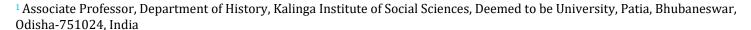
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# STUDY ON ART AND ARCHITECTURAL PATTERN OF THE SUN TEMPLE OF KONARK IN EASTERN INDIA

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## **ABSTRACT**

The aim of article is to emphasize the arts and architectural features of the Sun temple of Konark in the Puri district of Odisha. This massive Sun temple, constructed in the traditional Kalinga style, is shaped like a chariot of the Sun God, drawn by a group of seven horses and equipped with twelve pairs of exquisitely engraved stone wheels. Because of the temple's stunning eastward slope, the main entrance is first struck by the first light of dawn. An elephant and a man are crushed beneath the two enormous lions guarding the entrance on either side. The outside walls of the temple are covered in carvings of erotica, beasts, monsters, warriors, and animals. The enormous, seventy-meter-tall main sanctum, known as vimana, collapsed in 1837 as a result of the heavy structure and poor soil. Around the main temple, archaeologists have also uncovered a few other subsidiary temples of the eleventh-century. The Mayadevi temple honors one of the wives of the Sun God, while the other is thought to be devoted to Lord Vishnu. There are a good number of "Mithuna" sculptures at Konark Sun temple. Aside from the entrance, the only remaining buildings today are the "jagamohana" (porch) and "Nata Mandir" (Dancing Hall). The Nata Mandir alludes to the 'Devdasis' tradition, in which dancers resided within the temple complex and dedicated their lives to classical dances such as Bharatnatyam and Odissi. The third point in the state's golden triangle is Konark Sun Temple; the first two points are Jagannath Puri Temple and Bhubaneswar Lingaraj Temple. It was originally constructed on the sea bank by Narasimhadeva-I, but it is now quite a distance from the coast. Just outside the Sun temple is the Nine Planets Temple, also known as the Navagraha Temple. Inside is a massive black slab that has idols of the nine planets carved out of chlorite stones. Originally housed above the main doorway, the slab is currently on display within the Navagraha temple. Out of three structures of Sun temple, the structure of *jagamohana* is only survived till today, but some portions of the vimana and *natamandapa* portions have existed to know their designs and plans.

Keywords: Art, Architecture, Sun, Temple, Konark, Arka-Kshetra, Puri District, Odisha

## 1. INTRODUCTION

The Konark Sun temple is an important Hindu monument of the Puri district of Odisha in Eastern India. It is the largest temple in Odisha and one of the most remarkable examples of Odishan architecture at its peak. This Sun Temple is located at a distance of 35 km northeast of Puri town and 65 km southeast of Bhubaneswar, the capital city of Odisha. The site of Konark had a special significance as a *Surya kshetra* since ancient times. Konark is famous as Arka-Kshetra, the sacred place of Sun god. Konark, also called "Kainapara" in

Indian texts, was an important trading port (Helaine, 2008, p. 1731). It remains an important place of pilgrimage for Hindu people who assemble here in around February to see the *Chandrabhaga Mela* (Davidson and Gitlitz, 2002, pp. 318-319). The former sanctity of the site may have been an important consideration in building a sun temple on the coast (Behera, 1993, p. 73). The Hindu temples of Odisha can be aptly called 'Kalinga style'. The temple architecture of Odisha reached its peak with the construction of the Konark Sun Temple, which is unique for its rich carvings and carvings. Konark is located at Latitude 19053' North.; longitude 86º 06' East (Mitra, Konark, ASI, 1998,p.1). The places of Bhubaneswar, Puri and Konark form the 'Golden Triangle' of Odisha from the point of view of tourism. Konark site was inscribed as a UNESCO World Heritage site 1984 and is also a major tourist destination in Odisha. The Konark Sun Temple is famous in Odisha for its erotic sculptures and enormous size (Donaldson, Vol.I, 1985 and 1986, p. 2). The word Konark is derived from two Sanskrit words viz; Kona (corner) and Arka (sun). The place "Konark" seems to have derived from the name of presiding deity Konark meaning arriving sun god, "Arka" meaning Surya and "Kona" meaning corner (Behera, 2005, p.1). Since 1676 A.D., the Sun temple of Konark was called by early European mariners/sailors as the 'Black Pagoda', because of its black colour (Richard Carnac, ed., 1911, p.56,93 and Mitra, 1998, p.3 and see Davidson, Gitlitz, 2002, pp. 318-319). The magnificent Sun temple of Konark, though in ruins still testify its former grandeur unrivalled by any temple in the world (Mohapatra, 1989, p.49). There is a great controversy regarding the causes of ruins of the Sun temple of Konark and it is not clear till today (Donaldson, 2005, pp.15-28). The Sun temple of Konark is not only unique, but is in itself both architecturally and in details of its sculptures, one of the noblest monuments of Indian medieval art (Coomarswami, 1911, p.346). The temple was the largest architectural enterprise of Odisha: Percy Brown remarks that it is the 'grandest achievement of the eastern school of architecture' (Brown, 1965, pp.106-107). The Sun temple of Konark, enclosed within a spacious compound, consists of the deula, the jagamohana and the natamandira, along the east-west axis. All the structures face to the east. The deula and jagamohana forming component parts of one architectural scheme are designed in the form of a monumental chariot of the Sun god (Behera, 2005, p.35). The natamandira is located at a short distance from jagamohana on the east. In fact, the Sun temple of Konark occupies a unique place as a work of art in India.



**Figure 1** The Northern view of the Sun temple of Konark, Puri, Odisha https://www.britannica.com/place/Konark-Sun-Temple

Narasimhadeva-I, the Ganga ruler was a great devotee of Sun God and for the worship that deity, he constructed the gigantic, well decorated and sculptured temple at Konark(Pradhan, 2012,p.63). In the Odia Madala Panji, as well as in the Katakarajavamasavali a Sanskrit text of the same nature, Narasimha Deva is mentioned as the builder of Konark temple. In the 16th century, Abul-Fazl, the court historian of Akbar was aware of the tradition that 'Raja Narsing Deo completed this stupendous fabric and left this mighty memorial to posterity'. In the 18th century, the Sanskrit work Ganga Vamsanucharita mentions this achievement of Narasimha. In 1825, even before the discovery of Ganga inscriptions, Andrew Stirling ascribed the temple to "Raja Langora Narsimha Deo, A.D. 1241, under the superintendence of his minister Shibai Santra'. Thus over the centuries, at least from 1295 A.D. to the present times, King Narasimha is remembered as the builder of Konark temple. The copper plate charter of Narasimha-II, dated in the Saka year 1217 i.e. 1295 AD, in its verse 86 records that "King Narasimha built Konakona (a place of great renown) temple for the Sun to live with other gods" (JASB, 1896, pp. 229-271 and see Behera, 1993,p.72). This temple was built by King Narasimhadeva-I whose reign forms a glorious epoch in the history of Odisha (Behera, 1993, p.71). Most probably, the construction of the Sun temple of Konark was commenced after the completion of Narasimhadeva's victory over Tughral Tughan Khan, the Muslim Governor of Bengal in 1245 A.D. In this connection, K.C. Panigrahi records that the Sun temple of Konark was constructed and designed to exhibit his power, prestige, devotion and perhaps to commemorate his victory also (Panigrahi, 1957, p.3). In this connection, R.P. Mohapatra remarks that Narasimhadeva-I of the famous Ganga dynasty had built the Sun temple at Konark marks the magnum opus or the culmination of Odishan style (Mohapatra, 1982, p.20). Narasimhadeva-I was the worshipper of Sun god as evidence of his reverence is found depicted in sculptural panels of the temple. Therefore, the reason for which he undertook the construction of the Sun temple has become a subject of speculation (Behera, 1993, p.73). According to tradition twelve hundred masons were engaged for completion of the construction of the Sun temple for long twelve years and twelve years revenue of the kingdom has also been utilised for completion of this magnificent edifice (Mohapatra, 1989, pp.50-51). The legend has been embellished with admixture of new elements by different writers. In one version, the master crafts man is called Visu Maharana, while Gopabandhu Das, a Nationalist leader of Orissa, for the first time coined the name Dharmapada for the boy as his father was involved in the construction of the temple of the Dharma Devata or the Sun god (Behera, 2005, p.18). The aim of this article is to focus on the arts and architectural features along with religious significance of the Sun temple of Konark.

## 2. ADOPTED METHODOLOGY

The primary data as well as the works of earlier scholars had been utilized by the writer for compilation of the article. The data relating to primary source is gathered by practical observation through field study and texts and gazetteers. The secondary source materials like some books, journal articles have also been used by the author.

## 3. ANALYSIS AND DISCUSSION

### 1. Art and Architecture of the Sun temple of Konark

The Sun temple of Konark is located at within a spacious courtyard and it faces to the eastern direction so the first rays of sunrise forays the main entrance. The Konark Sun temple consists of three structures such as *vimana* which is broken from a certain height of the superstructure, jagamohana (porch) standing in its original form but filled with sand and pillared natamandira (dancing hall) without roof. The deula and jagamohana of the temple stand close to each other, but the natamandira has been built as a detached structure a few yards to the east of jagamohana (Behera, 1993, p.74). The sanctuary and the porch forming a single unified architectural scheme has been conceived as the celestial chariot of the Sun god who is believed in Hindu mythology to course across the sky in a chariot drawn by seven caparisoned spirited horses symbolizing seven days of the week(Mohapatra, 1989, p.51). The jagamohana of the temple is the only structure which has survived in complete form, but of other two structures only small portions have come down to us (Panigrahi, 1985,p.410). Some portions of the main deula have fallen in the twentieth century. The height of the main temple is now a matter of speculation and calculation. The earlier drawings of temple in 1680 and especially by James Fergusson in 1837, show that the main temple was higher than the jagamohana. M.M. Ganguly, on the basis of measurements and relative proportion of Orissan temples, came to a conclusion that height of bada is the height of the pabhaga multiplied by 13/3 and the height of the rekha deula exclusive of kalasa is usually three times the height of the bada. Thus according to the calculation of M.M. Ganguly the height of temple was 228 ft (69.5 m). This information is mentioned by K.S. Behera in his Book (Behera, 2005, pp.38-39).

## Vimana

## Upana

The *vimana* of the Sun temple is *sapta ratha* in plan. The platform rests on a low upana, the vertical faces of which are relieved with frieze of elephants, whose number is said to exceed 1600, military procession, men and animals carrying supplies, hunting scene, labourer at work, scenes depicting working of food, etc.(Behera, 2005, p.35). The Sun temple of Konark is constructed in the shape of chariot design. There are twenty-four wheels, and seven horses placed in the front to drag the chariot of Sun god. The twenty-four wheels carved on the sides of the solid platform, conveys a sense of mobility, which imparts a monumental grandeur unique in the realm of art (Behera, 1993, p.74). These twelve pairs of wheels symbolize the twelve months, of this earthly chariot are carved against the three sides of the platform and two sides of the front (east) staircase, the latter having further by its sides, but in the van, seven (three on the northern flank and four on the southern) admirably sculptured galloping horses, fully caparisoned and spurred to run the colossal car (Mitra, 1998, p.41). The twelve pairs of the wheels justify the description of the Sun temple as a chariot. Treated magnificently, each wheel consists of an axle kept in position by a pin as in a bullock cart, a hub, a felly and sixteen spokes, of which eight are broad and the other eight thin (Mitra, 1998, p. 54). Each wheel is approximately 9 feet 9 inches in height and it is elegantly decorated with different elements.



Figure 2 The wheel of Sun temple of Konark, Puri

https://www.indiaphotoprints.com/prints/p/konark-sun-temple-wheel

The *vimana* and *jagamohana* are found built above a majestic platform. The raised platform rests on a low *upana*, which is mostly embellished with a fine series of friezes of elephants as mentioned earlier. The elephant figures are depicted in different postures like moving in rows one after another, capture of elephants, etc. By observing the friezes of elephants of Konark Sun temple, one of the scholars aptly remarks that here "We have some of the best elephant reliefs of Indian Art" (Majumdar, 1957, p.655). Other scenes like military procession, palanquin and umbrella bearers, men and animals, hunting scenes, etc. are noticed at the *upana* part. Some of the processions of these animals are not only graphic but magnificent (Mitra, 1998, p. 42). Generally, the hunting of boar and deer and rarely lion with either a bow and arrow or a spear seems to have been a favourite pastime of the warrior class of medieval Odisha as depicted in the *upana* of the *vimana*. Among the animals carved on the *upana*, the presence of a giraffe on the southern side is noteworthy (Mitra, 1998, p. 45).

#### Pistha

The ornamental platform is erected above the *upana* and it is 13 feet 3 inches high (Behera, 1993, p.75). The facade of the pistha(Bose,1931,p.185) has five horizontal divisions such as pabhaga, tala jangha, bandhana, upper jangha, and baranda. The pabhaga consists of five mouldings of khura, kumbha, patta, kani and basanta. The tala jangha is designed with khakhara mundies. The intervening recesses are carved with pilasters, which are decorated with nayika(kanyas) figures, erotic figures, simha vidalas, naga-nagini figures, and human figures in different roles. On the pilasters, we find many navikas in graceful poses (Behera, 1993, p.75). The bandhana is designed with three mouldings- varani, noli and basanta. The first and the last have scroll works, animals, birds, leaves and flowers, while the noli contains two series of lotus petals with a central line of beads (Mitra, 1998, p.49). The upper jangha part has five pilasters. The intervening recesses between the pilasters are mostly similar designs of the lower jangha. The worship of Sivalinga, Durga and Jagannatha by the King, a king riding on elephant being greeted by a group of men, etc. are found carved in the upper jangha. The baranda (Bose, 1931, p.178) consists of three horizontal mouldings. The flights of steps are found made for ascending the top of platform.



**Figure 3** The Alasa Kanyas and Simha vidalas of the Sun Temple of Konark, Puri https://thetempleguru.com/listing/konark-sun-temple/

#### Bada

The *bada* of the *vimana* is made of five divisions such as *pabhaga*, lower *jangha*, bandhana, upper jangha, and baranda. The pabhaga consists of five mouldings of khura, kumbha, patta, kani and basanta. The lower jangha is broken and from this part /level, the major bada parts of vimana are disappeared. The khakhara mundies and seated Dikpalas are noticed from the damaged bada. The intervening recesses between the rathas are relieved with vidalas in different forms. The three side central niches of bada are housed with three large size images of Surya as parsvadevatas. The standing images of Surya on the south and the west are more or less same in their treatment, the only striking difference being that while the western one has a bejewelled crown on the head, the southern side Surya has a stupi-shaped bun on the head (Behera, 2005, p.76). The more than life sized image of Surya in the southern niche stands majestically on a *saptaratha* chariot drawn by seven horses. Aruna, the charioteer is shown to the waist. The sun god (Surya) image is draped in a short dhoti and is decked in a girdle, a ratnopvita, a necklace, a neck ornaments, armlets, ear-rings and a short crown, all richly embellished. Around the head is a carved four foil halo with tongues of flames at the outer edge. At the crown of the halo is a kirtimukha flanked on either side by a flying figures blowing conch, all playing on musical instruments. At the extreme top corners is a Vidyadhar couple. The four standing females, two each on either side of Surya, carrying variantly a *chamara*. Possibly, they represent the four wives of Surya Devata. The Danda and Pingala, the two attendants of Surya, stand on both sides of deity. The image is 3.38 metre high and 1.80 metre wide and 71 cm thick. The above description of Southern side Surya image is mentioned in the work of Debala Mitra (Mitra, 1998, pp. 76-77).



**Figure 4** The Surya image, the western side parsvadevata of the Sun temple of Konark https://upload.wikimedia.org/wikipedia/commons/e/e5/Konark\_Sun\_Temple\_Statue\_of\_Sun\_Go d.jpg

The Surya image of northern niche rides on a magnificent horse fully equipped with rich trappings (Behera, 2005, p.76). All the *parsvadevats* made of chlorite, representing Surya, are rather stiff in conformity with the canonical convention regarding hieratic deities, but theses sculptures, with their benign and majestic bearing, are superb specimens of the iconographic art (Mitra, 1998, p.76). These three *parsvadevata* sculptures are further noted for their elaborate composition, crowded with accessory figures. There are three subsidiary temples (*nisa deulas*) in front of the *parsvadevatas* on the South, West and North side of the main temple. These temples formed parts of the original scheme and stand on the common *pitha* on which the *deula* and *jagamohana* are erected.



**Figure 5** The Surya image, the northern side parsvadevata of the Sun temple of Konark https://www.pinterest.de/pin/sun-god-and-konark-temple-images-of-sun-at-konark-sun-temple-94786767139906588/

The *pidha mundi* niches of the upper *jangha* contain the consorts of the Dikpalas. The temple is devoid of its *baranda*, *gandi* and *mastaka*. Most probably, the *vimana* had curvilinear superstructure of the Odishan *rekha deula*. The curvilinear *gandi*, to presume from the contemporary specimens, had five richly carved pagas on each of the four sides/faces. The *mastaka* of *vimana* consisted of *beki*, *amla*, *khapuri*, *kalasa* and the finial , the last in the semblance of a lotus(Mitra, 1998, p.75). By observing the ruins of *bada*, we can presume that the total height of Sun temple was 227 feet. The detached sculptures like lion on elephant, crowning elements of the temple lies in the premises belong to the ruined temple of the site.

There is no access to the interior of the *deula* from the *jagamohana* as the latter has been packed with sand and stone to prevent its fall. One can, however, get into the interior through the reconstructed steps by the side of the western parsvadevata. The walls of the main temple, are plain except for a set of three mouldings at a height of 1.5m. The walls were originally plastered, of which traces are visible. The floor of the sanctum is square of 10m and is paved with chlorite slabs. The floor slopes towards the central part of the north wall, where there is a channel to drain out washings from the interior. The Konark temple was dedicated to the Sun god but the presiding deity is, however, missing but the pedestal still exists. According to traditions, the image was removed to the Jagannatha temple, Puri in the 16th century (Behera, 2005, p.67). The most impressive feature is the superb simhasana of chlorite, 3.8m. by 2.2m, meant for the presiding deity. The simhasana is about 1.2m in height, and rests on a low upana decorated with a frieze of elephants. The overall design of the platform consists of a pabhaga, recessed jangha and the baranda. The above information of the sanctum of the Sun temple is mentioned by K.S. Behera (Behera, 2005, p. 39).

The archaeological and literary sources suggest that the Sun temple was completed and consecrated and even continued for a long time in full glory (Behera, 1993, pp.78-79). The Kenduli plates of Narasimha-IV dated 1384 A.D. records that by that time the monument was in a perfect state of preservation. The *Bhakti Bhagabata*, a Sanskrit work composed 1510 A.D., mentions about Sun temple of Konark that "the banner of the steeple of which struck the heaven" (Jivadeva Acharya, 1962, Vol. IV, No.1 p. 25). The sanctum of *vimana* is open to the sky. The designed chlorite doorframe of the sanctum is similar to the eastern one of the *jagamohana*.

#### Jagamohana

The jagamohana is pancha ratha in plan and it is about 128 feet (39 M) in height. The structure of jagamohana is a pidha deula and it is raised on high platform (pistha). The bada of the jagamohana has five vertical divisions like pabhaga, lower jangha, bandhana, upper jangha, and baranda. The overall design follows the pancharatha model of the Lingaraja temple of Bhubaneswar and the temple of Lord Jagannatha at Puri. The pabhaga consists of five mouldings namely khura, kumbha, patta, kani and basanta (Behera, 2005, p.41). The kanika and anuratha pagas of pabhaga are decorated with khakhara mundis(Bose, 1931, p.182). These khakhara mundis are flanked by two pilasters. The two inner pilasters, which immediately flank the khakhara-mundi, have at the base a set of three mouldings crowned by two lions rampart on a single or double elephants, in the middle a round column entwined by nagas and nagis, and at the top a vajra mundi (Mitra, 1998, p.57). The outer pilasters have a base of three mouldings, a faceted shaft relived with scroll work, creepers, floral motifs and beaded strings and at the top the upper portion of a khakhara mundi, the latter crowned by a ghata with a lion or lion on elephant on

either side(Mitra, 1998, pp.57-58). The *bandhana* is composed of five mouldings-varani, noli, pata, noli and basanta-all connected at intervals by vertical bands, decorated with creepers (Mitra, 1998, p.60). The lower and upper janghas are relieved with khakhara and pidha mundis respectively. The intervening recesses between the pagas/rathas(Borner and Ratha Shanda, 1966, p.154) are decorated with varieties of vidalas in the lower jangha and erotic figures in the upper jangha(Donaldson, 1986, Vol.III, p.1184) respectively. By observing the decoration of bada, James Fergusson aptly remarks that this building as "one of the very best specimens of Indian architecture as an exterior" (Fergusson, 1848, p.28). The elaborate designed doorframes of the raha and the three faces of the three rahas in the form of torana, reveal interesting features rarely met with elsewhere (Behera, 1993, p. 81).



**Figure 6** The Naga-Nagini and erotic figures of the Sun temple of Konark, Puri https://commons.wikimedia.org/wiki/File:Konark\_Sun\_Temple\_-Konark\_-Odisha\_-DSC\_0005.jpg

The bada of jagamohana is surmounted by pyramidal roof. The pidhas (Borner and Ratha Shanda, 1966, p.155) are arranged in three tires, called potalas separated from one another by a recessed vertical wall called kanthi (Mitra, 1998, p.31). The central raha of each tier is decorated with ghantas of diminishing size. The individual pidha of each side are richly carved. The pidhas, with a subdued cyma reversal curve on the upper part, have at intervals tiny vertical projections called tankus in the form of either a semi-circle or the quadrant of a circle (Mitra, 1998, p.67). Standing sculptures of female musicians in the intervening recesses between the lower and upper tiers are the unique features of the jagamohana. These sculptures with their super modelling and graceful attitude and poses, add a new and striking note in the form of the Odissan jagamohanas (Majumdar, p.553). The mastaka of the jagamohana is circular in cross-section. It consists of beki, ghanta, amla-beki, amla, and khapuri (Bose, 1931, p.182). The elements of kalasa, and ayudha

are now missing. The *mastaka* is supported by eight lions, of which the four facing

the intermediate directions have two hinder parts.



**Figure 7** The Jagamohana of the Sun Temple of Konark, Puri https://www.google.com/search?sca\_esv=c37c500de97470de&sxsrf=ADLYWIJkEaGd5jq-kCUu3VjbYpDRc RUkw:1728035146569&q=jagmohan+of+konark+temple

The interior of the porch(jagamohana), now inaccessible, is reported to have been plain but plastered. It has been filled up to prevent the collapse of the structure. A simple moulding is said to have run all round the walls at a height of about 1.52 metres (Mitra, 1998, p.70). Over the ceilings of the passages leading into the floor are corbelled recesses. Supported by iron beams, the architraves were of chlorite and had their front faces sculptured. These ceilings are supported by three iron beams (Mitra, 1998, p.70). The roof is formed after the usual bracket fashion of the Hindus, each course projecting beyond the other so as to give the appearance of inverted stairs; the angles of each, however, are here rounded considerably improves the effect(Ferguson, 1848, p.28). Access into the interior of the jagamohana is provided through magnificial doorways on the east, south and north. On the western side, there is doorway leading from the jagamohana to the sanctum (Behera, 2005, p.44). Access to the doorway is provided by three stair ways on the east, south and north. Each of the three entrance portals had a pair of impressive pilasters supporting multifoiled arches. The eastern side doorframe, originally a monolith, is still at Konarak. The eastern side doorframe is the best preserved, but for a small missing section near the base, it is also complete.



**Figure 8** The Eastern side doorframe decoration of Jagamohana of the Sun temple of Konark, Puri https://www.dreamstime.com/beautiful-door-frames-main-temple-konark-sun-puri-odisha-unesco-world-heritage-site-image294725339

The partially-preserved northern one is still in position. Debal Mitra mentions that the southern door, now blocked up, is completely stripped of its frame, but a portion of its lintel was found near the eastern staircase. It now lies below the banyan tree near the north-western corner of the *bhogamandapa* (Mitra, 1998, p.64). This doorframe is made of chlorite and it is richly decorated. Each doorjamb is divided into eight facets, all on different planes, the innermost being the most receding and the outermost the most projected (Mitra, 1998, p.64). The Navagraha slab which was originally placed over the eastern doorway of the *jagamohana* is now kept in a separate shed erected by the Archaeological Department (Behera,2005, p.70). Beginning from the left the grahas are Surya, Soma, Mangala, Budha, Brahaspati, Sukra, Sani, Ranu and Ketu. Except Rahu and Ketu, the planets are seated in *padmasana* over the *padmapitha*. Observing the *jagamohana* of Sun temple, one earlier scholar mentions that it's bold conception, massive execution, perfect propositions and imposing dimensions leave the visitors with an indescribable feeling of awe and amazement (Mohapatra, 1982,p.21).

At the eastern entrance of the <code>jagamohana</code> there was a beautiful monolithic pillar, known as Arun Sthambha , which has been removed to Puri during the Maratha period and installed in front of the Jagannatha temple( Mohapatra,1989, p.51 and Behera, 1993, p.82). The crowning pieces of the pillar is Aruna with folded hands , his left knee in the kneeling posture and right bend and raised, seated on the pericarp of a full blown lotus(Mitra, 1998, p.89). This pillar is dedicated to Aruna, the charioteer of the Sun god. It was brought to Puri Srimandira by the Marathas in the early part of the 18th century AD. (Mitra, Vol.II, 1984, p.190). This Aruna pillar is made of monolithic chlorite stone with sixteen sides and set on an exquisite podium of the same material (Mohapatra, 2007, p.98). The podium of pillar consists of <code>pada</code>, <code>kani</code>, <code>basanta</code> and <code>padma</code> or <code>cyma</code> showing representations of lotus leaves. Aruna, the conventional mount of the Sun God is found installed on the top. The total height of the Aruna pillar is 33 feet 8 inches from the base (Senapati & Kuanr, eds.,1977, p.780). Mitra records that the pillar was set up here two hundred

years old but it was made in the early part of the 13<sup>th</sup> century AD. (Senapati & Kuanr, eds.,1977, p.780).

#### Natamandira

The natamandira of the Konark Sun temple has been built as a detached structure, a few yards away from the entrance of the jagamohana. This ruined structure with its missing roof was exposed to the view after the clearance of sand and debris. The *upana* of *natamandira* consists of three plain mouldings of *khura*, noli(Bose, 1931,p.184), and basanta. The natamandira (festive hall) of Sun temple is distinguished by an ornamental platform of 9 feet and 6 inches height (Behera, 1993, pp.82-83). The plan of the *natamandira* is square. It is built on a high pitha or platform which is 23.8m square (Behera, 2005, p.48). The platform of *natamandira* has five vertical divisions like pabhaga, lower jangha, bandhana, upper jangha, and baranda of three mouldings. The pabhaga is decorated with khakhara mundis and pilasters containing vajra mundis at the top. The lower jangha division of the wall is filled with vajramundis and pilasters. The mundi niches contain various figures such as elephant riders, wrestlers, a man fighting with wild animal, a cavalier engaged in hunting, seated dikpalas, and other divinities such as Ganesa and Gaja Laksmi(Behera, 2005, p.48). The pilaster figures represent mostly female dancers and musicians. The bandhana connecting the lower and upper jangha consists of three richly carved mouldings. The upper *jangha* closely follows the lower *jangha* in decorative details. Some of the vajra mundi niches contain dikpala partners. The upper jangha is surmounted by a baranda of three mouldings, the top most one is carved with friezes carved of military processions (Behera, 2005, p.48). At intervals, the baranda is provided with projecting gargoyles fashioned as makara heads, female figures, figure of tortoise and ganas in the attitude of supporting the superstructure.



**Figure 9** The Natamandapa of the Sun Temle of Konark, Puri https://www.flickr.com/photos/29848963@N03/15387878739

The walls of the *natamandira* start above the second *pistha* leaving a narrow margin of 1foot 9 inches (Behera, 1993, p.83). There are four stairways in the centre on all four sides lead to the top of the platform. The eastern stairway forming the main entrance is framed by a plain parapet. The colossal *gajasimhas* fronting the eastern stairway, did not form the original design, and their placement there dates back to the beginning of the twentieth century (Behera, 2005, p.49). The northern

stairway, composed of a series of steps simulating moonstones, is also flanked by parapets. The design of the western stairway is different from others. From the top steps descend in form of semicircles facing west and thereafter these are bifurcated into two flight of steps, one towards the north and the other to the south. The facade of the central wall is decorated with female figures, mostly carrying musical instruments (Behera, 2005, p.49). The *natamandira* has four main openings on the four sides and small openings between the *anuratha* and *kanika*. The original pyramidal roof of the *natamandira* is now completely disappeared. The *natamandira* is now open to the sky. During the first clearance of debris in 1906, a portion of the roof existed in the north and south east comer(Behera, 2005, p.49). The entrance is manned by two huge lions on either side, both crushing a man and an elephant beneath.



**Figure 10** Lions on couchant elephants are noticed at the Front doorway of the Natamandapa, Sun temple of Konark, Puri.

https://www.fabhotels.com/blog/konark-sun-temple-puri/

The interior of the *natamandira* is reached by a flight of three steps in the centre of the four sides. Thus there are four central openings, each 3m wide, and flanked by the pillars and each pillar projects forward from the wall (Behera,2005,pp.49-50). At the base of each pillar, there are set of five ornamented mouldings, the round shaft is decorated with dancers and musicians, and crowned by *kirtimukhas* with pearl string hangings. The capital of the pillars, rests over a set of three mouldings, and resembles a lotus with upturned petals (Behera, 2005, pp.49-50). The interior of the hall is about 12m square. It has four massive pillars which are perfectly aligned with the pillars flanking the four major entrances. The rows of pillars divide the floor of the *natamandira* into nine compartments, probably indicating some association with the nine grahas (Behera, 2005, pp.50-51). The construction of this pillared *mandapa* in front of the *jagamohana* might have been the later period of the main *deula* of the site.

According to Thomas Donaldson, evidence suggests that the damage and the temple's ruined condition can be dated to between the late 16th century and the early 17th century from the records of various surveys and repairs found in early 17th-century texts. These also record that the temple remained a site of worship in the early 17th century. These records do not state whether the ruins were being used by devotees to gather and worship, or part of the damaged temple was still in use for some other purpose( Donaldson, 2005, pp.16-28).

#### 2. Additional Shrines

Besides the main temple, some additional shrines and monuments are also noticed at the temple complex of Konark. They are Mayadevi temple and Vaishnava temple.

## The Mayadevi Temple

The Mayadevi temple is located western part of the complex and it has been dated to the late 11th century, earlier than the main temple (World Heritage Sites: Konarak Sun Temple, 2013). It consists of a sanctuary, a mandapa and, before it, an open platform. It was discovered during excavations carried out between 1900 and 1910.

## Vaishnava Temple

The Vaishnava temple is located at the south-west of the so-called Mayadevi temple, it was discovered during excavations in 1956. This discovery was significant because it confirmed that the Konark Sun Temple complex revered all the major Hindu traditions, and was not an exclusive worship place for the *saura* cult as previously believed. The Vaishnava consists of a sanctuary and a porch. This is a small temple with sculptures of Balarama, Varaha, and Vamana–Trivikrama in its sanctum, marking it as a Vaishnavite temple. These images are shown as wearing *dhoti* and a lot of jewellery. The sanctum's primary idol Janardana form of Vishnu is now in the National Museum, New Delhi (Mitra, 1998, p.111). The site's significance as a place of Vaishnavism pilgrimage is attested to in Vaishnava texts.

## 3. Compound Wall-

The temples and structures are surrounded by a high compound wall. The section of the wall is T-shaped, the top course slightly projecting beyond the rest of the wall. The finds of some stone battlements by the side of the debris of the wall suggest that the enclosure had a battlemented top (Mitra, 1998, p.117). The compound wall of Konark rectangular in plan, measures 261.2m long from east to west and 164.6m from north to the South (Behera, 2005, p.60). The original walls, built of Khondalite and laterite stone have been repaired and reconstructed in the twentieth century.

#### 4. Gateways-

The enclosure is pierced with two small gateways; one facing the east staircase of the *bhogamandapa* and the other the south staircase of the porch of the temple. The former, the main entrance, probably had a *pidha* roof, the ceiling being spanned by corbels. The south gateway of Khondalite, with five divisions on its body, had a corbelled ceiling and possibly a *pidha* roof (Mitra, 1998,p.118).

#### 5. Conservation of Sun Temple

In 1894 thirteen sculptures were moved to the Indian Museum. Local Hindu population objected to further damage and removal of temple ruins. The government issued orders to respect the local sentiments. In 1903, when a major excavation was attempted nearby, the then-Lieutenant governor of Bengal, J. A. Bourdillon, ordered the temple to be sealed and filled with sand to prevent the collapse of the *jagamohana*. The Mukhasala and Nata Mandir were repaired by 1905. Observing the Sun temple of Konark, Sir John Marshall, Director General of Archaeology, in his conservation note Dated Feb. 28, 1905, remarked "There is no monument of Hinduism, which I think is at once so stupendous and so perfectly proportioned as the Black Pagoda, and none which leaves so deep an impression on the memory".

## 4. CONCLUSION

Thus, it is known from the above discussion that the great temple of the Sun god, now known as Konark, is the most celebrated of the monumental buildings of Narasimha deva-I who belonged to the Eastern Ganga dynasty of Kalinga. In fact, the temple of Konark was built during the reign of Narasimhadeva-I (1238-1264 A.D.) but no exact date is available either for its beginning or for its completion. On the basis of literary and epigraphic evidences it is fairly certain that King Narasimha-I had built the Surya (temple) at Konark. Konark was considered to be the most suitable place for the erection of the Sun temple, because from time immemorial it had a special significance as a Kshetra of Surya. It is also called Arka-Kshetra, the holy place of the Sun. The vimana and natamandira of the Sun temple of Konark were possibly destroyed either by the attack of Kalapahada ,the notorious general of Sulaiman Karanani or British Government for the smooth movement of their mercantile ships in the Bay of Bengal. Some other view like defective construction method of temple may be taken for the collapse of the vimana as well as natamandira of the Sun temple of Konark. The Sun temple's advancement is marked by the blending of sculptures with architectural magnificence, chariot car conception, completely detached *natamandira* and provision of a high basement for the vimana and jagamohana. The jagamohana is the best specimen of pidha order of the Kalinga style of temple architecture of Odisha. The bada of the jagamohana has full-fledged five vertical divisions of pabhaga, lower jangha, bandhana, upper jangha, and baranda. The interior of jagamohana of Sun temple is completely closed to visitors. The *natamandira* of the Konark Sun temple is a detached ruined structure and it was exposed after the clearance of sand and debris. The Sun temple of Konark is famous in the world for its architecture and sculptures. The Odishan temple style was highly developed with the construction of Sun temple of Konark of Puri. A large number of verities of sculptures and decorative designs are found adorned in the walls of Sun temple of Konark. The animal figures constitute the most common theme of decoration of the Sun temple of Konark. The motif of wheel is depicted on the reverse side of the Indian currency note of 10 rupees to signify its importance to Indian cultural heritage. The architectural designs form an important element of decoration of the sun temple. This stupendous monument is not only very popular in Eastern India, but it also dignifies the Odishan Hindu temple art in the whole world. The complex of the Sun temple of Konark is provided with a compound wall with two gateways. On the whole, the Sun temple of Konark is the best specimen of the Kalinga style art and architecture of Odisha and it is the culmination and climax of a long evolution of the Odishan temple art in Eastern India.

## **CONFLICT OF INTERESTS**

None.

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