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# Built Heritage Tradition of Odisha Special Reference to Temples of Bhubaneswar

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**Abstract:** Considering the Brahmanical mansions in the form of temple architecture, the tradition of Odisha is found prominent due to its number, size and volume, which latently progressing throughout ages. The land of Odisha witnesses the initiation of its rich tradition of temple architecture during the Sailodbhavas, dating back to 6<sup>th</sup>-7<sup>th</sup> Century CE, whereas the classic temple building tradition has come across various phases i.e.; formative phase, mature phase and declining phase. The gradual development of the Brahmanical edifices on this sacred land resulted the erection of thousands of temples throughout the state, which again got varied (architecturally) by different sects like; Vaisnavite, Saivite and Shakta. The indigenous temple building tradition of Odisha purely regulated by several silpa texts (Bhubana Pradipa, Silpa prakash, Silpa pothi and so on) and known as Kalingan style of architecture. Rich architectural and sculptural value of the Kalingan style of temples often supported by the epigraphical records, apprises the glorious chapter of socio-cultural affinity of the land from different grounds. Here the current attempt made to distinguish the significant architectural designs as well as types by concentrating on the temple city (Bhubaneswar). This research paper may facilitate the scholars immensely in understanding the architectural pattern and tradition.

**Keywords:** Rekha, Pidha, Khakara, Silpasastra, Navagrah. Saptamatruka

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## Introduction

Though geographically the present land of Odisha stretches on the eastern coast of India in between West Bengal and Andhra Pradesh on north and south direction respectively, the state already named as Kalinga, Utkal, Odra and Orissa through the ages. Odisha, famous for its magnificent free standing Kalingan style of stone temples (Mitra 1961; Deba 1995), which is a regional variation of Nagar tradition<sup>1</sup>. Apart from the important regional variations evolved in specific geographical locations all over India, the Kalingan temple building tradition has its own distinctive feature as well as the

sculptural designs (Brown 1959). The artistic richness and engineering marvels of Odishan temple architecture reflected through the massive structures and gigantic monuments has no parallel in the world. In general Stones and in some cases burnt bricks used as the raw material to erect the grandeur and wonderful structures time to time in respect of any particular deity. The beautiful temples represent the distinct past glory in the form of art and science by designing religious structures all over the State. As described in the *Bhubana Pradipa*, architecturally the temples of Odisha can be divided into three broad categories as *Rekha*, *Pidha* and *Khakhra Deula* (Behera 1993). However, these three of designs have been employed by the artisans continuously for a long span of time with slight modification in throughout ages. (Fig. 1)

## Sources

The Amritesvar temple inscription, Holal, Karnataka described about the *Kalingan* style of temple architecture as an addition to the main three styles (Garnayak 2007:55). The temple is a religious architecture. It is the house of gods and goddess on earth. *Hatigumpha* inscription of Kharavela describes about the erection of religious structure for the placement of Kalinga Jina<sup>2</sup>, Bhadrak inscription of Raja Gana, Asanpat inscription of Satrubhanja indirectly described about the temple building tradition of Odisha (Dehejia 1979, Parida 1999). Chinese traveller XuanZang also referred about temple style of Odisha (Panigrahi 1981). Harekrushna Mahatab said that “*There are more temples in Orissa than the rest of Hindustan*”. Factors behind the construction of large number of temples in Odisha are; Revive of Hinduism (Shaiva, Shakta, Vaisnava), Lengthy period of ruling dynasties, Royal Patronisations, development of artistic intellectual in Odisha and static or sound financial condition of the state.

Though earlier Kalingan temples are square hut type structures, but later on the pattern modified with the addition of the *shikhara* to the main structure. Due to the prominent *Rahapagas* on the temples of later period look circular from a distance but the ground plan of *Kalingan* style is basically square. There are few indigenous *silpa* texts available in Odisha using for the construction of temples such as *Bhuban Pradipa*, *Silpapothe*, *Silpapathakosa*, *Silpa-ratnakara*, *Silpasarini*, *Silpa Prakash*, *Padma Kesara*, *Silpa Kalasha* (Garnayak 2007: 55) etc., indicating the standard construction pattern in the field of the sacred architecture. Among these architectural texts *Bhuban Pradipa* was the most important for the study of Odishan temple architecture as traditionally it is well preserved by the artisan class<sup>3</sup>. Notable archaeologist N.K. Bose collected the seven *Odia* manuscript on *Silpasatra*, one from Lalitagiri of Cuttack district and rest from undivided Puri district (Behera 1993).

*Bhubana Pradipa*, the treatise on Kalingan temple architecture deals with the categorisation of temples and specific measurement of different components. The word *Bhubana Pradipa* distinguished as *Bhuban* means fourteen worlds including the earth, Heaven and Nether world etc., and *Pradip* means lamp. It is known as the lamp on the abode of gods. The text referred Visvakarma as the chief architect, Pingala as the artist and Ahidhara as carpenter, who built temples for heavenly god. The text also dealt with classification of soil, *augury* (sign of good/bad/foretell), *sanku* (determination of naga position), astrological consideration, auspicious ceremony to be observed, *hasta* and *angula* (units of measurement), foundation of the buildings etc. The text discusses different types of temple style, such as *Rekha Deula*, *Bhadra (Pidha) Deula*, *Khakara Deula*. Apart from these three varieties, there are two more types of temple already being reported in the text *i.e.*; hypaethral (Circular and open to sky) and Goudiya type<sup>4</sup> (Bose 1932).

Odishan temple has passed through a long evolutionary phase. Temples of Odisha are broadly flourished during 5<sup>th</sup> CE to 16<sup>th</sup> CE. The temple building tradition patronised under various dynasties in different regions. All we know that Brahmanical temple building tradition started during Gupta

period in India. A temple named Bhima at Mahendragiri in Gajapati district of Odisha belongs to Gupta period (Parida 1999). Later on, temples of Sailodbhavas, Bhaumakaras, Somavamsis, Gangas and Gajapatis were flourished all over the Odisha (Panigrahi 1981; Mohapatra 1986). Scholars like Vidya Dehajia divided the temples of Odisha in to two phases; formative and mature (Dehejia 1979). Subsequently several scholars specialised in the field of temple architecture divided Kalingan style into three main phases as formative, mature and climax. In between formative and mature phase there is a transitional phase, where we found the *Pabhaga* motif added with one more executed flat folding, niche cutting became comparatively small and uplifted to the *tala jangha*, “S” profile fan decoration on the *Bada* portion<sup>5</sup>. After climax phase there was a decline phase, where temple building tradition completely saturated due to economic and political condition was very frail. This phase characterised with the devoid of sculptural decoration on the temple wall and low craftsmanship.

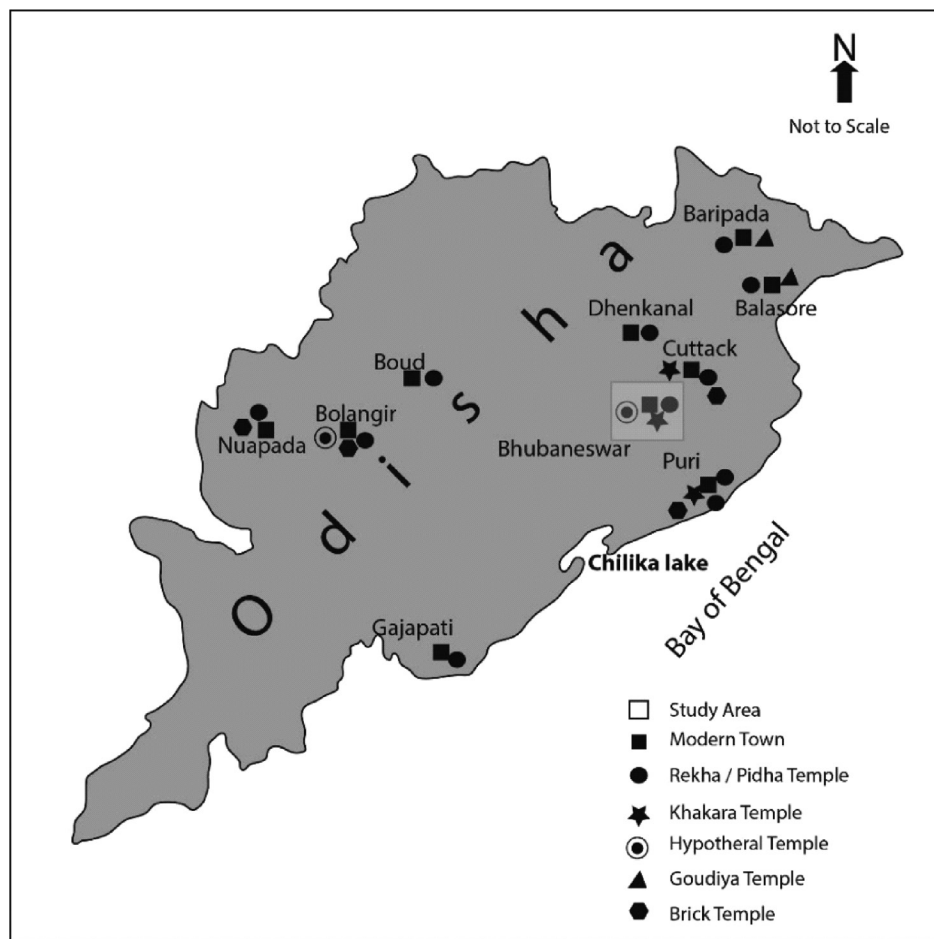


Figure 1: Map showing the major temple sites of Odisha

### Architectural features of Kalingan style Temple

Basically, the temple architecture of Odisha divided in to three categories such as *Rekha*, *Pidha* and *Khakara* (Fig. 2). All these temples have various divisions and components which are added time to time as per the requirement or purpose of decoration. The temples of Odisha made of stone and bricks with dry masonry technology. Brick temples are very less in numbers than stone temples of Odisha (Behera 1993; Das 1997; Dehejia 1979; Ganguly 1912; Fabri 1974; Khamari 2012).

The *rekha* temple consists of a square sanctum surmounted by a curvilinear spire. It is mainly known as *Garbhagriha* (Sanctum). The sanctum is in *triratha*, *pancharatha*, *saptaratha* and *navaratha*

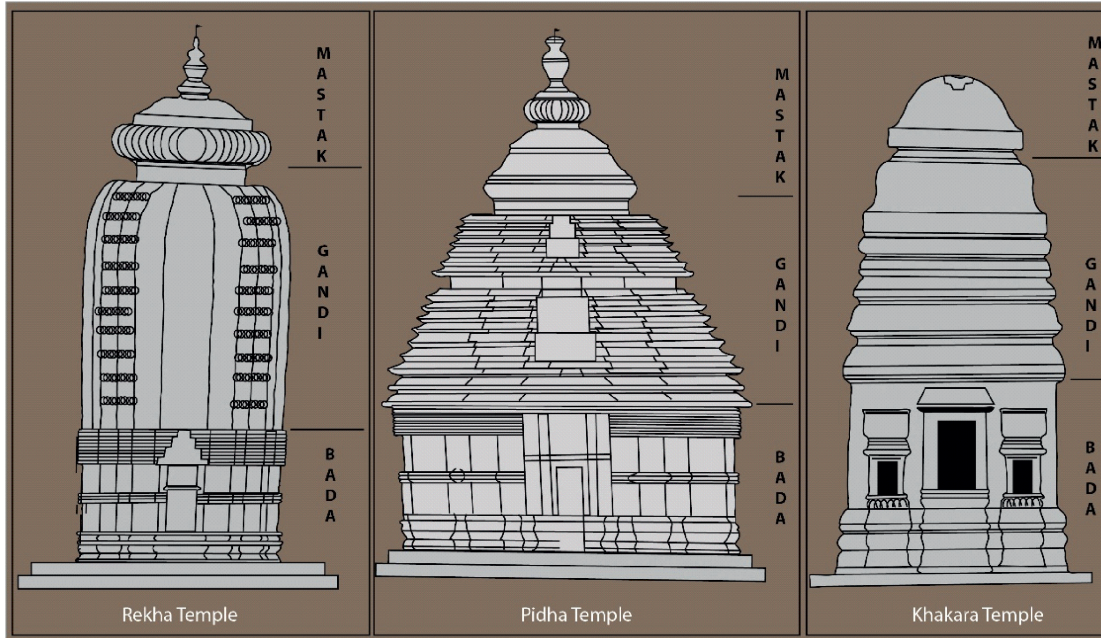


Figure 2: Line drawing of Kalingan style of temple with vertical division of the Temple

in plan (Donaldson 1986). It is divided into four broad divisions in elevation such as *Pista*, *Bada*, *Gandi* and *Mastaka*. The *Rekha deula* regarded as cosmic man (*vastupurusha*). *Pista* is not a regular feature to the temple architecture. Earlier days it was missing and initiated during later period. *Bada* is a square wall, on one side there is a door way. *Bada* divided into five divisions such as *Pabhaga*, *Tala Jangha*, *Bandhana*, *Uper Jangha* and *Baranda*, in the initial phases it is found that *Bada* has only three parts and known as *Traianga Bada* (*Pabhaga*, *Jangha* and *Baranda*). Later on, it is known as *Panchanga Bada* having all the five components. *Pabhaga* consists of several mouldings mostly either three or five. These mouldings are named as *Khura*, *Kumbha*, *Pata*, *Karni* and *Basanta*. In earlier temple the *Jangha* is one but in later temples *Jangha* is divided into two storied with addition of a set of mouldings. This set of mouldings known as *Bandhan/ Madhya Bandhana* and the mouldings are in five, seven or ten in numbers. *Baranda* is also a set of mouldings, which is the dividing line between *Bada* and *Gandi*. To increase the height of the Temple with proper proportion the numbers of mouldings are increased in *Baranda* portion. *Gandi* is an elongated tower like portion or curvilinear super structure. The *Gandi* consist of numbers of *Pagas*. The numbers of *Pagas* has been decided the plan of *Gandi* portion such as *Triratha*, *Pancharatha*, *Saptaratha* and *Nabaratha*, such divisions are due to vertical projection between the *Rahas*, *Anuraha* and *Kamikas* (Behera 1993; Ganguly 1912). The *Gandi* is well decorated with aerodynamic designs to safe the temple from water percolations and to avoid air born activities inside. Frequently *kanika pagas* consist of *Bhumiamlaka*, whereas on *pagas* with miniature *Rekha deula*, popularly known as *Angasikhara*. *Mastak* consists of several portions such as *beki*, *amlaka*, *khapuri*, *kalasa*, *aayudha* and *dhwaja* (Behera 1993; Ganguly 1912; Fabri 1974).

Usually the structure named *pidha deula* is consisting a square base but covered by the pyramidal roof of receding steps. This is used as frontal audience hall known as *jagamohan* (Bose 1932). *Pidha deula* has also *Bada*, *Gandi* and *Mastaka* divisions. *Bada* is same as of *Rekha deula*. *Gandi* consists of receding tiers in pyramidal order with the sequence of larger to smaller one. A series of continuous *pidhas* is known as *Potala*. The gap between two groups of *pidhas* or *potala* is known as *Kanti*. The *mastaka* of the *pidha deul* has the same features besides the addition of *ghanta* (bell) and inverted lotus (Behera 1993; Ganguly 1912).

*Khakra* type of temples found seldomly have both square and rectangular ground plan with cylindrical roof at top. Such types of temples in Odisha are very few in number e.g. Vaital temple at Bhubaneswar, Varahi temple at Chaurasi and Durga temple at Banki (Panigrahi 1981; Mohapatra 1986; Parida 1999).

In addition to these there are two more types of temple found such as hypaethral and Goudiya (*Chala* design) temples. Hypaethral temples are circular in plan and open to sky (Das 1981, 1997; Mahapatra 1953). There is a square pillared *mandap* placed in the central part of the temple e.g. Chuasathi Yogini Temple at Hirapur, Bhubaneswar and Ranipur Jharial, Bolangir. The *Chala* design temples are mostly found in Balasore and Mayurbhanj district. In these temples no particular ground plan but the temple roof is little slanting e.g. Chandaneswar temple, Bhogarai, Balasore. (Fig. 3)



Rekha deula,  
Siddheswar Temple, Gangadhar  
Prasad, Dhenkanal, 7th / 8th CAD

Pidha Deula,  
Sun Temple, Konark, 13 th CAD

Goudiya Temple  
Chandaneswar Temple, Balasore,  
15th CAD

Khakara Style Temple  
Varahi Temple, Chaurasi,  
10th CAD

Hypoethral Type Temple, Chausathi yogini Temple, Hirapur, 9th CAD

Figure 3: Types of temples in Odisha

### Sculptures in Kalingan Style Temples

The temples of Odisha are remarkable for their sculptural masterpieces. The sculptures in the temples of Odisha are divided in two groups such as religious and secular sculptures. Religious sculptures include *Graha* penals, *Parsvadevatas*, *Digpala*, *Digpalika*, *Lakulisha*, *Surya*, *Visnu*'s incarnations and *Shiva*'s manifestations etc., (Gupta 1997; Gopinathrao 1971). Secular sculptures are erotic sculptures, *nayikas* (female figurine), animals, birds, Doorjamb, naganagi column and grotesque etc. On the temple wall there are stories from *Ramayan* and *Mahabharata* narrated in a series of sculptural panels. The sculptural elements duly depicted on temple wall also signify the importance of the presiding deity, even to rectify whether it belong to *Shaiva*, *Shakta*, *Vaisnava* or *Saura* sects. Sometimes it is noticed the sculptural depiction of two or more faiths in a single complex with individual chambers directly indicate the perfect religious harmony of the particular period (Behera 1993, Fabri 1974, Parida 1999). (Fig. 4 & Fig. 5)

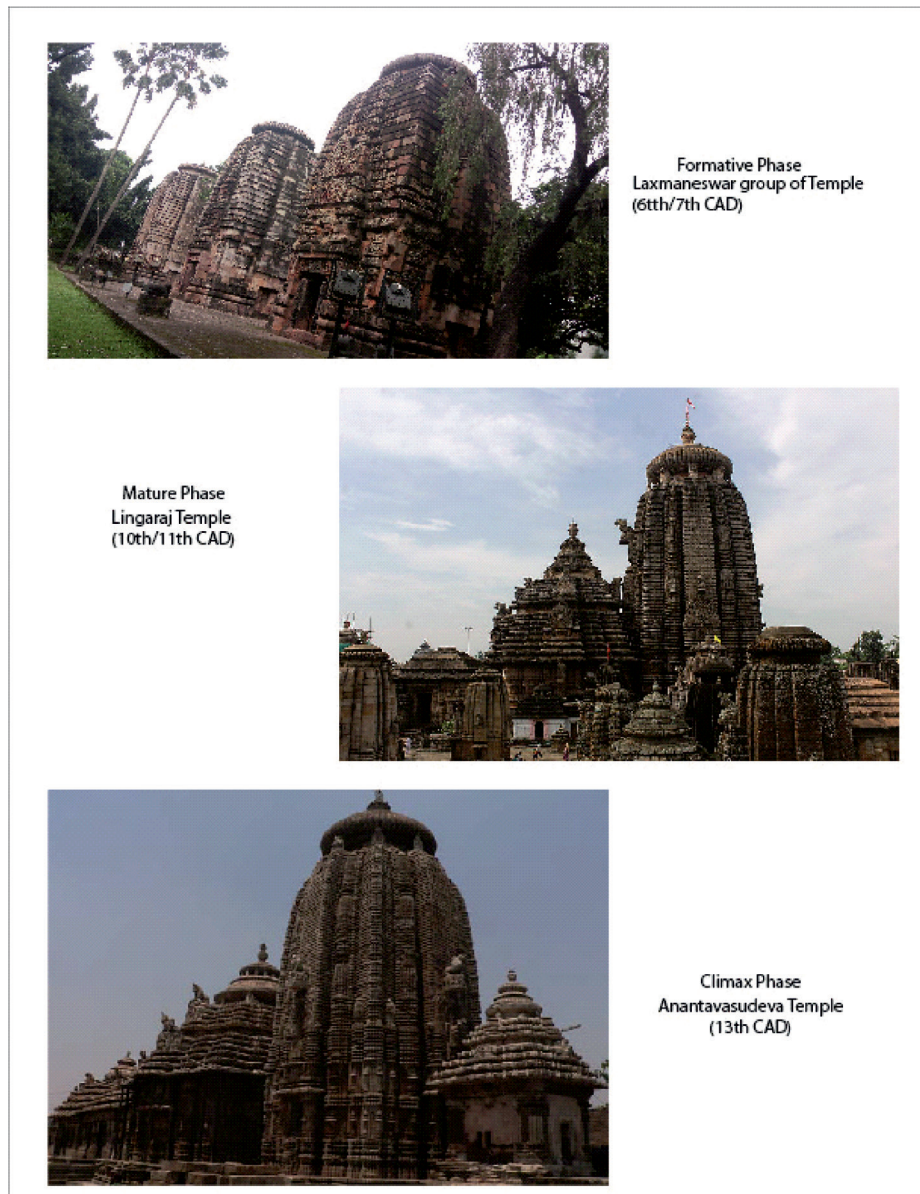


Figure 4: Temple Architecture of Kalingan style belongs to different phases of temples in Bhubaneswar



Formative Phase (Talesvar Temple, Bhubaneswar 8th CAD)



Transitional Phase (Dakara Bhimesvar, Bhubaneswar 9th CAD)



Mature Phase (Kottitirthesvar Temple, Bhubaneswar 11th CAD)

Figure 5: Graha pannel in the temple belongs to different phases of temples in Bhubaneswar

### Developments of Kalingan Style Temples in Various Phases

The best representation of formitive phase of Kalingan Architecture is found on Parasurameswar temple, at Bhubaneswar. During the formative phase it is noticed that *Triratha* in plan, *Astagraha* panel (Ketu was missing), *Traianga Bada*, *Pabhaga* having three mouldings, *Parsvadevatas* niches cut through the *paabhaga* of the temple, Kartika holding cock instead of peacock and Mukhasala's were without internal pillars. In general, the sculptures carved during this formative phase are of low relief with odd limb proportions.

Matured phase witnessed the refinement and best representation of architectural as well as the sculptural patterns. The classic example may provide by reciting the names of Rajarani, Brahmeswar and Lingaraj temple. During this mature phase *Ketu* added into the *Navagrah* pannel, *Panchanga Bada*, *Pabhaga* turned into five mouldings, *Angasikharas*, *Bhomotifs* introduced, alto relive (high relief and round shape) sculptures found on the temple wall with profusely decorations. *Dikpalaka* introduced and babies added to the lap of the *SaptaMatrikas*.

During climax phase the newly features as the addition of *Pistha*, *Natamandap*, *Bhogamandap*, *Vahanastamba*, *Dikpalikas* and so on took place along with few selected older traditions. The most important feature of this period was the soaring height and magnificent structure. Frequently iron beams and dowel used to strengthen the structure (Behera 1993, Dehejia 1979). In this context the best example may infer with the names of Sun Temple at Konark, Jameswar temple at Bhubaneswar.

## Conclusion

The present paper enlightened the unique sculptural and architectural features of Kalingan style of architecture in Odisha. Such type of Temple architecture different as well as similarity found from other temple building styles in all over India. From keen observation, the temple building tradition recognizes its continuity for a long period by being the focal point at Bhubaneswar. Where central Indian features such as prominent Angasikharas are noticed in numbers of temple. This might be strong cultural relation between coastal Odisha and central India. All the four variety of temple style (*Rekha, Pidha, Khakara & Hypothermal*) found in Bhubaneswar, Odisha. But the *Chala* design temple mostly noticed in northern Odisha Balasore and Mayurbhanja region due to Bengal impression. The gradual development and decline in the tradition, but not disappeared at all. New adaptations and modification gave the temple building tradition a new horizon and made the Kalingan style of architecture unique.

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## Notes

1. The Brahmanical temples are broadly divided into 3, named as *Nagar, Dravida* and *Vesara*. *Kalingan* style of architecture regarded as a separate tradition during early medieval India due to its certain features.
2. Hatigumpha inscription of Kharabela describes about *Debasthanam* in the context of honouring the Kalinga Jina.
3. N.K. Bose edited the *Bhubana Pradipa* and published it in the year 1931.
4. The Goudiya style of temple architecture is characterises by the *Chala* design.
5. Personal opinion after keen observation of the temples at Bhubaneswar.

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