

## COMPARATIVE STUDY OF NAGARA AND VESARA/CHALUKYAN STYLE OF TEMPLE ARCHITECTURE

Arka Acharjee<sup>1</sup>

### **Abstract:**

*The origin of Indian temple goes back to the pre Christian era and its evolution into a monument of great architectural merit is marked by conscious efforts on the part of several ruling dynasties from the 4<sup>th</sup> to 17<sup>th</sup> centuries, making it an institution of enduring importance in the social, economic and political integration of the sub-continent. There are several regional variations in the process of its development as a symbol of Indian culture. Undoubtedly its historical past, therefore, makes a charming study. As a centre for worship, the temple is mainly a creation as well as a visual medium of the puranic tradition. Hindu myths, legends and beliefs are selected and put together in texts, collectively called the Puranas. The Hindu Pantheon of gods originated from the texts of two Brahmanical sects, the Vaishnava and the Saiva, which with other minor religious system are part of the Puranic tradition, under what is known as Hinduism. The Hindu temple, in more than one sense, represents the multiple facets and complex process of this development through its architecture. So through this article one attempt has been made to ventilate the views about the comparative study of Nagara and Vesara/Chalukyan style of temple architecture (from ancient to early medieval period).*

**Keywords:** *Cruciform Plan, Hybrid Type, Star-Shaped Plan, Straight-Lined Cone, Stellar Design, Admixture/Amalgamation/ Fusion.*

---

<sup>1</sup>Arka Acharjee is Asst. Professor in Department of History, ABN Seal College.

**Origin of the Indian Temples:**

• **“Architecture is the matrix of civilization”**

**-Lethaby<sup>1</sup>** (Brown 2014, 1)

The important question arise here is how or what has contributed in the evolution of the Indian Temple? Is it a single tradition or is it an amalgam of various traditions? It is believed by some that the temple form is derived from the Vedic alter, the earliest known sacred structure (Vedi) which had the square as its essential form. Apart from the square Vedic alter, other non-Vedic non-metaphysical and more historical beginnings are assigned to the temple for example, the present day flat roofed shrine is commonly/generally seen as an offshoot from an aboriginal prototype, the stone dolman or a sepulchral (Funereal) structure which first appeared in the megalithic age in the centuries immediately before and after the beginning of the Christian era.

Another significant derivation of the temple was from the tabernacle of the forest (made of bamboo or branches of large palm leaves only) in which a divine presence was known to dwell. The tabernacle, seen as alter, enclosed the space by the high shape of four curved branches, with their ends gathered to a point in gradual reduction of the three dimensional form in one direction. This is still a familiar form in village huts. This form gives way to the curvilinear Sikhara (Superstructure) of the north Indian temple, ascending in diminishing units towards a finial, marked by the Kalasa, a vase of pitcher<sup>2</sup> (Champakalakshmi and Kris 2001,23-26).

### Early Temple Styles:

The Practice of erecting sanctuaries probably goes back to the 2<sup>nd</sup> century BC apparently built in perishable materials; these sanctuaries provided little scope for the application of the principles of architecture as an art.

The Gupta period marks the beginning of structural temple architecture. As evident from the extant monuments, there was experimentation in a number of forms and designs, out of which two significance temple style evolved, one in the north and the other in the south. The following well defined types may be identified: 1) Flat Roofed, square temple with a shallow pillared porch in the front. 2) Flat Roofed, square temple with covered ambulatory around the sanctum and preceded by Pillared porch, sometimes with a second storey above. 3) Square temple with a low and squat Sikhara (Tower) above. 4) Rectangular temple with an apsidal back and a barrel vaulted roof above and 5) Circular temple with Shallow rectangular projections at the four cardinal faces.

Neither the fourth nor in the fifth type seem to have any marked effect on subsequent development. But the first three types are seen as precursors of later Indian temple styles. Illustrative examples of the first include Kankali Devi Temple at Tigawa and Vishnu and Varaha temple at Eran, all in Madhya Pradesh. The second type is seen in the Parvati Temple at Nachna Kuthara, the Siva Temple at Bhumara, both in Madhya Pradesh. The example of third type of temple architecture is a disputable issue. Some archaeologists said that the Dasavatara temple at Deogarh (Jhansi District) and the brick temple at Bhitargaon are the examples of 3<sup>rd</sup> type of temple architecture. But the other did not agreed on their view in this issue<sup>3</sup> (Swarup 1968, 135-138).

The second and the third type of Gupta temple are called “Vimana”, (Storeyed) and “Sikhara” (cruciform) types. In the following centuries, these two types supposedly underwent further improvements and crystallized to form two distinctive temple styles respectively in the South and North.

### **Emergence of later temple Styles (Nagara, Dravida and Vesara):**

The major temple styles listed and described in the “Vastu Shasta” texts are the Nagara, Dravida and Vesara, of which the prime position is assigned to the Nagara of North India as the reading style. Next in important is the Dravida in South India. All the available texts are agreed on the point that the Nagara style was prevalent in the region between Himalayas and Vindhya. The Dravida country is well known and the texts rightly confine the Dravida style to that part of the country lying between the river Krishna and Cape Kanyakumari; while the Vesara style is sometimes associated with the area between the Vindhya and Krishna River. Hardy points out that Nagara and Dravida should be understood as architectural languages, in the sense that they provide a vocabulary, a range of elements and a family of forms which can be put together in different ways <sup>4</sup>(Singh 2008, 625).

### **Comparative study of the Nagara and Vesara/Chalukyan style of Temple Architecture:**

From earlier references we know that Hindu Temple Architecture was categorically divided into three styles. Vesara style was the ‘least known’ temple architecture in comparison with two other. We know from various earlier sources like “Isanasivagurudevapaddhati”<sup>5</sup>, “Samaranganasutradhara”<sup>6</sup> etc. that the name of ‘Nagara’ occurs frequently in that texts but the name of ‘Vesara’ does not occur because its name was contradicted with the name of ‘Varata’ <sup>7</sup>(Kramrisch 2015, 286-287).

The word 'Nagara', as derived from Nagara, a city, means 'Pertaining to a city or town'. This is generally accepted meaning (Kramrisch 2015, 287). However, from another sources we know that the meaning of Nagara is 'Universe (Visva)'. The temple is like a Universe is Nagara<sup>8</sup>(Kramrisch 2015, 288).

On the other hand 'Vesara' means "a mule", an admixture/ amalgamation of heterogeneous parents<sup>9</sup> (Kramrisch 2015, 291) i.e. Nagara and Dravida. This style of temple architecture mainly evolved, practiced and developed by the influence of Chalukyan kings of Deccan. That is the sole reason of the fact that this type of temple architecture also famous by the name "Chalukyan Style of Temple Architecture".

From various sources we know that Nagara temple is quadrangular all over i.e. from the base to the stupi. Beside, Vesara/Chalukyan temple style in its initial stage generally evolved as a replica of the Dravidian style i.e. octagonal style but soon this style gradually changed and developed as a distinct style mainly by its star-shaped plan, projecting angles lying in the circles whose centres were in the middle of the shrine and mandap respectively<sup>10</sup> (Fergusson 2012, 425).

Gradually, two main orders of the temple architecture (i.e. Nagara and Dravida) in course of full formation begin to emerge and also there geographical distribution clearly represent as North and South Indian. But, in course of time in a very different sequence the Deccan region of Peninsular India represent a hybrid style which was popularly known as 'Vesara'. This style mainly extended in Maharashtra, Karnataka and Andhra region & flourished as a highly florid architectural design in the Chalukya (North & Central Karnataka), Hoyasala (South Karnataka) and Kakatiya (Hyderabad, Warangal and adjoining areas) temples<sup>11</sup> (Champakalakshmi and Kris 2001, 44) from 7<sup>th</sup> to 13<sup>th</sup> centuries.

The Northern (Nagara) type is distinguished by its bold curvilinear spire with ribbed "Amalaka"<sup>12</sup> (Kramrisch 2015, 216-217) - fruit of Vishnu's blue lotus, which caps the tower and carries the Kalash, symbolising the Jar of Nectar.

On the other hand the Vesara style is totally an amalgamation of Nagara and Dravida temple style. In plan it is Dravida and in shape it follows Nagara style which means it denotes a mixed style<sup>13</sup> (Kramrisch 2015, 291). Two important earlier examples of this style are the Papanath and Virupaksha temple at Pattadakal. The former mainly inheriting the Nagara features but using decorative motifs unknown in Northern temple style; the latter blindly followed the Dravida style in its design and execution<sup>14</sup> (Champakalakshmi and Kris 2001, 89).

Every temples of the north India, irrespective of its situation and date, reveals two distinct features – I) in planning ii) in elevation. In plan, the North Indian temple is always a square one with a number of graduated projection in the exterior. In elevation, it exhibits a tower (Sikhara), gradually inclining inwards of several layers of convex curve; usually crowned by an 'Amalaka'. These two features –the cruciform ground plan and curvilinear Sikhara<sup>15</sup> (Singh 2008, 625) hence, be regarded as the salient features of Nagara temple. In those respects, the archetypes of the Nagara temple may be seen in the third (Sikhara) type of Gupta temples, in which these features supposedly occur more or less in a rudimentary stage.

Plate LIII

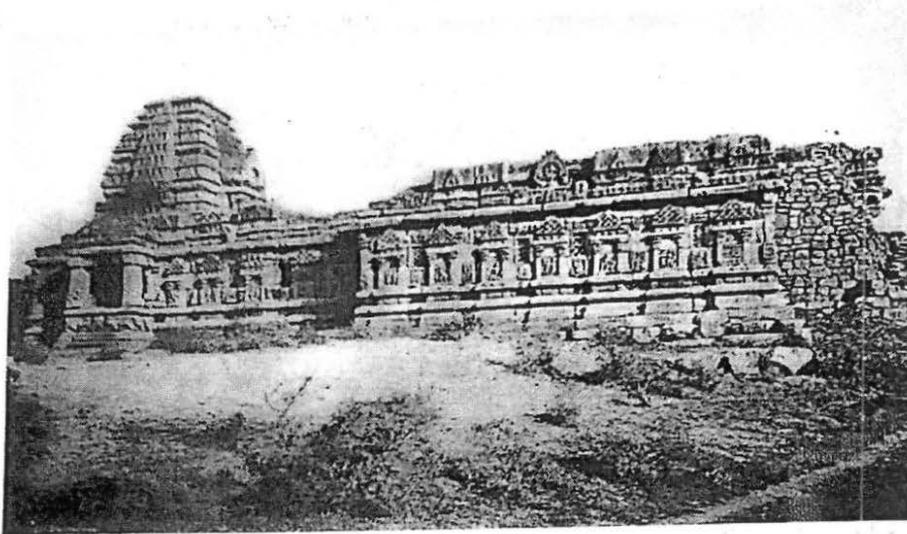


Fig. 1. Pattadakal: Temple of Papanath; c. 680 A.D.

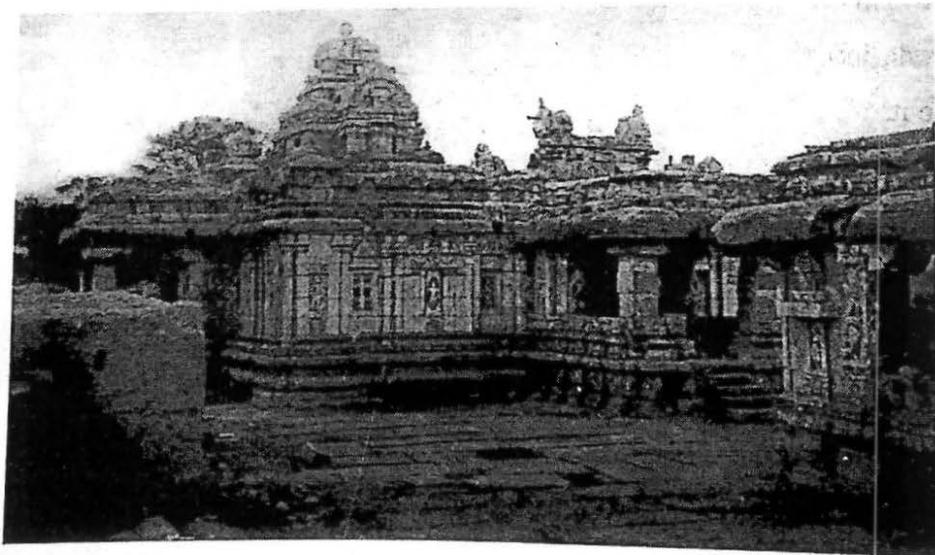


Fig. 2. Pattadakal: Temple of Virupaksha; c. 740 A.D.

\*[Source: Plate-LIII- BROWN, PERCY -*Indian Architecture (Buddhist and Hindu)*, New Delhi,CBS Edition 2014]

Beside, from the remains of the earlier examples we conceived the fact that at first the Vesara style followed the general pattern of the Dravidian style but some features were included like the prominent corners by flat increments, slight projections on the walls, the Sikhara & roof become stepped etc. But after some years the general plan was changed and it come to be star-shaped from the octagonal Dravidian shape. The pillars were arranged in square and lathe turned. The treatment of this style in wall surface, the design and order of the pillars and the arrangement in 'Mukha-Mandapa' are distinctive. It's uniqueness also prominent in its architectural features like its stellar design on the outer projections, carvings from base to finial in a three sectional elevation and its sculptural treatment<sup>16</sup> (Champakalakshmi and Kris 2001, 92-93).

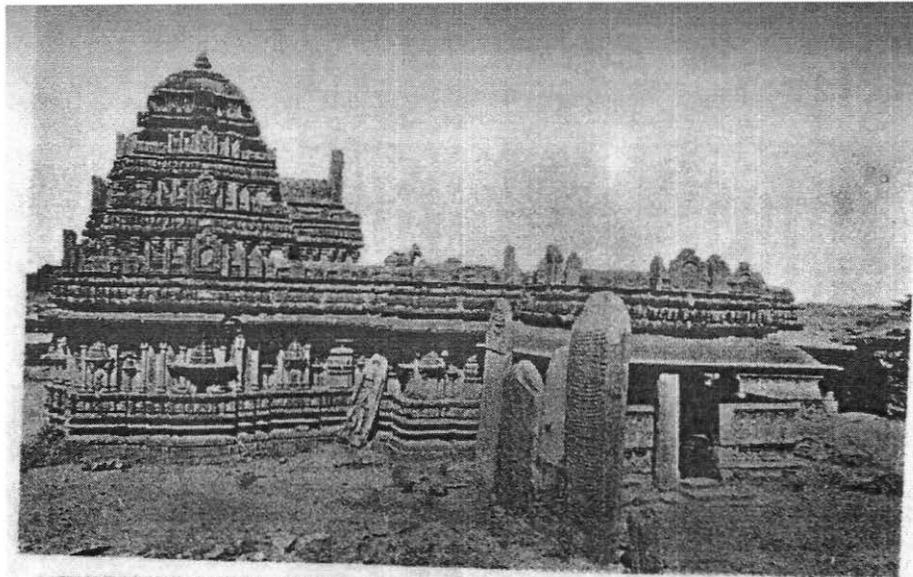
Actually the later temples of this style mainly distinct itself from the Nagara and Dravida influence by the grouping of three shrines round a central mandap or hall. Also its pillars are markedly different from the Dravidian and Nagara type; they are massive, circular, richly carved and highly polished. Their capitals are far wide and shaft is carved with circular moulding and vertically held<sup>17</sup>(Fergusson 2012, 423) which was completely different in comparison with Northern style.

Initially, the temple originated as a flat roofed square structure in the form of a cell (Shrine), with a pillared porch in front. Variants of the flat roofed structure persisted under the post Gupta dynasties of the North and central India and the Nagara style emerged with the evolution of a Sikhara over the super shrine. The subsequent development of the Nagara style can be traced through in the Dashavatara temple at Deogarh and Brick temple at Bhitargaon (both in up). The beginnings of the typical Nagara Sikhara can be seen in the Mahadeva temple at Nachna Kuthara (7<sup>th</sup> century A.D.) in MP. The fully developed Nagara style is

evident in the Lingaraja temple of Bhubaneswar and Sun temple in Konaraka (both in Orissa) by 8<sup>th</sup> century A.D.

The history of the Vesara style begins by the hands of early Chalukyan rulers. Architectural activity of the Chalukyans mainly centred on three sites (i.e. Badami, Pattadakal and Aihole). In those sites the Chalukyan rulers erected hundreds of temples which were the best example of the beginning of hybrid Vesara style. In these sites no single temple represented entirely to Dravida or Nagara style but originated as a mixing or trying combination and amalgamation of two styles as represented the Papanath(680 C.E.) & Virupaksha (740 C.E.) temple at Pattadakal. Earlier it was mentioned that this two temple were the masterpiece of emerging Vesara style and this credit went none other than Chalukyan artisans. They successfully did a tremendous job i.e. the fusion of two style which lead to manifestation of completely new, distinct, different and popular style known as Vesara/ Chalukyan style.

The most representative examples of the later Northern Indian 'Sikhara' style temples (from the 6<sup>th</sup> century A.D.) are the Dasavatara temple at Deoghar (U.P.) and the Brick temple at Bhitargaon (U.P.). The Dasavatara temple presents an unusual feature apart from the Sikhara in the arrangement of three sculptured niches on the three walls; each as a panel framed by two pilasters on either side. This niches along with the projection of the door frame in the front wall appeared to set off in the middle of the each phase. Such an arrangement may be regarded as the beginning of a device that subsequently be developed into the practice of setting forward and become the characteristics of the ground plane of Nagara temple of later days. This two temples show a rudimentary Sikhara which became the most characteristic feature, of the Nagara style of temple architecture.



CHAUDADAMPUR TEMPLE OF MUKTESWAR FROM THE SOUTH-WEST (to face page 429, Vol. I)

\*[Source: Plate-XV- Fergusson, James-*History of Indian and Eastern Architecture (Vol.I)*, Delhi, Low Price Publications-2012]

On the other, the development of the Vesara style continued by the Later Chalukyans and the Hoyasala dynasty (from 1050 C.E. to 1300 C.E.). The dharwar district may be considered as the centre of this development. The important temples of this site are Saiva temple at Ittagi, Kallesvara temple at Kukkanur, Somesvar temple at Gadag, Kasivisvesvar temple at Lakkundi, Chaudadampur temple of Mukteswar, Mallikarjuna temple at Kuruvatti, Dodda Basavanna temple at Dambal etc., all dating from 11<sup>th</sup> to 12<sup>th</sup> century. The Saiva temple at Ittagi considered one of the highly finished and architecturally perfect shrines of the Vesara style of temple architecture. According to Meadows Taylor, its decorative art is much superior to any other temple<sup>18</sup> (Fergusson 2012, 424). However, in case of the tower formation

the development of this style commenced from Ittagi, Kukkanur and Gadag temples ultimately matured in black stone temple at Chaudadampur. But the artistic features of the beautiful plastic ornamentation, an innovative pattern in the Sikhara and the sculptural decoration in the doorways reached its zenith in the Kasivisvesvar temple at Lakkundi and Mallikarjuna temple at Kuruvatti. However a totally different plan of the Vesara style found in the same Dharwar district by the attendance of the famous Dodda Basavanna temple at Dambal. It presents us with what came to be a late form of the Chalukyan Sikhara, the star shaped stellate plan appears both in the sanctuary and also in the 'Navaranga'<sup>19</sup>, richly carved antechamber, most beautiful doorstep design and richly chiselled four pillars which supported the mandap. This temple regarded as one of the latest designed temple in early medieval India and also the masterpiece of Vesara style.

The Nagara style of temple architecture reached its highest climax/watermark in the Lingaraj temple of Bhubaneswar, Sun temple at Konaraka (both in Orissa) and the Khajuraho temples in central India. At first, we discuss about the Lingaraj temple. It consists of all the four chambers for temple ritual, the 'Deul', the 'Jag Mohan' the 'Nat mandap' and the 'Bhog mandap'. The deul with its gracefully tapering tower, standing out prominently in the on first composition, is undoubtedly the most imposing feature of the temple. The Sikhara now attains the complete, beehive shape in the balanced formation of which the Lingaraj manifests the magnificent fulfilment of the Nagara style of temple architecture.

The grandest achievement of the northern India style reflected in the temple of the Sun at Konaraka. It illustrates the finality and maturity of the Nagara style of architecture. Every part of the temple large or small, was not only perfect in itself, but so systematically co-ordinated, that the temple of the sun present an architectural unity hitherto unknown. The god Surya has been traditionally visualized in Hindu

mythology as blazing across the heavens his fiery golden chariot of seven horses –an allegory which the Konaraka architects so splendidly tried to express in the temple form. Undoubtedly this temple is one of the finest example of the Indian craftsman.

On the other hand, before reaching its full-fledged form a simple but notable example of the Vesara style of temple architecture must be mentioned i.e. temple at Buchhanapalli which is adjacent to Haidarabad. The roof of this temple is in steps with a flat band on four principal faces. The peak of this temple beautified with a vase though in an incomplete form. The porch composing with of 16 pillars arranged in a same distant manner. The Sikhara of this temple is a straight-lined and conical form. The decoration of the Sikhara is completely different than the Nagara curvilinear outline and Dravida spire in storeys. The arrangement of the pillars in porch is also considered as a distinct style because it is different than the bracketing arrangement of the Southern style or domical forms of the Northern style. So by these architectural features it is undoubtedly proved that this temple is completely demonstrated the unique features of Vesara style and exhibited this style as a separate and distinct style of temple architecture<sup>20</sup>(Fergusson 2012, 435-436).

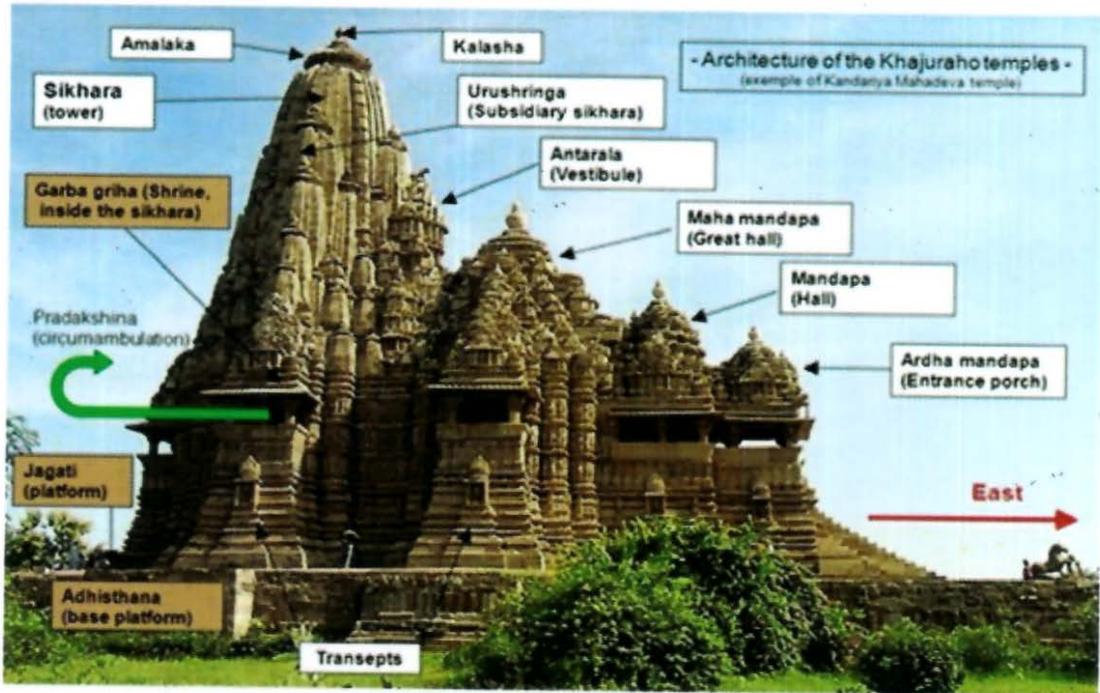
## Plate LXXXIX



Fig. 1

Fig. 1. Konark Sun Temple; c. 1250 A.D.

\*[Source: Plate-LXXXIX- BROWN, PERCY- *Indian Architecture (Buddhist and Hindu)*, New Delhi, CBS Edition 2014]



\*[Source: <https://iasmania.com/temples-styles-in-india/>-retrieved on 15/06/2017 at 7 p.m.]

On the other side, perhaps the extra ordinary group of temples at Khajuraho in central India, sums up all that is best and most elegant in Indo-Aryan style of architecture. These temple built in during the supremacy of the Chandelle Rajput's (950 A.D. to 1050A.D.). The finest and the largest of the group is "Kandariya Mahadeva" temple. This temple, like the other stands on a high and solid mercenary terrace. Differing from the Orissan temples, Khajuraho is maintained in a compact whole and not through a conjoined group of separate buildings. In general, the magnificence of the Khajuraho Shrines depends on the beauty of the proportions, elegance of contours and a perfectly harmonious blend of the structural and decorative elements with the introduction of sculptured bands on the central zone of

the temple. So, undoubtedly we say that the Khajuraho temple made an evolution in the Nagara style and reached this, temple style on unique position.

Vesara style of temple architecture reached its highest climax under Hoyasala dynasty (1000 C.E.-1300 C.E.). The Chalukyan-Hoyasala builders mainly used a greenish or bluish black chloritic schist for the creation of these remarkable temples under Hoyasala patronage. One of the notable temple in Mysore region is the Kesava temple at Somnathpur (1268 C.E.). This temple is architecturally borrowed all the characteristics of a hybrid style. This temple is unique in its stellar design on the outer projections, carvings from base to finial in a three sectional elevation, treatment of the wall surfaces, the design or order of the pillars and a triple shrine with a common 'Navaranga'<sup>21</sup> (Champakalakshmi and Kris 2001, 92-93).

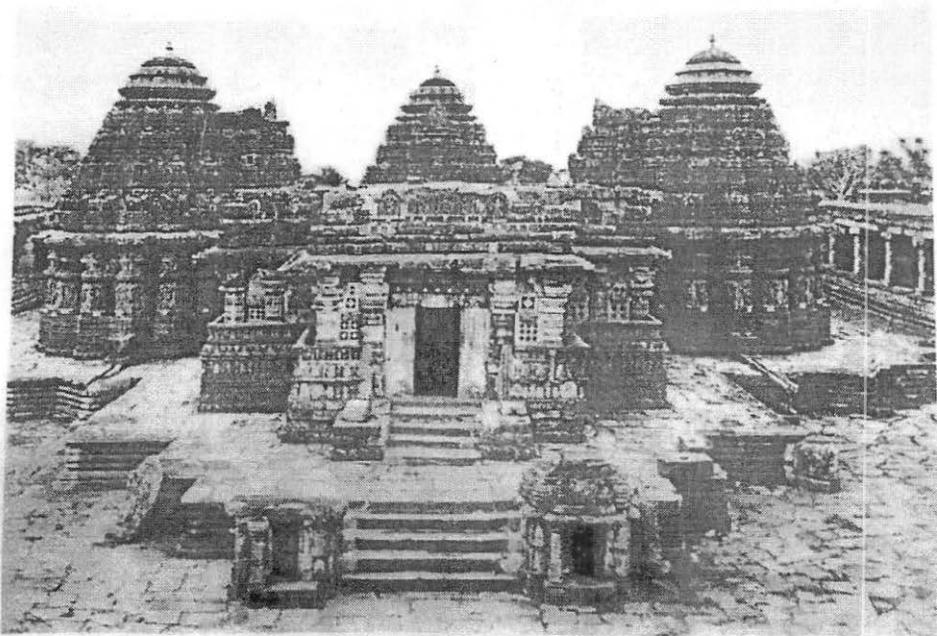


Plate CXXV

Somnathpur, Mysore: Kesava Temple; 1268 A.D.

\*[Source: Plate-CXXV- BROWN, PERCY- *Indian Architecture (Buddhist and Hindu)*, New Delhi, CBS Edition 2014]

The supreme climax of Vesara style reflected and manifested in the Hoysalesvara temple at Halebid (12<sup>th</sup> century C.E.). It is a double temple and has four entrances. The temple itself is 160 ft. in north and south by 122 ft. in east and west. Its height is most probably 25 ft. from the terrace on which it raises. Each temple is cruciform in plan, each have 'Nandi Mandapa' (open pillared pavilion). This temple chiefly on account of its comprehensive sculptural ornamentation, is, without exaggeration, one of the most remarkable monuments ever produced by the hands of man. This temple is also recognised as the grandest achievement of Indian architecture in its most superb plastic manifestation, phenomenal concentration, tremendous technical skill, ingenuity, unstoppable imagination and profound religious significance<sup>22</sup> (Brown 2014, 142-143).

#### **Essence of differences between Nagara and Vesara/Chalukyan style:**

The differences between the Nagara and Vesara style lies in the configuration of the building, the shape of the plan, the treatment of the wall surface, the design and order of the pillars and most important distinction is the design and treatment of the tower or Sikhara. Generally the Sikhara of the Vesara temple style is a straight-lined cone which is unlike to the curvilinear outline of the Nagara style. The porch is also a unit of difference. Mainly the porch of the Vesara temple is open and comprised of columns arranged equidistantly over its floor different from the domical forms of the Northern style. Vesara style is also unique in its grouping of the shrines round a central hall which is unlike to Nagara style. The plan of the Nagara temple is naturally quadrangular while Vesara temple is star-shaped. The design of the tower of Vesara temple is very high standard, recognised as one of the best plastic ornamentation in its sculpture texture. On the other hand the building of the

Nagara temple mainly stressed to its structural strength rather than beautiful ornamentation. However, both are created on the principle of diminishing squares. According to “Manasara –Silpasastra” the distinguishing features of the two styles also seems to be the general shape of the Sikhara<sup>23</sup> (Acharya 1996, 48).

### Conclusion:

The history of the Indian temple architecture which started from the ancient times Vedic alter reached its highest climax in the Nagara, Dravida & Vesara style. In defining this two types (Nagara & Vesara/Chalukyan) we can say it in words that the former to be called ‘Sikhara’ type and the later was Hybrid (‘mull’) type. While the Chalukyan/Vesara form flourished dynastically (Especially by Chalukyan and Hoyasala dynasty), the Nagara style developed regionally, each region manifesting its own particular qualities, undoubtedly impressed at every place by the same ideals principles and forms of art. So, after the above study and discussion we can say that although those two styles of temple architecture had its own distinctive features and forms but both contributing greatly for the enrichment of Indian temple architecture.

### Notes and References:

- 
- <sup>1</sup> Brown, Percy. *Indian Architecture (Buddhist and Hindu)*. New Delhi: CBS Publishers & Distributors Pvt. Ltd., 2014, P.1. .
  - <sup>2</sup> Champakalakshmi, R. and Kris, Usha. *The Hindu Temple*. New Delhi: Lustre Press Roli Books, 2001, pp.23-26.
  - <sup>3</sup> Swarup, Shanti. *5000 years of arts and crafts in India and Pakistan*. New Delhi: B.Taraporevala Sons & Co. Pvt. Ltd., 1968, pp.-135-138.

- <sup>4</sup> Singh, Upinder. *A History of Ancient and Early Medieval India*. Chennai: Pearson, 2008, P.625.
- <sup>5</sup> It is a monumental book on Tantra, divided into four parts and consists of 119 chapters which deals of variety of topics such as the science of magic, hymns of various deities and their applications, construction and renovation of temples etc.- Sastri, Ganapati(Edited). *ISANASIVAGURUDEVA PADDHATI OF ISANASIVA GURUDEVA (VOL-II)*. New Delhi: BHARATIYA VIDYA PRAKASHAN, 1990
- <sup>6</sup> It is a voluminous book on Indian architecture, divided into 83 chapters which deals with house and temple architecture, sculptural arts, paintings, town planning etc. - [https://en.m.wikipedia.org/wiki/Samarangana\\_Sutradhara](https://en.m.wikipedia.org/wiki/Samarangana_Sutradhara)-retrieved on 10/02/2018 at 10 a.m.
- <sup>7</sup> Kramrisch, Stella-. *The Hindu Temple (Volume-1)*. Delhi: Motilal Banarasidass Pvt. Ltd., 2015, pp. 286-287.
- <sup>8</sup> Ibid, P.288.
- <sup>9</sup> Ibid, P.291
- <sup>10</sup> Fergusson, James. *History of Indian and Eastern Architecture (Volume-1)*. Delhi: Low Price Publications, 2012, P.425.
- <sup>11</sup> Champakalakshmi, R. and Kris, Usha. *The Hindu Temple*. New Delhi: Lustre Press Roli Books, 2001, P. 44.
- <sup>12</sup> Notched ring stone Kramrisch, Stella-. *The Hindu Temple (Volume-1)*. Delhi: Motilal Banarasidass Pvt. Ltd., 2015, pp. 216-217.
- <sup>13</sup> Ibid, P.291.
- <sup>14</sup> Champakalakshmi, R. and Kris, Usha. *The Hindu Temple*. New Delhi: Lustre Press Roli Books, 2001, P. 89.
- <sup>15</sup> Singh, Upinder. *A History of Ancient and Early Medieval India*. Chennai: Pearson, 2008,
- <sup>16</sup> Champakalakshmi, R. and Kris, Usha. *The Hindu Temple*. New Delhi: Lustre Press Roli Books, 2001, pp. 92-93.
- <sup>17</sup> Fergusson, James. *History of Indian and Eastern Architecture (Volume-1)*: Delhi: Low Price Publications, 2012, P.423.
- <sup>18</sup> Ibid, P.424.
- <sup>19</sup> It is an open hall with two rows of four pillars at the side, all the pillars except two being carved with large female figures in the relief in the front- Acharya, Prasanna Kumar. *A Dictionary of Hindu Architecture (Manasara series I)*.Delhi: Low Price Publications, 2015,
- <sup>20</sup> Ibid, pp.435-436.

- 
- <sup>21</sup> Champakalakshmi, R. and Kris, Usha. *The Hindu Temple*. New Delhi: Lustre Press Roli Books, 2001, pp. 92-93.
- <sup>22</sup> Brown, Percy. *Indian Architecture (Buddhist and Hindu)*. New Delhi: CBS Publishers & Distributors Pvt. Ltd., 2014, pp.142-143.
- <sup>23</sup> Acharya, Prasanna Kumar. *Indian Architecture (Manasara series II)*. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd., 1996, P.48.