in different issues of the above weekly in 1908. He has cited lucidly in Oriya about the names given to the elephant in Indian literature, the categories of war elephants, elephant riding techniques, white elephants, foreign names of elephants, size of elephants, musth in elephants etc. He also said that twice the circumference of a front foot gives the height of an elephant (Nathasharma, 1908a,b,c; 1909a,b,c).

### **KHEDA**

Sanskrit literature describes five methods of capturing elephants in the following order of desirability from most to least (Stracey, 1963):

- (i) Stockades or kheda;
- (ii) by means of female decoys;
- (iii) mela-shikars or noosing from the back of a trained elephant;
- (iv) by nooses concealed on the ground; and
- (v) by the pit method.

These methods were developed over a period of time and became peculiar to particular geographical regions of the country.

All forms of capturing elephants were practised in Orissa, as per available records. The stockade or kheda used to be the most widely used method to capture elephants. Stracey

(Supra) reports that Meghasthenes (400 BC) was the first to record a clear account of the kheda method of capturing elephants as practised in northern India in those days, probably in what is now South Bihar (Jharkhand) and neighbouring Orissa. Capturing elephants in a kheda was once a royal sport in India and this ancient game of the kings is mentioned in the Ramayana and Mahabharata. Kheda scenes are graphically depicted in the carvings on the walls of the Konarka temple. In one scene men mounted on horses and tame elephants and on foot are driving a herd of wild elephants by beating drums, blowing trumpets and shouting. The herd consists mostly of elephant female with calves. The herd has been driven into a large enclosure. This shows King Narasingha Deva, the Ganga ruler of Orissa, who built the temple of Konarka, used to have khedas conducted in the 13th century AD.

The kheda method of capturing wild elephants was practised in different parts of the Indian subcontinent to avoid heavy expenditure on hiring or keeping tame elephants. This led to the method of tying the legs of the captive elephant to the walls of the stockade and the use of training devices, like the Karen stocks, the Upper Assam, hal of the Morans and the South Indian Kraal. Stracey (supra) observes that the Karen method of tying elephants' legs to the walls of the stockade suggests connections with the systems of Orissa and Chittagong (Bangladesh). In both of these areas they also used vertically dropping or 'flap' gates, a feature which was introduced in Mysore by Sanderson too (Sanderson, 1878). The small roping stockade is also a common feature of Orissa and Mysore, but it is absent in Assam and Myanmar (Burma). A peculiar feature of the Orissa, Chittagong and Mysore stockades is the nature of the walls, which are openworked affairs of very heavy timber, whereas in Assam and Myanmar (Burma) these are close-knit structures

of much lighter posts. So many resemblances in capturing and training methods in countries separated widely by seas and mountains cannot be explained as a mere coincidence. The ancient Kalinga waves of colonization of the eastern lands, which spread from the shores of modern Orissa, could have been responsible for the Chittagong (Bangladesh) - Tenasserim (Myanmar) coasts receiving the basic Aryan methods developed in northern India. Bihar was apparently the centre of early elephant trade and certainly a key area for the exchange of information. Migration routes from Myanmar (Burma) must have brought both the Karen and the Shan techniques into Assam.

Kheda operations (Plate-13) were such a regular part of the activities of Mayurbhanj, the largest of the feudatory states of Orissa that there used to be a paragraph on it in the annual report, even though for consecutive years the paragraph may have remained blank. Remnants of old stockades can still be found in different parts of Similipal and its neighbourhood. Till 1932 ruins of large stockades existed at Arpata Chilma and Similipal and small stockades existed at Puruna Baripada, Orachandabila and Ban. These are older than a century. Maharaja Krushna Chandra Bhanja Deo (1867-1882) caught elephants in the Ahari jungle in Banahari Pragana and his successor Maharaja Srirama Chandra (1890-1912) of Mayurbhanj caught a large number in the Denga-amba, Jaypur, Pithabata, Chekamara and Mangargh jungles. The next in succession, Maharaja Puma Chandra (1920-1928), caught elephants at Dukura (Senapati and Sahu, 1967). In 1932, Maharaja Pratap Chandra caught elephants at Champagarh. Out of 18 elephants caught, one old cow elephant was left free. One large tusked and one makhna (tusk less male) died. Out of the remaining 15 elephants, five were tusked, one a Ganesh (single tusked) and nine

cow elephants (Das, 1932). The speciality of this kheda operation of 1932 was that no tamed elephants were used to tie the elephants like earlier khedas. Rather tying of elephants was accomplished by two trained 'mahunts' without any difficulty. Das (supra) describes the methodology of such operations. Kheda operations used to be in the nature of festivities to which dignitaries were invited (Plate-14). In the 1932 kheda there were dignitaries like the Prince of Bikaner, Maharaja of Puri and Maharaja of Nilgiri. The last kheda of Mayurbhanj was held in 1938 (Senapati and Sahu, 1967).

Das (1932) points out that in Mayurbhanj state elephants used to be caught by means of Kheda, by nooses concealed on the ground, by the pit method and by female decoys. Later, all methods except catching elephants by Kheda were banned in the state as it was found difficult to catch elephants both by female decoys and noosing, and elephants were severely injured and sometimes died when captured by the pit method. However, the last elephant caught in the State was in 1943, when a single elephant walked into a trap. Strong ropes were laid and a man sat on top of a tree. As the elephant touched the trap a light went up and the man pulled the ropes. The elephant was caught and since then there has been no catching of elephants as the operations were too expensive and there was no market for the elephants (Senapati and Sahu, 1967).

Cobden Ramsay (1910) reports that in the South - East of the Athmallik feudatory state, a tract of forest was reserved for elephant catching operations. The chief of the state conducted elephant catching operations generally about every third year. The catches did not usually average more than ten to fifteen animals. The tract is still called the Hatidhara (meaning elephant catching) reserved forest, which adjoins the Satkosia -

Baisipalli wildlife sanctuary and still harbours a few elephants.

## IVORY

In Africa, both bulls and cows bear tusk, the source of ivory. The females of the Asian elephant do not have tusks; sometimes old-ones bear short spikes or tushes, projecting a few inches from the lips-line. The proportion of Asian bull elephants with tusks varies from country to country. In Orissa over 90% of the bulls are tuskers.

A group of rings and combs worked in Egypt about six thousand years ago is usually considered the earliest confirmed use of elephant ivory in carvings (Lawley, 1994). Specimens of ivory work discovered at Harappa and Mahenjodaro show that ivory craftwork was already well developed in India as early as five thousand years ago (Bedi, 1969). Two ivory carvings discovered outside India are a mirror handle, recovered from the volcanic ash of Pompeii, Italy, and a plaque, discovered in a cache at Begram, Afghanistan (Craven, 1976). Both these carvings are traced to the Andhran sculpture of the 1st century BC to 1st century AD. These discoveries indicate a sea trade route flowing from India through Alexandria in Egypt and ultimately to Rome on the one hand and on the other to a land based trade route to Central Asia, which joined the Chinese Silk Road with Indian trade centres and seaports in the Deccan.

Orissan art had reached a very high level of excellence in its ivory work and according to Sukumar (1989) the best quality of ivory is reported to have come from the elephants of Orissa. It is said that the Kalinga (Orissa) King had presented a large quantity of high quality ivory to the Pandavas (Acharya, 1925). In 1953, the then ruler of Talcher killed a rogue elephant in the

Dhenkanal forest, which measured 3.3m (11 feet) in height at the shoulder (Behura, 1990; Stracey, 1963). Each of its tusks weighed 41.73 kg and measured 2.59m in length outside the curve. In 1903, the then ruler of Kaptipada had presented two pieces of tusks to his lawyer at Cuttack, Ray Hariballabh Bose, weighing 111 kg (3 maunds), one being 2.4m (8') and the other 2.36m (7'9") outside the curve, the girth at the base being 45.72 cm (18") for both. It was estimated to be worth 40 to 50 thousand rupees in England at that time when gold per Tola (11 gm) was Rs.24.69 (Rs.24 and eleven annas) and the rate of rice was 13 seers (12 kg) per rupee (Anonymous, 1903). In ancient times craftsmen working in ivory were employed in royal palaces to inlay thrones, couches and other furniture with ivory. In the first year of his reign emperor Purusottam Deva (AD 1467-1497) of Orissa had presented ivory couches along with other articles of luxury to the temple of Lord Jagannath (Panigrahi, 1986). Cobden Ramsay (1910) observes that one or two families in Dhenkanal and Nayagarh made ivory work of high quality. They manufactured chains, buttons, sticks and statues of fine-workmanship -all of ivory.

## EPILOGUE

Orissa was also earlier named Utkal, besides being variously known as Kalinga, Tosali, Koshala etc, and was a place where art and architecture had reached the epitome of its glory. In dealing with the aesthetic side of visual art, it has been noticed that the finer quality of plastic or pictorial representations of any period solely depends on the inborn faculties of a genius or a group of talented people concerned, who might not have come in contact with other cultural developments. Sen (1972) opines that the surprising representations of animals in the cave paintings of Europe and other parts of the world

belonging to the prehistoric age testify to this statement. The minute observations of, and love for nature are the essential qualities of an artist, which guide his creative faculties. The great sculptors of Orissa, the then Kalinga, had observed animals in nature and applied their technical knowledge achieved through the centuries to the animal motifs depicted on the walls of caves and temples.

The preponderance of elephant motifs on the railings of caves and temples shows a cultural association of people with the animal and their availability in plenty both in the wild and in captivity. It is really surprising that while Kapilendra Deva (15th century AD) had two hundred thousand tamed elephants, the present wild elephant population of Orissa has come down to less than two thousand only. According to an elephant census of 2002, 1841 elephants of Orissa are now confined to the rugged hilly terrain of the Mayurbhanj, Baleswar, Kendujhar, Jajpur, Sundargarh, Deogarh, Sambalpur, Angul, Nayagarh, Boudh, Cuttack, Dhenkanal, Khurda, Kalahandi, Kandhamala, Rayagada, Gajapati and Ganjam districts where human land development is slow and tardy. The elephant habitats are subject to human pressure, monoculture plantations, annual fires, mining, encroachments, shifting cultivations, poaching and processes of developmental activities (Swain, 2004). Because of the gap in demand and supply of forest resources and suitability of elephant lands for shifting cultivation, mining and other developmental activities we are destined to lose the elephants in a few years' time if no tangible actions are taken now to save the elephant habitats. Reserves are being created and developed for these majestic creatures, which have played such an important role in the art, architecture and history of India.

### References :

- Acharya, P.M. (1925). *Odisha Itihasa* (History of Orissa) (In Oriya), Utkal Sahitya Press, Cuttack, India.
- Anonymous (1903). *Masta bada hati danta* (A huge elephant tusk) (In Oriya), Utkal Dipika, 38/20, dated 16.05.1903.
- Bedi, R. (1969). *Elephant: Lord of the Jungle*. National Book Trust, India, New Delhi, India.
- Behera, K.S. (1983). *Traditions in sculpture*. In *Art tradition of Orissa*, Orissa Sahitya Academy, Bhubaneswar, India: 28-54.
- Behera, K.S. (1991). *Architecture*. In Orissa State Gazetteer, (ed.N.C.Behuria), Government of Orissa, Bhubaneswar, India (2):99-1 13.
- Behera, K.S. (1996). *Konark: the Heritage of Mankind*. Vols.I and II, Aryan Books International, New Delhi, India.
- Behura, B.K. (1990). *Fauna*. In Orissa State Gazetteer, (ed. N.C.Behuria), Government of Orissa, Bhubaneswar, India (1):103-1 04.
- Cobden Ramsay, L.E.B. (1910). *Feudatory States of Orissa*. Firma K L M Private Ltd., Calcutta, India: Reprint 1982.
- Craven, Roy C. (1976). *A Concise History of Indian Art*. Praeger Publishers. Inc. New York, U.S.A.
- Das, G.C. (1932). *Mayurbhanjare hatidhara* (Elephant capture in Mayurbhanj) (In Oriya). Mayurbhanj Gazette, July, 1932 issue, 5-7.
- Das, H.C. (1986). *Military History of Kalinga*, Punthi Pustak, Calcutta, India
- Lawley, L. (1994). *The World of Elephants*. Friedman/Fairfax Publishers, New York, U.S.A.
- Ministry of Information and Broadcasting (1969). *5000 years of Indian Architecture*. Government of India, New Delhi, India.

- Nathasharma, B. (1908a). *Hastitatwa* (In Oriya). Sambalpur Hitaisinee, Sambalpur, India, dated 05.12.1908.
- Nathasharma, B. (1908b). *Hastitatwa* (In Oriya). Sambalpur Hitaisinee, Sambalpur, India, dated 19.12.1908.
- Nathasharma, B. (1908c). *Hastitatwa* (in Oriya). Sambalpur Hitaisinee, Sambalpur, India, dated 26.12.1908.
- Nathasharma, B. (1909a). *Hastitatwa* (in Oriya). *Sambalpur Hitaisinee*, Sambalpur, India, dated 02.01.1909.
- Nathasharma, B. (1909b). *Hastitatwa* (in Oriya). *Sambalpur Hitaisinee*, Sambalpur, India, dated 09.01.1909.
- Nathasharma, B. (1909c). *Hastitatwa* (in Oriya). *Sambalpur Hitaisinee*, Sambalpur, India, dated 16.01.1909.
- Nehru, J. (1946). *The discovery of India*. The Signet Press, Calcutta, India.
- Panigrahi, K.C. (1961). *Archaeological remains at Bhubaneswar*, Oriental Longmans, Calcutta, India.
- Panigrahi, K.C. (1986). *History of Orissa*, (Hindu Period). Kitab Mahal, Cuttack, India.
- Sanderson, G.P. (1878). *Thirteen years among the wild beasts of India - with an account of the modes of capturing and taming elephants*. W.H.Allen and Co., London, 2nd edn.
- Sen, A. (1972). *Animal Motifs in Ancient Indian Art*. Firma K.L. Mukhopadhyay, Calcutta, India.
- Senapati, N. and Sahu, N.K. (eds.) (1967). *Orissa District Gazetteers, Mayurbhanj*, printed by the Superintendent, Orissa Government Press, Cuttack, India.
- Stracey, P.D. (1963). *Elephant Gold*. 1st Indian Publ.1991, Nataraj Publishers, Dehradun, India.
- Sukumar, R. (1989). *The Asian Elephant : Ecology and Management*. Cambridge University Press, Cambridge.
- Swain, D. (2004). *Asian elephants : Past, Present and Future*. International Book Distributors, Dehradun, India.
- Trautmann, T.R. (1982). *Elephants and Mauryas. In India : History and thought* (ed. S.N. Mukherjee), Calcutta : Subarnarekha, 254-281.
- Zimmer, H. (1962). *Myths and Symbols in Indian Art and Civilization* (ed. Joseph Campbell), First Harper Torchbook edn., Harper and Row, New York, USA.

---

Debabrata Swain is Conservator of Forests, Berhampur Circle, Berhampur - 760004.