# Analyzing the Impact of Indian Architecture on the Architecture of Cambodia, Thailand and Indonesia

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Abstract—To appreciate Indian art and architecture by studying it in India alone will only lead to partial understanding of the whole story and the variety of the statement has been amply proved by subsequent decades of patient research. The results of the work of the Archaeological Survey of India forms only one half of the picture, the other half emerges with the studies of the archaeology and art of the Far East that progressed almost simultaneously under the Archaeological Survey of the Dutch East Indies, the École française d'Extrême-Orient (EFEO), or French School of Asian Studies, and allied institutions. The conclusions arrived at have only rendered the assertion that India produced her ultimate master pieces only through foreign influences and in foreign lands (the South-Eastern peninsular and archipelagic regions) almost axiomatic. Angkor in Cambodia and Borobudur in Java, undoubtedly the two greatest architectural marvels of Indian genius, for in content and spirit these (and other monuments of varying magnitudes), are purely Indian, would well illustrate the statement mentioned earlier. Stimulated research followed the discoveries and among the many studies and publications of such pioneers like Coedes, Coomaraswamy and many others in Dutch, French and English made growing contributions to the subject. This paper will discuss in detail the impact of India on the architecture of South East Asia by detailed comparison of architectural styles, elements, and construction materials of a few specific architectural master pieces, in both India and South East Asian countries. It will also analyze the reasoning behind the influence of India on South East Asian countries in spite of them being exposed to the equally culturally rich and civilized kingdoms of China. The intention of this paper is to understand that, conquest by war is not always the only reason for architectural influences and impacts.

**Keywords**—Architectural influence, Buddhist architecture, Indian architecture, Southeast Asian architecture.

## I. INTRODUCTION

INDIAN acculturation of countries of the South East has always been peaceful, since it mostly followed the growing trade of the mercantile communities of India, as evidenced by the many inscriptions of their activities that are found both in peninsular India and those countries across the Bay of Bengal. Varied trade followed out of the many eastern ports of India, extending from Tamralipti in the north of the bay to Korkai in the south Pandyan country [4]. The priesthood and clergy of Hinduism including Buddhism accompanied, as did the craft guilds of the times, and founded small settlements in these farflung areas. Commercial contacts with the South East intensified from the early centuries of the Christian era, perhaps with the loss of trade with the Mediterranean world and the Persian Gulf areas that until then was flourishing.

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Similarly, great upheavals in Central Asia could have discouraged active trade with the territories north and northwest of India. In addition, historical events in India should have also sometimes intensified the process of Indianization chiefly by the immigrant small colonies. The relations with India were thus always close and friendly, with the exception of a single incident in the political relations between Srivijaya and Cholas in the 11th century. The accompanying Indian acculturation of these areas had thus always been pacific and independent of politics, and by its very nature more acceptable than the Chinese, to which the countries and civilizations of these areas were equally adjacent and exposed, and which was animated by a desire for conquest accompanied by the imposition of the organizational system of the empire. In this context, each crisis in the Chinese Empire proved to be a boon to South Eastern Asian countries, as their vitality could increase whenever the Imperial power to the north waned or was eclipsed.

## II. REASONING

Related as they were to the Chinese world and constantly connected with it from proto-historic times, these South Eastern countries interposed between India and China were indeed open to prolonged Chinese cultural diffusion, though limited to small areas. The Chinese political power did have the effect of slowing down the progress of the Indianization of these countries. Once the impact of Indianization started in early historic times, the aspect of dependence of these countries on China was completely altered. Continued diffusion of the three great Indian religious currents - Saivism, Vaishnavism and Buddhism - naturally resulted in their absorption and assimilation, according to the respective native genius of common elements, religious ideas, philosophy, ritual traditions, identical themes of symbolism and iconography, and canons of architecture - all mostly derived from Indian sacred literature and technical treaties that formed a common patrimony. Naturally, also local history, legends, beliefs and traditions did influence the format of the matrix of their respective art, architectural and iconographic expressions. Indianization was facilitated more by adoption of the Indian language of religion, philosophy and technology, namely Sanskrit and even the Indian Pallava - Grantha variety. And, once the language and script were learnt, the study and comprehension of the treaties and the diffusion of the contents were easy.

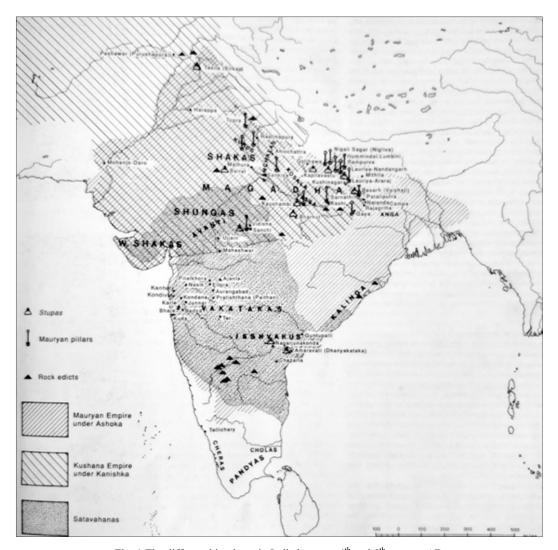


Fig. 1 The different kingdoms in India between  $4^{\text{th}}$  and  $5^{\text{th}}$  century AD



Fig. 1 Countries of Southeast Asia

Savant Codes [7] would have us understand the process of Indian acculturation of these areas as essentially the expansion of an organized culture based on Hindu concepts of royalty characterized by Hindu and Buddhist worship, Purana mythology, observance of the Dharmashastras, and the use of Sanskrit as the means of expression. The most important and

vital aspect of this complex phenomenon was the use of Sanskrit which provided the vocabulary of religious and social terminologies. Almost all the words and terms dealing with abstract concepts as well as others concerned with day-to-day life, technical terms (Paribasha) and grammatical particles were derived from Sanskrit.

#### III. COMPARATIVE ANALYSIS

With this background in mind, here it is important to briefly examine the influences that Indian architecture had on the building art of Southeastern Asian lands. It is possible to trace the development of the Hindu-Buddhist art of India in these areas from the time when buildings and their concomitant sculptures were first executed in durable materials, like the varieties of stone from the late 6<sup>th</sup> or the 7<sup>th</sup> century. But these cannot be so directly examined and evaluated in spite of the availability of much extensive archaeological material and documentation, for the simple reason that all the art and architectural productions were made of perishable fabrics like brick timber, stucco that have become much disjointed, if not

destroyed. As such, the developments that India witnessed from the time of King Ashoka of the Mauryan dynasty, in the form of rock – architecture [6] could not be traced in the South Eastern lands. Even in India, in the makeup of the great stupas of the classical period of Indian art, as at Sanchi, Bharhut, and Amravati, the main fabric of construction was brick and stone, when used, was only used as a veneer or casing, serving no constructional purpose, but lending itself to emplacement of carvings in addition to being a protective casing. The 'toranas' and railings though sometimes of stone were imitations of carpentry and not real stone structures in the strict meaning of the term involving principles of construction related to the material employed.

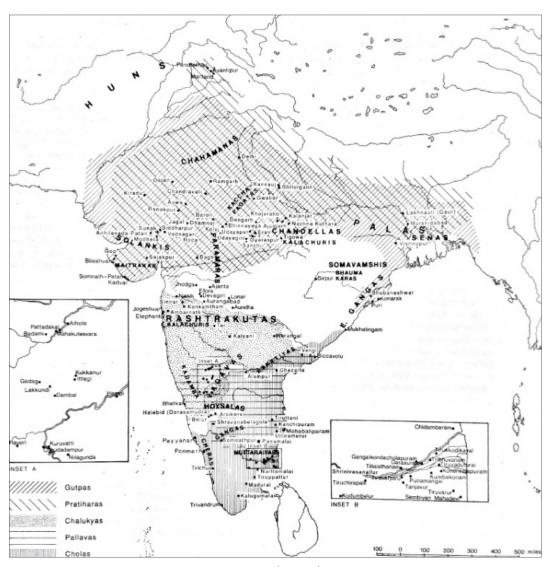


Fig. 2 India between 5th and 12th century AD

The four or five centuries following the 6<sup>th</sup> Christian era, when the art of the Gupta period had attained its marvelous efflorescence, marks the greatest period of building activity in stone and the development of the accompanying sculptural art in the stone structures. This was more active in the peninsular India, south of the Vindhyas when the three great empires of

Chalukyas of Badami in the Deccan, the Pallavas of Kanchi on the coast and the Pandyas of Madurai in the far south rose to power and became perhaps the greatest contributors to the new mode of art and architecture in stone, the verve of which crossed the eastern sea border and spread across the bay to these countries, where too, almost contemporaneously, the

stone tradition in the construction of temples and stupas started. The Rastrakutas who sub planted the Chalukyas of Badami, as the power in the Deccan after the lapse of about a century and a half of Chalukya power and the Imperial Cholas of Tanjore, who replaced both the Pallavas and the Pandyas after their three century old reign, with the eastern branch of the Chalukyas of Vengi wedged in between them on the Andhra sea border, formed two dominants in the late part of the period that developed respectively, the technique, forms and idioms started by the Badami Chalukyas in the Deccan on the one hand, and by the Pallava-Pandiyas of the south on the other, and spread them out eventually to the south east. It is in this period that the distinct Vimana or the tiered temple from the south developed with various stylistic and regional variations as also the Gopura entrances to the temple complex, equally characteristic of South India, as contrasted with the Prasada temple form of the Deccan and North India including Kalinga and Gujarat, some with torana entrances the two forms (Vimana and Prasada types) in their earlier stages being found as a mixed bag in the Chalukyas centers of Badami, Mahakuteshwar, Aihole and Pattadakal. The Chalukyas and following them the dynasties that rose to power in their area of the Deccan and North Mysore continued the tradition of employing stones from the softer varieties of rocks, like sandstone, as the Guptas, Sungas, Mauryas and others did earlier in north India and where the sandstone or soft-stone tradition continued in the late mediaeval and Muslim periods extending even to modern times. The fabric of Gandhara art, it should be remembered, was limestone and that of the Satavahanas was the soft trap into which they excavated the great Buddhist monuments of western India or the soft Palnad limestone of the Krishna Valley as at Amaravati and many other places with the succeeding Iksvahus following suit as at Nagarajunakond.

Orissan art and architecture was also on the soft stone medium. Kalinga (Orissa) and Bengal in eastern India which provided equal access to the South - Eastern lands of these times, maritime from their ports as also overland, too had a share in the makeup of the architectural forms and art trends of the area, particularly in the more proximate regions. The strident development of contemporary Orissan architecture and sculpture under the Bhaumas, the Somavamsis and the Eastern Gangas as also the distinct styles of the Palas had their effects on the monuments of the South Eastern countries.

The Pallavas and the Pandyas struck a new trial by excavating into extremely hard rock's like granite and charnokite or later by building up with stones of such material. This hard stone tradition continued under the Cholas and succeeding dynasties of the far south right into modern times. It was during the times of the Vijayanagara emperors whose empire extended both over the Chalukyas area and the far south, that the hard stone tradition spread over the entire south, terminating the till then prevalent soft stone work as for example schist, soapstone etc. of the Western Chalukyas, the Kakatiyas and the Hoysalas.



Fig. 3 Durga Temple, Aihole

We find that in most of the south eastern countries that soft stones, like sandstone, limestone or even laterite (as in Orissa and Kerala) mostly for foundations (or hearting as in Cambodia) were adopted except in Indonesia where the hard volcanic stone andesite or trachyte was employed following the Pallava-Pandya-Chola hard stone tradition, a significant feature in the art history of the countries concerned. Furthermore, the masonry, as in the Indian monuments, was of dry order, with no mortar or cementing materials being used in the construction; so that in their building technique and the structural principles adopted were eventually the same as in India

Pradaksina or circumambulation constituting an important ritual in Indian worship, whether of the Buddhist or of the Saiva-Vaisnava or of the other sects, the design of the temples, whether of the open-to-air or of the hypaethral type, or of the roofed type, had to provide for such a feature which is found again faithfully repeated in the plan and layout of the South-Eastern stupas and temples. The hypaethral temple with the object of worship open to the air, as in the vriksa caitya or Bodhimanda, reflecting the earlier trends of animistic or treeworship and of the stupa, starting primarily as a funerary tomb (sariraka), becoming secondarily a reliquary of objects associated with the hallowed great (paribhogika) and ending as the commemorative (uddesika) monument - all symbolic of the master and likewise reflecting the cults of ancestor worship of the earlier peoples and the roofed sanctuaries enshrining the object of worship - symbolic or anthropomorphic forms of the deity venerated, both appealed to the almost similarly conditioned people of these lands, where too animism and megalithism prevailed earlier to the onset of the organized Indian religious ideas. Thus the borrowal by the Southeast of Indian temple types, both in their function and form and exhibiting very little modification in the beginning resulted. The provision of such elaborate circumambulatory in the monuments of Borobudur, Parambanan and Angkor, to mention the most well-known, would suffice to illustrate this trend.

The enhancement of the stature of the monument - stupa or temple, by mounting it on a high square platform with steps (sopana) provided on the cardinal sides would be another feature of Indian origin. This particular feature can be found emphasized in not only the three monuments mentioned

earlier but, also among most cases in Burma, Cambodia, Thailand and Indonesia. The essentially square platforms are repeatedly offset on their sides to make twelve or progressively more re-entrant corners. The Sompuri or Paharpur temple as an early example preserved in what is today Bangladesh (old Bengal of India) which had as its nucleus a stupa mounted on a triple terrace, each square reduces in size on all sides than the one below and offset into 20 corners, surrounded by four big sanctuaries and a covered pradakshina so much so that the steeple like chatravali finial of the main part alone is rendered visible as over topping the whole complex formed a model for the Burmese temples and stupas, as in the Ananda Temple at Pagan of the 10<sup>th</sup>-13<sup>th</sup> centuries, constituting veritable specimens of the late Pala school. The shape of the dome of the stupa tending to the bell shaped or campanulate is a development borrowed from the Sri Lanka types and a variation from the domical or high domical of the northern, western and south Indian, and the tall cylindrical of north western India. But the original structure of the Burmese stupa was cylindrical e.g. the Bawbawgyi stupa (early 7<sup>th</sup> century) or high domical showing traditional shapes from a bulbous to a more slender tower shaped top. While in essential concepts, form and components these stupas derive much from the Indian forms, the characteristic feature is the general absence of the harmika, a small pavilion like or railed enclosure like structure found on the top of the Indian forms, though this element is found preserved on top of a few hemispherical stupas that have remained more faithful to the Indian or Sinhalese prototypes. The crowning member of the hypaethral stupa temple was instead a conventionalized chatravali elongated and of conspicuous height, the hti, perhaps a borrowed and development of the Sinhalese form. In the Javanese examples the finial approximates more a miniature stupa or even a kalasa form, but with an elongated attenuate rod like terminal.

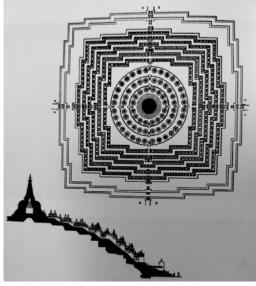


Fig. 4 Plan and section of Borobodur [2]

The trend that animated the creation of monumental forms,

as in Borobudur, is clearly traceable to such great forms as the stupa of Lauriya Nandangarh (4<sup>th</sup> century) which in dimensions exceeded the Javanese monument but certainly lacked its wealth of decoration. In its final form this most developed concept of the hypaethral stupa temple form in Borobudur seems to have derived from more than one regional source in India. Also the arrangement of the niches and miniature stupas on the terraces of Borobudur is more after the model of the arrangement of the miniature shrine forms on the talas of a south Indian vimana.

In the case of the roofed temples, devayatanas or caityagrhas, where the body of the structure raised over its own plinth, often elevated by a terrace sub-base, is a sanctuary enshrining the object of worship a stupa form, icon, image or symbol, the general essentials are mostly Indian. The roof, likewise, was trabeate, rising up tower like by a system of inward corbelling of the stages, achieved by the overlapping of the courses progressively towards one another inside, thus gradually reducing in size the space to be covered or roofed over. This scheme, called kadalikakarana in Indian architectural texts, is the characteristic mode of construction adopted in India for its rising roofs that reduce themselves to a small opening on top that can be covered by a single slab-the pidhana-phalaka, that carried the finial - the stupi or kalasa of the southern temple or the amala - sila with kalasa of the northern temple.

While the architectural and decorative adjuncts added around the base over the platform would recall the pancayatana layout of the Indian temples, familiar from late Gupta times, such architectural embellishment of the faces, particularly of the superstructure, by miniature shrines, models or shrine frontals (the torana or nasika) motifs, and their repetition over the various stages of the rise of the superstructure in the temples of the southeastern regions are definite adoptions of the Indian forms deriving from the Deccan and South India, but modified according to the regional styles and the patterns in particular being essentially borrowed from the south Indian Vimana form.

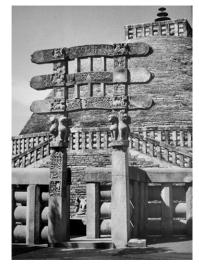


Fig. 5 South Torana of the Mahastupa at Sanchi [5]

Since the Kadalikakarana technique adopted for the rising super structure or roof naturally restricted the architectural possibilities, for a lofty temple would require a correspondingly broad base, the broader the sub base or terraced platform became necessary; the terraced sub base being essentially the elaboration of the idea of the upapitha below the adhisthana of south Indian temples, prescribed in the texts as an expedient for enhancing the stature of the vimana though its adoption can be optional. By its introduction not only the stature of the monument was enhanced but, with its offset sides the possibilities of architectural elaboration and sculptural embellishment increased.

The spatial magnitude of the monument was further enhanced, as in the Indian examples, particularly the southern ones, by erection of smaller temples or stupas, or the parivara units in concentric series around the main nuclear structure resulting in a temple complex. While in the innermost series the parivara units face the principal structure, the units of the successive outer series face alternatively outwards and inwards as in the complexes of Java e.g. in Candi Sewu and Prambanan. the rudiments of this feature is found in the Pallava structural temple complex - the Kailasanatha at Kanchipuram (700 - 730 AD) where the principal shrine is surrounded by inner ring of parivara shrines (all of them except those on the eastern side facing east the latter facing west) and the beginnings of an outer series with eight subshrines in a row facing east, outside the prakara. One would often find that the inner series are not thus cordoned off by corresponding series of enclosure walls or prakara though these were provided with gopura entrances or gateways, again after the model of the south Indian temple complexes, of which they were the characteristic and where they also developed both in magnitude and importance as against the torana entrance - a linear or arcuate festoon spanning a pair of columns, that went with some of the north Indian or Orissan monuments, as at Sanchi and Bhuvaneshwar. The gopura wherever it occurs is extant either in Indonesia (where it is called gapura) as for example in the Djedong and Plaosan temples with an entrance passage through the pylon on the top of the stepped up base, or in the Cambodian temples as for example the Angkor complex is essentially, a take over from south India. In later Javanese temple architecture (10<sup>th</sup>-15<sup>th</sup> centuries), the gopura or duwar as it is also called in Java is, however, modified resulting in a totally and longitudinally (or vertically) bisected solid pylon with an open passage in between the two identical halves reached by a flight of steps, before and after.

Among the variety of ground plans of the structures prevailing in India i.e. square, oblong, octagonal, circular, elliptical (oblate or prolate) and apsidal (capa form) some as more common had an influence on the constructions of the monuments in the southeast. Of these the square often with repeatedly projected offsets approaching almost the western Calukyan or Hoysala patterns (e.g. Vat Mahaduta of Thailand) is most common and to a lesser extent the oblong as illustrated by the storeyed, vihara like Candi Sari, with its triple - celled

sanctuary on the ground floor (aditala) in Java. The octagonal brick pagoda at Sung Shan in Honan of the 6th century is an early example illustrating this rather rare plan. Circular or oblate plans are again rare, except in the case of the circular sectioned stupa forms, and the unique circular Shiva shrine at Candi Jabung in Java. This high temple is erected over a stepped up square platform with pronounced offsets or buttresses (bhadra) and the transition from the square plan of the sub base to the circular of the tall shrine part with offsets on the foreside is skillfully managed, as in the case of many an Indian example, making it the finest specimen of Javanese art, though in ruins. The offsetting resulting buttresses of the rectilinear sides and the proliferations of the number of angles progressively from four to twelve, twenty and so on, as stated before, adds strength in addition to affording nice play of light and shadow and incidentally increasing the area to the sculptured or otherwise embellished. These would lead on to temples with lateral niches provided in the projected offsets as in the Candisof Prambanan, Dieng and Penataran, in which temples the Pallava ensemble is well marked, and ultimately leads to lateral shrines with separate entrances again like the Pallava temples of Kailasanatha. Such an extreme type is exemplified by the later temples like Candi Singasari (Java) as in the almost contemporary, post rastrakuta or western Calukyan temples of the Deccan.

The great temples of Bayon and Angkor show, besides the elaboration of the pancayatana layout with corner sub shrines in the various terraces, the common Indian caturmukha (chawmukha) aspect also in having the square sanctuary provided with door openings on all the four sides. The disposition of small shrine replicas in the hara as it is called round the body (harmya) of each receding tala or storey, over the ground tala (adi tala) of the multi storeyed vimanas of the Pallavas, Pandyas and Calukyas is essentially a repetition of the ground level layout of a central shrine surrounded by five (pancayatana) or eight (astaparivara) or more sub shrines. The scheme of arrangement of the components of the hara will in the typical south Indian vimana be the square kutas or miniature vimanas with square section and domical convergent roof with single finial, placed at the corners of each tala top hence karanakutas and salas or oblong miniature vimanas with wagon top roof and a row of finials over their ridges placed in between over the sides, often with the third element the panjara or nida of apsidal form interposed between the two and occurring in later forms of vimanas with four or five talas or more. The elements are connected to each other by lengths of cloister or dwarf walls of lesser height, the harantara.

In the south eastern temples which approximate more the south Indian vimana forms than the north Indian prasada forms in the adoption of this scheme the component elements of the hara are modified. While in the group in Dieng (Java) which in general recall the Pallava examples in Mahabalipuram the cornea karnakuta and the intermediate sala elements are discernible, the sala becomes a sabha form (with oblong section of the body and the linear roof sloping down all four sides in curves) in the south eastern examples of Candis

Dorowati, Puntodewo and Getoet Kotjo, but the connecting harantara is not evident, thus making the elements stand separated from each other. This is not kept up in later temples like Candi Mendut and Candi Pawon where they would be appropriate, but also found carried over, as a motif, to non-Buddhist examples as in the great temple complex of the Candi Loro Djongrang at Prambanan. The Gedong Songo Chandis, however, show the free standing karnakuta like elements over the talas with amala- sila shaped sikharas, evidently a borrowed element from north India, and more probably the Calukyan area where both the northern and southern forms of temples were built or even from Kalinga. The same scheme of ahara on the periphery of every rising tier is to be found adopted in the colossal hypaethral temple Borobudur, where the elements over the square terraces are stupa forms, in place of the south Indian karnakutas at the corners and figure- niches (simulating the panjaras of south Indian vimanas) in between, all connected by a parapet of balustrade that is richly sculptured, an elaboration, carried to the extreme, of similar sculpturing found in the harantara lengths of the south Indian vimanas. The upper circular terraces, however, have stupa forms alone set on their fringes. The sculpturing of the terrace walls, in addition to the faces of the balustrades would again recall south Indian vimana forms with ambulatories in the upper talas as for example the Pallava Dharmaraja ratha at Mahabalipuram and Kanchi Vaikuntha Perumal temple. The same is to be said about the Prambanan and Angkor temples. Often in the case of smaller temples the top of each tala carries between the corner shrine replicas - the karnakutas, triangularly shaped three pronged antefixes, not unlike those found in the late Calukyan temples.

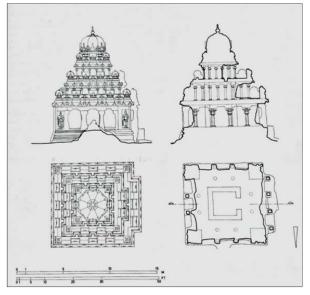


Fig. 6 Dharmaraja Ratha at Mahabalipuram [3]

The ultimate finial over the top of most tala is again found to be a stupa form in many cases with the characteristic campaniform shape, as against the stupi and kalasa (purnaghata form) of the Indian finials. The stupa form finial is evident in the Indonesian temples, the Candis of Pawon, Mendut and Sewu. But the kalasa form is also discernible in some cases as in Prambanan area and in the much later Candisof Singasari, Jawi and Badut. Elsewhere, the finial is the conventionalized chatravali of a tier of parasols of diminishing size.

The most interesting feature would be the transformation of the Indian makara-torana motif into forms like the kalamakara as in Java. The makara-torana is essentially a curved floral or foliar arch (jhasa) or festoon issuing from the gapes of a makara pair, an ihamrga (fabulous animal form in Hindu mythology), the makaras themselves facing each other, perched on the tops of the capitals of two supporting pillars. In Indian architecture this is employed variously, primarily as a general entrance in its free-standing form (as in Sanchi where the arches are nearly straightened or in Bhuvaneshwar where the arches have their natural arcuate form) to serve as a frontal primary entrance to the premises of a temple or even a palace or a fortification as in early times (in place of the gopura in front of it) and again as the characteristic south Indian prabha called tiruvaci framing stone or metal icons. it is used more frequently as the front frame (mukhapatti) of opening like shrine - entrances, niches or devakosthas, nasika (gable like) entrances, the arched end faces of sala (wagon top) or panjara (apsidal where the front end would be arched), sikharas ( or roofs) of south Indian vimanas. Often, the two halves of the semi-circular or horseshoe shaped arches are made to terminate at the apex or top into the open gapes of two addorsed makara heads or a simhamukha or kirtimukha (leonine face) forming the crest, the lalatabimba. In its abbreviated form without the supporting columns it frames the alpha nasika or the characteristic kudu ornaments of the cornice element (kapota) in south Indian architecture while the torana supported on two columns (stamba torana) is either free standing or applique to the frontals of the various types of openings or entrances (dvara torana), niches or walls (bhithi torana), or other lesser apertures like nasikas gable ends (mukha patti) etc.



Fig. 7 The makara

The shrine entrances in the north Indian examples; however, have an elaborate over-door or outer frame composed of three, five, seven or more concentric elements, the saklas extending on either side beyond the jambs, and offer the lintel with a central motif - an ihamrga or an icon the

lalatabimba. This starting from the Gupta period, is found variously elaborated in the north Indian temple styles of later period, and adopted by the Calukyas and their successors in the Deccan. An invariable component of the sakhas of the over door was the sarpasakha two large snake forms, one on either side, held at the top by their tail ends in the talons or beak of a garuda (eagle) forming the lintel crest or lalatabimba. The kala makara has just a leonine crest (kala) with the two fantastic makaras rising from its mouth and trailing down the door jambs of the doorway or niche with the heads of the makaras resting on the ground on either end of the sill, a feature akin to the sarpa-sakhaa of the north Indian and the Deccan temples with the variation of the makara element of the torana being borrowed from the typical south Indian forms.

The Javanese adaptation of the Indian makara - torana - sarpa - sakha - lalatabimba complex of motifs and their transformation into the characteristic kala makara form, tending more to a pointed apex and its extension in the prasats or temples of Khmer architecture would thus be easily understood. In many examples outside Java one could still discern the sarpa-sakha motif on the shrine doorways or niche openings. In the earliest phase of Cham architecture, as in Hoa-lai, the superstructure of the southern tower displays an arch showing its identity with the kudu arch of the south Indian vimanas.

#### IV. CONCLUSION

While the scope for this paper would permit only a general sketch as above, a detailed analysis of South Eastern architecture either region wise or chronologically would not be attempted here. It would be apt to say that these countries of the south east, while adopting along with the Indian religious, the architectural techniques, forms and motifs and reproducing Indian forms in their pristine stages of art and architectural development, considerably altered them later by their own contributions, drawn from their indigenous art trends and native genius. But the undercurrent of Indian influence is always discernible. Broadly speaking we can trace in each region of the south east, [1] first of all an Indianesque period when the local art constitutes to all intents and purposes a province of Indian art, so that the art of the Funan in the 6<sup>th</sup> and 7<sup>th</sup> century, may indeed be said to fulfill our knowledge of Gupta (Calukyas) and Pallava art; then a classical period (800-1200 AD.) in which a local national formula is evolved and crystallized and finally a local national phase that is no longer in direct contact with India and passing into an age of folk art which has generally survived up to the present day.

It would also be understood here that although Indian symbolism, ritual and general principles of plan, layout and design remained basically unchanged, architectural forms and techniques have undergone substantial modifications, the new forms created by the local genius revealing that the themes and compositions created by India are susceptible of different but equally valid interpretations in the various regions of the southeast. The variety of interpretations and their interaction, fusion and eclectic adaptations would only confirm the vitality of these types and structures in a variety of environments that

are socially and religiously similar.

#### **APPENDIX**

- Adhisthana: This Sanskrit term means the raised base on which a temple stands.
- Aihole: Is a memorable site of antiquated and medieval period of Buddhist, Hindu and Jain landmarks in north Karnataka (India) dated from the fourth century through the twelfth century. Situated around an eponymous little town encompassed by farmlands and sandstone slopes, Aihole is a noteworthy archeological site including more than one hundred and twenty stone and give in sanctuaries from this period. The reported history of Aihole is discernible to the ascent of the Early Chalukya tradition in sixth century. The Chalukyas supported craftsmen and fabricated numerous sanctuaries in this district between the 6th and 8th century. Proof of wooden and block sanctuaries dating to fourth century have been uncovered. Aihole began the experimentations with different materials, for example, stone around the fifth century when the Indian subcontinent saw a time of political and social steadiness under the Gupta Empire rulers.
- Amravati: Amravati is a town in Guntur region of the Indian province of Andhra Pradesh. It is situated on the banks of Krishna River. It is a legacy town and was the capital of the Satavahana Kingdom. It is additionally a memorable Buddhist site, and the Amravati Mahachaitya stupa was worked here between the second century BCE and the third century. After the decay of Satavahanas, Andhra Ikshvakus and later Pallava lords led here. Along these lines, Eastern Chalukyas and Telugu Cholas held influence over the district. Kota Kings were responsible for Amravati amid the medieval occasions. Kota rulers were stifled by Kakatiyas in the 11<sup>th</sup> century CE and Amravati turned out to be a piece of the bound together Telugu domain.
- Ambulatory: a place for walking, especially an aisle or cloister in a church or monastery.
- Ananda Temple: The Ananda Temple in Bagan, Myanmar is a Buddhist sanctuary worked in 1105 AD amid the rule (1084-1113) of King Kyanzittha of the Pagan Dynasty. It is one of four enduring sanctuaries in Bagan. The sanctuary format is in a cruciform with a few patios prompting a little pagoda at the best secured by an umbrella known as hti.
- Andesite: a dark, fine-grained, brown or grayish intermediate volcanic rock which is a common constituent of lavas in some areas.
- Angkor: The word Angkor is derived from the Sanskrit word nagara, meaning "city". It was the capital city of the Khmer Empire, which flourished from approximately the 9<sup>th</sup> to 15<sup>th</sup> centuries. The city houses the magnificent Angkor Wat.
- Animistic: the conviction that common items, characteristic wonders, and the universe itself have spirits.
   The conviction that regular articles have spirits that may exist separated from their material bodies. The regulation

that the spirit is the standard of life and wellbeing. confidence in profound creatures or organizations. Antefixe: An antefix (from Latin antefigere, to fasten before) is a vertical block which terminates the covering tiles of a tiled roof. In grand buildings the face of each stone ante-fix was richly carved.

- Archaeological Survey of India The Archaeological Survey of India (ASI) is a Government of India organization responsible for archaeological research and the conservation and preservation of cultural monuments in the country.
- Archipelagic region of Southeast Asia: It consists of two distinctive different geographic regions, one is mainland Southeast Asia, also known as Indochina, on the Indochinese peninsula; it comprises the countries of Cambodia, Laos, Myanmar (Burma), Thailand, Vietnam and West Malaysia (Peninsular Malaysia), the other is the Malay Archipelago, or Maritime Southeast Asia, which comprises the countries of: Brunei (on the island of Borneo), East Malaysia (with the Malayan states of Sabah and Sarawak on the northern part of Borneo), all the islands of Indonesia, the Philippines, Singapore and Timor-Leste (East Timor).
- Balustrade: a railing supported by balusters, especially one forming an ornamental parapet to a balcony, bridge, or terrace.
- Bawbawgyi pagoda: is one of the earliest existing examples of a Burmese pagoda. It is a circular brick-built structure, raised on terrace to a height of approximately 46 m.
- Bayon: It is a luxuriously improved Khmer sanctuary at Angkor in Cambodia. Worked in the late 12<sup>th</sup> or mid-13<sup>th</sup> century as the state sanctuary of the Mahayana Buddhist King Jayavarman VII.
- The Bayon stands at the centre of his capital, Angkor Thom. It is most distinctive feature is the multitude of serene and smiling stone faces on the many towers which jut out from the upper terrace and cluster around its central peak. The temple has two sets of bas-reliefs, which present a combination of mythological, historical, and mundane scenes.
- Bengal: It is a geopolitical, cultural and historical region in South Asia, specifically in the eastern part of the Indian subcontinent at the apex of the Bay of Bengal. It is currently divided between Bangladesh (which covers twothirds of the region) and the Indian territories of West Bengal, Tripura and Assam's Barak Valley.
- Bhadra (buttress): A buttress is an architectural structure built against or projecting from a wall which serves to support or reinforce the wall. Buttresses are fairly common on more ancient buildings, as a means of providing support to act against the lateral forces arising out of the roof structures that lack adequate bracing.
- Bhaumas: The Bhauma dynasty is second legendary dynasty of Pragjyotisha (present day Guwahati).
- Bhithi torana: A torana with murals.
- Bhuvaneshwar: Bhubaneswar or Bhuvaneshwar is an

- ancient city in India's eastern state of Odisha, formerly Orissa. Many temples built from sandstone are dotted around Bindu Sagar Lake in the old city, including the 11<sup>th</sup>-century Hindu Lingaraja Temple. A standout amongst the most total proclamations of the Mauryan Emperor, Ashoka, dating from between 272–236 BCE, stays cut in shake 8 kilometers (5.0 mi) toward the southwest of the cutting edge city. The territory was thusly administered by a few administrations, including Satavahanas, Guptas, Matharas, and Shailodbhavas. In 7<sup>th</sup> century, Somavamshi or Keshari dynasty established their kingdom in the area, and constructed a number of temples.
- Borobudur: It is a 9<sup>th</sup>-century Mahayana Buddhist temple in Central Java, Indonesia. It is the world's largest Buddhist temple. The sanctuary comprises of nine stacked stages, six square and three round, topped by a focal arch. It is enriched with 2,672 alleviation boards and 504 Buddha statues. The focal arch is encompassed by 72 Buddha statues, each situated inside a punctured stupa. Worked in the 9<sup>th</sup> century amid the rule of the Sailendra Dynasty, the sanctuary configuration pursues Javanese Buddhist engineering, which mixes the Indonesian indigenous faction of progenitor revere and the Buddhist idea of accomplishing Nirvana. The sanctuary shows the impacts of Gupta craftsmanship that mirrors India's effect on the area, yet there are sufficient indigenous scenes and components joined to make Borobudur interestingly Indonesian.
- Buddhism It is the world's fourth-largest religion. An Indian religion, Buddhism encompasses a variety of traditions, beliefs and spiritual practices largely based on original teachings attributed to the Buddha and resulting interpreted philosophies. Buddhism originated in ancient India sometime between the 6<sup>th</sup> and 4<sup>th</sup> centuries BCE, spreading through much of Asia.
- Bulbous: fat, round, or bulging
- Caturmukha/Chaw mukha: four faced
  - Chalukyas: The Chalukya line was an Indian regal administration that ruled huge parts of southern and focal India between the sixth and the twelfth hundreds of years. Amid this period, they managed as three related yet singular administrations. The most punctual line, known as the "Badami Chalukyas", ruled from Vatapi (present day Badami) from the center of the 6th century. The Badami Chalukyas started to state their autonomy at the decay of the Kadamba kingdom of Banavasi and quickly rose to noticeable quality amid the rule of Pulakeshin II. After the passing of Pulakeshin II, the Eastern Chalukyas turned into an autonomous kingdom in the eastern Deccan. They controlled from Vengiuntil about the 11th century. In the western Deccan, the ascent of the Rashtrakutas amidst the 8th century overshadowed the Chalukyas of Badami before being restored by their relatives, the Western Chalukyas, in the late 10<sup>th</sup> century. These Western Chalukyas ruled from Kalyani (current Basavakalyan) until the finish of the 12<sup>th</sup> century.

- Cham architecture: Champa was an Indic civilization that flourished along the coasts of what is now central and southern Vietnam for roughly a one thousand-year period between 500 and 1500 A.D. The original Chams were probably colonists from the Indonesian islands, who adopted as their principal vocations those of trade, shipping, and piracy. Their cities were ports of call on important trade routes linking India, China and the Indonesian islands. Their style of architecture was unlike the Khmer of Angkor, who for the most part employed grey sandstone to construct their religious buildings, as the Cham built their temples from reddish bricks. Some of these brick structures can still be visited in the Vietnamese countryside.
- Candi: is a Hindu or Buddhist temple in Indonesia, mostly built during the Zaman Hindu-Buddha or "Indianized period", between the 4<sup>th</sup> and 15<sup>th</sup> centuries. In modern Indonesian language, the term Candi can be translated as "temple" or similar structure, especially of Hindu and Buddhist faiths. Thus temples of Cambodia (such as the Angkor Wat), Champa (Central and Southern Vietnam), Thailand, Myanmar and India are also called Candi in Indonesian.
- Candi Dwarawati: This is part of the 7<sup>th</sup> 8<sup>th</sup> century Dieng temples in Indonesia. The Dwarawati consisted of 4 temples in its cluster but only one remains now.
- Candi Gatotkaca: This is also part of the 7<sup>th</sup> 8<sup>th</sup> century Dieng temples in Indonesia. The Gatotkaca cluster consisted of five temples but only one remains today.
- Candi Jabung: It is a 14<sup>th</sup> century Buddhist temple. Red brick is the primary material used for construction.
- Candi Mendut: Mendut is a 9<sup>th</sup>-century Buddhist temple, located in Mendut village, Mungkid sub-district, Magelang Regency, Central Java, Indonesia. The temple is located about three kilometers east from Borobudur. Mendut, Borobudur and Pawon, all of which are Buddhist temples, are located in one straight line. There is a mutual religious relationship between the three temples, although the exact ritual process is unknown.
- Candi Pawon: It is a Buddhist temple in Central Java, Indonesia. Located between two other Buddhist temples, Borobudur and Mendut, Pawon is connected with the other two temples, all of which were built during the Sailendra dynasty (8<sup>th</sup>-9<sup>th</sup> centuries).
- Candi Puntodewo: This is part of the 7<sup>th</sup>-8<sup>th</sup> century Dieng temples in Indonesia. It belongs to the Arjuna cluster.
- Candi Sari: It is an 8<sup>th</sup> century Buddhist, Indonesia. The temple was a two-story building with wooden beams, floors, stairs completed with windows and doors; all from natural materials which presently are rotted and gone. It is proposed that the first capacity of this building was Buddhist religious community a residence for priests. The sanctuary's name Sari or Saré makes an interpretation of as "to rest" in Javanese, which additionally affirms the residence idea of the building.
- Candi Sewu: An 8<sup>th</sup> century Mahayana Buddhist temple located 800 meters north of Prambanan in Central Java,

- Indonesia. Candi Sewu is the second largest Buddhist temple complex in Indonesia.
- Candisof Badut It is the oldest existing temple of east Java in Indonesia.
- Candisof Jawi: This is a syncretic Hindu-Buddhist temple dated from late 13<sup>th</sup> century Singhasari kingdom. The temple is located on the eastern slope of Mount Welirang, East Java, Indonesia, The temple was thought to be a Hindu-Buddhist place of worship; however, it actually was dedicated as a mortuary temple to honor King Kertanegara, the last king of Singhasari.
- Candisof Singasari: It is a 13<sup>th</sup> century syncretic Hindu-Buddhist temple located, in East Java in Indonesia.
- Chedi: alternative term for a Buddhist stupa mainly used in Thailand.
- Cholas: The Chola administration was one of the longestdecision lines ever. The most punctual datable references to this Tamil tradition are in engravings from the third century BCE left by Ashoka, of the Maurya Empire. Amid the period 1010-1153, the Chola regions extended from the islands of the Maldives in the south to as far north as the banks of the Godavari River in Andhra Pradesh. Rajaraja Chola vanquished peninsular South India, attached parts of which is currently Sri Lankaand possessed the islands of the Maldives. Rajendra Chola sent a successful undertaking to North India that contacted the stream Ganges and crushed the Pala leader of Pataliputra, Mahipala. He additionally effectively attacked urban areas of Srivijaya of Malaysia and Indonesia. The Chola tradition went into decay toward the start of the thirteenth century.
- Cloister: A cloister (from Latin claustrum, "enclosure") is a covered walk, open gallery, or open arcade running along the walls of buildings and forming a quadrangle or garth
- Coedes: George Coedes was a 20<sup>th</sup>-century French scholar of southeast Asian archaeology and history.
- Concomitant- a phenomenon that naturally accompanies or follows something
- Coomaraswamy: Ananda Kentish Muthu Coomaraswamy was a Ceylonese Tamil philosopher and metaphysician, as well as a pioneering historian and philosopher of Indian art, particularly art history and symbolism, and an early interpreter of Indian culture to the West.
- Corbel In architecture a corbel is a structural piece of stone, wood or metal jutting from a wall to carry a superincumbent weight, a type of bracket.
- Deccan: Deccan implies Southern part in antiquated India, south of the Satpura and Vindhya ranges. Deccan incorporates the east and west drifts and fields, the level and mountain scopes of the antiquated Southern India.
- Devakosthas: A niche on the exterior of the wall of a southern-style Hindu temple containing an image of a deity or, sometimes, other figures.
- Devayatanas: temples with learning centers
- Dharmaraja Ratha: Dharmaraja Ratha is a landmark in the Pancha Rathas complex at Mahabalipuram, on the

- Coromandel Coast of the Bay of Bengal, in the Kancheepuram locale of the province of Tamil Nadu, India. It is a case of stone monument Indian shake cut engineering. Dating from the late 7<sup>th</sup> century.
- Dharmashastras: is a genre of Sanskrit texts, and refers to the treatises (shastras) of Hinduism on dharma. There are many Dharmashastras, variously estimated to be 18 to about 100, with different and conflicting points of view. Each of these texts exists in many different versions, and each is rooted in Dharmasutras texts dated to 1<sup>st</sup> millennium BCE.
- Dieng is a damp level that shapes the floor of a caldera complex on the Dieng Volcanic Complex close Wonosobo, Central Java, Indonesia. It sits at 2,000 meters (6,600 ft) above ocean level, a long way from real populace focuses. The name "Dieng" originates from Di Hyang which signifies "Habitation the Gods". The Plateau is the area of eight little Hindu sanctuaries from the Kalingga Kingdom.
- Embellishment: a decorative detail or feature added to something to make it more attractive
- Festoon: a chain or garland of flowers, leaves, or ribbons, hung in a curve as a decoration.
- Funan: The Funan Kingdom was a pre-Angkorian civilization set within the Mekong River delta of south Cambodia and Asian country. The introduction of trade routes between China and Indian on the primary century AD inspired the appearance of settlers within the space and is consistent with Chinese records, one in all the primary settlements was Funan.
- Gandhara art style of Buddhist visual art that developed in what is now northwestern Pakistan and eastern Afghanistan between the 1<sup>st</sup> century BCE and the 7<sup>th</sup> century CE.
- Garuda: Eagle
- Gedong Songo Candis: is a cluster of Hindu temples settled in Central Java, Indonesia. the location was originally engineered throughout the first amount of the Medang Kingdom that controlled Central Java throughout the eighth and ninth centuries. almost like the Dieng temples on the Dieng highland, Gedong Songo was erected out of volcanic stone and also the two complexes represent the oldest Hindu structures in Java.
- Gopura: is a monumental entrance tower, usually ornate, at the entrance of a Hindu temple, in the Dravidian architecture of the Tamil Nadu, Andhra Pradesh, Kerala, Karnataka, and Telangana states of Southern India.
- Granite: Granite is a common type of felsic intrusive igneous rock that is granular and phaneritic in texture.
- Grantha script: The Grantha script is an Indian script that
  was widely used between the sixth century and the 20<sup>th</sup>
  centuries by Tamil and Malayalam speakers in South
  India, particularly in Tamil Nadu and Kerala, to write
  Sanskrit and the classical language Manipravalam, and is
  still in restricted use in traditional Vedic schools
- Gupta dynasty: An ancient Indian empire existing from the mid-to-late 3<sup>rd</sup> century CE to 590 CE. At its celestial

- point, from roughly 319 to 550 cerium, it lined a lot of the Indian subcontinent.
- Harmika: In Buddhist Architecture, Harmika is a fence like enclosure in the shape of a square which indicates heaven on the top of a stupa.
- Hearting: Material used as fill between walls of greater structural integrity, especially in masonry.
- Hoysalas: The Hoysala Empire was a Kannadiga control beginning from the Indian subcontinent, that ruled a large portion of what is presently Karnataka, India, between the tenth and the fourteenth hundreds of years. The Hoysala time was an essential period in the advancement of workmanship, design, and religion in South India. The realm is recalled today fundamentally for Hoysala engineering. Over a hundred enduring sanctuaries are dissipated crosswise over Karnataka
- Hti: a Burmese language word meaning umbrella, is the name of the finial ornament that tops almost all Burmese pagodas. The shape is an propitious symbol in Buddhism and Hinduism.
- Hypaethral: having no roof.
- Ihamrga: kind of wolf.
- Iksvahus: Ikshvaku dynasty, in Puranic literature, was a dynasty founded by the legendary King Ikshvaku.
- Javanese: The Javanese are an ethnos native to the Indonesian island of Java. They are primarily located in the eastern parts of the island.
- Jurisprudence: the theory or philosophy of law
- Kailasanatha Temple: The Kanchi Kailasanathar temple is the oldest structure in Kanchipuram. Located in Tamil Nadu, India, it is a Hindu temple in the Dravidian architectural style. The temple was built from 685-705 AD by a Rajasimha (Narasimhavarman II) ruler of the Pallava Dynasty. The low-slung sandstone compound contains a large number of carvings, including many halfanimal deities which were popular during the early Dravidian architectural period. The structure contains 58 small shrines which are dedicated to various forms of Shiva. These are built into niches on the inner face of the high compound wall of the circumambulatory passage.
- Kakatiyas: The Kakatiya dynasty was a South Indian dynasty whose capital was Orugallu, now known as Warangal.
- Kalasa: Hindu temples typically have Kalasa at the top of temple towers. These Kalasas in the form of inverted pot, with pointed head facing the sky, is one of the prominent symbol of temples. Most Kalasas are made of metal or stone.
- Kalinga: Kalinga is a historical region of India. It is generally defined as the eastern coastal region between the Mahanadi and the Godavari rivers, although its boundaries have fluctuated with the territory of its rulers.
- Kapota: is the Sanskrit word for "pigeon."
- Khmer architecture: In Khmer architecture the period of Angkor is the period in the history of the Khmer Empire from approximately the latter half of the 8<sup>th</sup> century CE to the first half of the 15<sup>th</sup> century CE.

- Kirthimukha: Kirtimukha is the name of a swallowing fierce monster face with huge fangs, and gaping mouth, very common in the iconography of Hindu temple architecture and Buddhist architecture in South Asia and Southeast Asia.
- Korkai: Korkai is a tiny village within the Srivaikuntam taluk of Thoothukudi district in Tamil Nadu, India. it had been referred to as Pandya-Kavada within the Kapatapuram in Kalithogai. it's placed concerning three kilometer north of the Thamirabarani river and about six kilometer from the shore of Bay of Bengal. Korkai was the capital, principal center of trade and necessary port of the first Pandyan Kingdom. At that point, it had been set on the banks of the Tamraparani stream and at the ocean coast, forming a natural harbor. because of excessive deposit, the ocean has receded regarding six kilometer within the past 2000 years, leaving Korkai well midland these days.
- Kutas: decorative elements
- Lalatabimba: central protective image
- Laterite: a reddish clayey material, hard when dry, forming a topsoil in some tropical or subtropical regions and sometimes used for building.
- Lauriya Nandangarh: Lauriya Nandangarh is a historical site located in West Champaran district of Bihar, India.
- Limestone a hard sedimentary rock, composed mainly of calcium carbonate or dolomite, used as building material and in the making of cement.
- Mahabalipuram: Mahabalipuram is a town in the southern Indian state of Tamil Nadu, on a strip of land between the Bay of Bengal and the Great Salt Lake. It is known for its temples and monuments built in the 7<sup>th</sup> and 8<sup>th</sup> centuries by the Pallava dynasty. The shore temple on the seafront consists of three ornate granite shrines
- Mahakuteshwar: a temple at Badami
- Makara: The hybrid creature is an ancient mythological symbol made up of a number of animals which collectively possess the nature of a crocodile. It has a crocodile's lower jaw, an elephant's snout or trunk, the tusks and ears of a wild boar, a monkey's darting eyes, the scales, and the flexible body of a fish and the swirling peacock tailing feathers.
- Mauryas: The Maurya Empire was a geologically broad Iron Age chronicled control situated in Magadha and established by Chandragupta Maurya which ruled old India somewhere in the range of 321 and 187 BCE. Including the greater part of South Asia, the Maurya Empire was brought together by vanquishing the Indo-Gangetic Plain in the eastern degree of the realm and had its capital city at Pataliputra (present day Patna). The domain was the biggest to have at any point existed in the Indian subcontinent, crossing more than 5 million square kilometers
- Motif: a decorative image or design, especially a repeated one forming a pattern.
- Mukhapatti: Entrance door.
- Nagarajunakonda: is a recorded town, presently an island

situated close to Nagarjuna Sagar in Guntur locale, Andhra Pradesh, India. The remains of a few Mahayana Buddhist and Hindu hallowed places are situated at Nagarjunakonda. It is one of India's most extravagant Buddhist locales, and now lies for the most part under the Nagarjunasagar Dam. It is named after Nagarjuna, a southern Indian ace of Mahayana Buddhism who lived in the second century, who is accepted to have been in charge of the Buddhist movement in the zone. The site was before the area of numerous Buddhist colleges and religious communities, pulling in understudies from to the extent China, Gandhara, Bengal and Sri Lanka.

- Nasika: nose
  - Pagoda: A pagoda is a tiered tower with multiple eaves, built in traditions originating as stupa in historic South Asia and further developed in East Asia or with respect to those traditions, common to Nepal, China, Japan, Korea, Philippines Vietnam, Myanmar, India, Sri Lanka and other parts of Asia.
- Paharpur temple: Somapura Mahavihara in Paharpur, Badalgachhi Upazila, Naogaon District, Bangladesh is among the best known Buddhist viharas in the Indian Subcontinent. It is also sometimes fondly called Paharpur temple.
- Palas: The Pala Empire was an imperial power in the late Classical period of the Indian sub-continent [3], originating in the Bengal region. It is named after its ruling dynasty, the rulers of which bore names ending with the suffix of Pala. The Pala school of sculptural art is recognized as a distinct phase of Indian art and is well known for the Bengal sculptors ' artistic genius. It is influenced by the art of Gupta.
- Pallavas: The Pallava dynasty was a South Indian dynasty that existed from 275 CE to 897 CE, ruling a portion of southern India. Pallavas are most noted for their patronage of architecture. They left behind magnificent sculptures and temples and laid the foundation of medieval architecture in the South of India. They developed the Pallava script from which Grantha ultimately descended. The script of Pallava gave rise to several other scripts in South East Asia.
- Palnad limestone: Limestone that is quarried from Palnad a region located in the south-western area of Guntur district, Andhra Pradesh, India.
- Penataran: is one of the largest Hindu temple ruins complex in East Java, Indonesia. It is believed to have been constructed between the 12<sup>th</sup> century and 15<sup>th</sup> century.
- Pancayatana: A Hindu temple is a Panchayatana one when the main shrine is surrounded by four subsidiary shrines. The name originates from the Sanskrit words Pancha (five) and ayatana (including). The Hindu temple is generally built along a west east axis. Thus the four subsidiary sanctuaries are in the north east, south west, north west.
- Panjara: The grid.
- Pandyas: The early Pandyas ruled parts of South India in

the 4<sup>th</sup> century BC at least. In the first half of the 16<sup>th</sup> century CE, the Pandian rule ended. It is an ancient Tamil dynasty of South India. Structural temples are an important part of the architecture of Pandyan. The Vimana and the mandapa are part of the early Pandian temples.

- Parasol: a type of umbrella made for protection from the sun.
- Paribasha: a definition.
- Paribhogika: objects possessed or used by Buddha.
- Parmentier: Henri Parmentier was a French architect, art historian and archaeologist. Parmentier wound up one of the primary European pros in the archaic exploration of Indochina. He has reported, delineated and safeguarded numerous Khmer, Cham and Lao landmarks.
- Pattadakal: is a complex of 7<sup>th</sup> and 8<sup>th</sup> century CE Hindu and Jain temples in northern Karnataka (India). In total, there are over 150 Hindu, Jain and Buddhist monuments, and archaeological discoveries, dating from the 4<sup>th</sup> to 10<sup>th</sup> century CE, in addition to pre-historic dolmens and cave paintings that are preserved at the Pattadakal-Badami-Aihole site.
- Pidhana phalaka: the covering board.
- Plaosan: Plaosan, also known as the 'Plaosan Complex', is one of the Buddhist temples located in Bugisan village, Prambanan district, Klaten Regency, Central Java, Indonesia, about a kilometer to the northwest of the renowned Hindu Prambanan Temple.
- Pradaksina refers to circumambulation of sacred places in Hindu, Jain or Buddhist context, and the path along which this is performed.
- Prakara: It is the outer part around a Hindu Temple in Indian architecture. This space maybe enclosed or open.
- Prambanan: is a 9<sup>th</sup> century Hindu temple compound in Special Region of Yogyakarta, Indonesia.
- Proliferations: a rapid increase in the number of something.
- Protohistoric: is a period between prehistory and history, during which a culture or civilization has not yet developed writing but other cultures have already noted its existence in their own writings.
- Purana: ancient, old.
- Purnaghata: another term used for kalasa.
- Pylon: A Greek term for a massive gateway of an Egyptian temple. It has of two narrowing towers, each surmounted by a cornice, joined by a less prominent section which encloses the access between them.
- Rastrakutas: was a royal dynasty ruling large parts of the Indian subcontinent between the sixth and 10th centuries.
   The Rashtrakutas contributed much to the architectural heritage of the Deccan.
- Rectilinear: relating to a straight line or lines.
- Saivism: refers to a cluster of religious schools and traditions in Hinduism devoted primarily to the worship of the god Shiva, who is one of the principle gods of the Hindu religion.
- Sanchi: is a Buddhist complex, famous for its Great

- Stupa, on a hilltop at Sanchi Town in Raisen District of the State of Madhya Pradesh, India. The Great Stupa at Sanchi is one of the oldest stone structures in India, and an important monument of Indian Architecture.
- Sandstone: Sandstone is a sedimentary rock made for the most part out of sand-sized mineral particles or shake pieces. Most sandstone is made out of quartz or feldspar since they are the safest minerals to enduring procedures at the Earth's surface.
- Sanskrit: Sanskrit is a dialect of antiquated India with a history returning around 3,500 years. It is the essential ceremonial dialect of Hinduism; the prevalent dialect of most works of Hindu theory and in addition a portion of the vital writings of Buddhism and Jainism.
- Sarpasakha: snake vegetable.
- Sashtras treaties.
- Satavahanas also referred to as the Andhras in the Puranas, were an ancient Indian dynasty based in the Deccan region. The Satavahana rule started in the primary century BCE and kept going until the second century CE. Models of Amravati speak to the building improvement of the Satavahana time frames.
- Schist: a coarse-grained metamorphic rock which consists of layers of different minerals and can be split into thin irregular plates.
- Shrine: is a holy or sacred place, which is dedicated to a specific deity, ancestor, hero, martyr, saint, daemon, or similar figure of awe and respect, at which they are venerated or worshipped. Shrines often contain idols, relics, or other such objects associated with the figure being venerated.
- Sikharas: a Sanskrit word translating literally to "mountain peak" refers to the rising tower in the Hindu temple architecture of North India, and also often used in Jain temples. A shikhara over the garbhagriha chamber where the presiding deity is enshrined is the most prominent and visible part of a Hindu temple of North India.
- Simhamukha: lion faced
- Sinhalese: people originally from northern India, now forming the majority of the population of Sri Lanka.
- Soapstone: is a powder schist, which is a kind of transformative shake. It is to a great extent made out of the mineral powder.
- Somavamsis: dynasty ruled parts of present-day Odisha in eastern India between the 9<sup>th</sup> and the 12<sup>th</sup> centuries. They introduced a new style of art and architecture in Odisha.
- Sopana: step or staircase.
- Southeast Asian countries: Southeast Asia or Southeastern
  Asia is a sub region of Asia, consisting of the countries
  that are geographically south of Japan and China, east of
  India, west of Papua New Guinea, and north of Australia.
- Srivijaya: Srivijaya, was a prevailing thalassocratic Indonesian city-state dependent on the island of Sumatra, Indonesia, which affected a lot of Southeast Asia. Srivijaya was a vital place for the development of Buddhism from the eighth to the 12<sup>th</sup> century.

- Stamba: pillar or post.
- Stupa: A stupa is a mound-like or hemispherical structure containing relics that is used as a place of meditation. A related architectural term is a chaitya, which is a prayer hall or temple containing a stupa.
- Sungas: an ancient Indian dynasty from Magadha that controlled areas of the central and eastern Indian subcontinent from around 187 to 78 BCE.
- Talas: surfaces
- Tamralipti: was the name of a city in old India, situated on the Bay of Bengal. The Tamluk town in present-day West Bengal is recognized as the site of Tamralipti. It is trusted that Tamralipti was the leave purpose of the Mauryan exchange course for the south and south-east.
- Temple: A temple is a structure reserved for religious or spiritual rituals and activities such as prayer and sacrifice.
- Torana: It is a free-standing ornamental or arched gateway for ceremonial purposes seen in the Hindu, Buddhist and Jain architecture of the Indian subcontinent, Southeast Asia and parts of East Asia. Its typical form is a projecting cross-piece resting on two uprights or posts. It is made of wood or stone, and the cross-piece is generally of three bars placed one on the top of the other; both cross-piece and posts are usually sculpted.
- Trabeate: Structurally dependent on rectilinear post and beam supports.
- Trachyte: is an igneous volcanic rock with an aphanitic to porphyritic texture. It is the volcanic equivalent of svenite
- Uddesika: indicating or referring to.
- Upapitha: is a sub structure or member constructed beneath.
- Vaikunta Perumal Temple: Situated in Kanchipuram in the South India. Worked by the Pallava ruler Nandivarman II (720-96 CE), with later commitments from Medieval Cholas and Vijayanagar rulers. The sanctuary is encompassed by a stone divider encasing every one of the places of worship and water collections of the sanctuary.
- Vaishnavism: is one of the major traditions within Hinduism and it considers Vishnu as the Supreme Lord.
- Vengi: The Vengi is a region spread over the mandals of Godavari and Krishna districts. The capital city of Vengi is situated at Pedavegi close to Eluru. This territory was a piece of Kalinga until the point when that kingdom was vanquished by Emperor Ashoka of the Mauryan Empire in the mid-3<sup>rd</sup> century BC.
- Vihara: Vihara generally refers to a monastery for Buddhist renunciates. The concept is ancient and in early Sanskrit and Pali texts, it meant any arrangement of space or facilities for pleasure and entertainment.

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