

Angkor vat Temple according to me...

(The ever first research article by a Tamil Artist-Sculptor and a Professor after the visit of Cambodia)

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Abstract

The world renowned Angkor vat temple is composed with the combination of vertical structures with dominating horizontals. The perfect amalgamation of the whole, based on a fine ground plan which perfectly executed as of the Big temple of Thanjavur. Not as of the later exaggerative additions on some early other big temples, both the said above temples are rendered as it is according to their master plan in one swing. Plenty of researches have been made on Angkor vat temple. More useful writings came out from various scholars. However, why the art historians did and do over estimation on Angkor vat temple is a question to me. Therefore, this paper describes about the formation of Temple mount its origin and culmination those obviously followed mostly from Southern India. And, says further on the individuality of Khmers who technically found their distinction by assembling architectural elements of India from various sources. There is lot of thing to say as the Angkor vat is a next attempt of Dravidian architecture obviously after Gangaikonda Cholapuram. However, analyzing those all things in a single article, is not enough probably the other paper next to this can detail clearly. Besides, this article reasoning out on its grand look that how it appears as so. Also, made a comparative study with the Big Temple of Thanjavur and interpret on the defined height of Angkor vat Temple logically.

Keywords: Khmer, Angkor vat, Stepped pyramid, Suryavarman II, Chola, Big temple.

1. Introduction

The vast scaled Khmer temples are in fact not big temples when comparing to the big temples of India and stubis. However, I stunned and wondered even my eyes have wetted with tears in fact, when standing in front of the temple on 17.12.2015. But the next full day (18.12.2015) I have been there and studied analytically. After the visits of more important temples between the other two days (19th and 20th Dec 2015) returned to India and started to recollect the things done there. More than, 2700 photos and nearly twenty five video clippings with my oral explanations, some important notes and sketches have had been taken for research. However, while the processing I found the things again favouring towards Indian side than Eastern approach. Therefore, I analyzed the great and grandness of the Angkor vat temple by, part by part. In general, the wide prakaras to the central main shrine that addition the grandness as a whole that results to name, as: great / big / grand etc. For an example this great temple is in fact according to its main shrine; is simply gets the vastness by their in between spaces fenced with prakara walls. Since, it is not a great or big Temple as of the Rajarajesvaram of Thanjavur. So, it will be a largest undoubtedly as of the Srirangam temple of Vishnu. Therefore, this article is going to re interpret the fact on technical strand of the Khmers that how they inspired and learned from the Cholas to equalize their efforts at their prestigious temples. Hence, this article starts with Indian art movement prior to Khmers.

Hypothesis

Angkor vat temple is a beautiful grand temple by its illusive looks than muscular-Physicalness.

Methodology

This article took shape due to the hypothesis stroked during my study / research at Angkor vat. The hypercritical hypothesis itself determined and demands the methods to seek the truth. Thus, it started with descriptive method and further rooted with analytic, chronological, comparative, morphological and aesthetic research methods which have stood front. Besides, the Qualitative, Correlation and Meta-analysis worked out in certain ratios simultaneously to deal the hypothesis. Addition to this, the direct observational study in situ has casted a new dimension on the architectural treatment of the temple.

The Big Temple of Thanjavur

It is still riddle and many views blabbing on the closing cap of summit below to the sikhara of Rajarajesvaram of Thanjavur. Because, it is tough task, and at that very height closing there the aperture of raised pyramidal vimana, with 80 ton weighted 20 x 20 circular of slab. Without electricity and without any machinery support that was attained by entirely human effort is amazing and unparallel. Hats off, to the Tamil artist and architect: KunjaraMallanRajarajaPerunthachan and his co-artists. Though, there is another view available that the cap stone is not a monolithic one, however, it was a risky anyway. The vimana's height is mentioned as 216 ft. is a true height rose purely from the ground. Because, not it is reaching that much of height as by the elevated terraces, since, it stands on its own leg. The technical to such height of vimana purely from ground level what kind of brilliant scaffoldings were used then, and further, the each and every dressed stones were lifted through the scaffolding by a manual lifts are beyond to imagine even. For an example, an artist in a day how many

times he ascended and descended to work, to fix, to sculpt, and to sketch is difficult to calculate. Besides, how the stamina came to them to as future-machine like. Because, to impose such a huge tower with millions of tons of stone blocks were lifted to set out that how much of calories of the artisans have lost; is immeasurable; which could be ever bigger than any built. However, it could be a proud of them and really to each artist, because, being part of that great wondrous project then.

Three phases of Indian art

According to Khmers, it was actually a lucky of them had the supremacy in twelfth century. Because, the things of all have had finalised and got the fruitfulness by previous movements. We can classify as the phase of Indian art in three, except the modern movement. Such as: 1.Origination 2.Culmination 3.Post-Culmination. Therefore, to the first; we can fix the contributions of the Both Guptas and Pallavas. Of the second; we can fix the Cholas only. Though, the contemporary Gangas of Odisha contributed betterment but those come under Chola influence. To the third; probably that goes to Khmers with first place. The Pandiyas and the Vijayanagara and Nayaks stood behind them respectively.

The Massive Borobudur

Therefore, the architecture of Cambodia was initiated from Indian style, however; the temple mountain is probably from the neighbouring country of Java. Thus, the temple-mount of Borobudur in Java is a massive and grand structure that dealt with stepped terrace to break the early hemispherical Buddhist stupa tradition of India. It is the magnum opus art of Sailendra dynasty in eighth century whose initiator probably from East Indian origin.^[1] Also, one more perspective on their origin, that is; they belongs to South India. Even though, the stepped base style was perished in India earlier but very lately stimulated to Khmer's mind due to the neighbouring Borobudur.

Varman-ism

Besides, the all Khmer rulers were suffixed with the patronymic name of 'varman' that holds the evidential proof of their origin. According to a chronological documentation by a book source that the names tailed with varman is goes back to 1712 BCE. Hence, a King belongs to a solar dynasty in Nepal whose name is Bhumivarma was a first name in its kind.^[2] In Southern India the names with varman were traced obviously from the Pallavas. Thereafter, the Cholas suffixed even to their crowning title as 'Rajakesarivarman' and 'Parakesarivarman' as one after one respectively. 'Arunmozhiarman' is a birth name even of the Great Rajaraja. The Pandiyas also had this varman-tradition as Jatavarman and Maravarman as crown titles. The Early Chalukyas were been contemporary to the Pallavas those have this name tradition too. Besides, the Khmers, Mon-Khmers were the people of Sino-Tibetan origin.^[3] Further, the striking resemblance of the King Jayavarman VII (1181–1218 CE.) who was the last greatest emperor of the Khmer rulers that found at Angkor Thom temple that proves their origin and even their race. Therefore, the varman-ism that having some logically reason by race and regional wise. Therefore, the face of the sculpture has describes their belonging certainly. Here, mention need on the name tradition of Jayavarman specifically

that goes back to the same Solar Dynasty King list, thus, his year falls on 1644 BCE.^[4]

Serpent icons – Pallava / Khmer

According to history of the Pallavas that still being as an unfolded knot but said with two hypothetical perspectives as local tribes or foreigners. They were also known as Naga tribes related highly with snake tradition that too proved by their art; especially, from the giant relief of 'Descent of the Ganges' at Mamallapuram. The central portions of the relief sculpture that having the man – serpent demi Gods, called as Nagaraja and Nagini. Also, their sculptures of God and Goddesses or their iconographical tradition that are frequently holds snakes as a weapon at their hands which were modelled very rhythmically. We can see them at all their temples especially the familiar Kailasanatha Temple at Kanchipuram which stood as a fine example. From my point of view, they could, may have be represented them, as in the symbol of snake. Since, they believed as they were one of a weapon to Lord Shiva, thus the snakes frequently kept at the hands of Gods. This is the tradition can be spread or inspired to Khmer thus they implemented this in a grand level with their distinctive touch as the welcoming elements with raised multi hood snakes at their temple campuses. Of course, we can find a fine evolution of the snake deal alone as serpent railings that evidenced in Bayon temple right from ground floor to the top terrace. Addition to this, the linear bodies of the snakes aptly suited to treat so, and given freedom to extend according to the purpose further.

The root of stepped pyramid temples

However, the inspiration even from Java's Borobudur-Temple Mount, but the root of it again goes to India. Hence, the origin thought of the temple mount that probably could be a further development from the examples of early Māḍakoil (மாடக்கோயில்) of Ko-Chenganan, who was a Chola King of Post Sangam period. Those all were built by brick and mortar which set on very high platform with stepped access. Probably the steps could be very steep due to prevent entries of the elephants. To deny the elephants entry due to ex fear of the king's previous birth that based on the fight between him and elephant while he was been as spider. Also, in North India a fifth century temple of Guptas at Deogarh that known as Dasavatara Temple, set with a high platform particularly with four sub shrines at its cardinals.^[5] Kind of this 1+4 temples system has known as *Panchayatana* cult. Of these traditions we can assume the core ideology that gone towards far eastern countries obviously. We can ensure this because they followed the religions of India. The only thing now to them was naturally a next step over on the existing style and concept. Therefore, it was easy to them to achieve perfectly with a new perspective with slight conversions. However, some data says; that the stepped pyramid is entirely a new thought of Khmers though they followed the other things from India.^[6] To deny such a view the above explanation has been provided. It is true that the Khmer Architecture is based on Indian architecture. The core religion was entirely India, since we included it in the three phases as with third phase of post culmination. Things as so; to those; how to built temples are unnecessary seeking if; also the prevailing models of India even to the Buddhism are enough to replicate or imitate. However, their early style of hill top worships on their ancestors evolved as

stepped pyramid temples, though it differs from us; but the hill temples of us for example the Tiruvēṅgaḍam (Modern Tiruppathi) and Tirupparangunṅam, even the rest of other Murugan temples are all very earliest even than of their temple mount or stepped pyramid temples. Anyway, the evolution of Indian architecture from its main stream branched out by Khmer in welcoming way and casted another beautiful face of Indian art is outstanding. It was easy to them. Because they started their art from the great phase of Indian art. Particularly the Dravidian phase of Indian art itself sought the ever culmination independently. Therefore, the patron to the emerald culmination to the whole of Indian Art, were the Greater Cholas attained before to Khmer is to be minded and it is a new interpretation too.

However, there is another view from some scholars on the art of Khmer that denies as; may be the early phases of art imitated Indian art, but the later or the classical phase shows its own style not replicates again Indian. [7] Again I am saying it is true that the Khmer Architecture is based on Indian architecture even its all phases. They fused simply one with another, elaborated and multiplied some features with right ratio is the effort of them. And their rendering from Hindu and Buddhist art and too with the combination of all three Indian styles. We can see them by a table given below:

Indian Architectural aspects	Khmer Architectural aspects (conversional)
Raised platform	Stepped terrace
Buddhist stupa's centrally kept Buddha relics	Sepulchres of Individuals on stepped Pyramid
Temples for God and Goddess	Temples for God - flat ground based temple / step terraced temple / Central - Sepulchres of the Kings as garbagriha On stepped Pyramid
Pallippadaikoyil / SmasanaChaityam (இறந்தவர்களின்சமாதிமீதுஎழுப்பப்படும பள்ளிப்படைக் கோயில்)	
Single axial system	Biaxial system
Temple tanks	Moats
Kirtymuka of South Indian temple towers	Face of Avalakoteeswara on vimana's super structures
Yali / Elephant Balustrades	Serpent Balustrades
Perambulatory galleries with relief sculptures / paintings in single prakara ⁸	Perambulatory galleries with relief sculptures even in upper (stepped) prakaras
Adhishthanam (various types)	Monotonous
Sikaram: four, six, eight faceted and hemispherical	No sikarams were separately dealt since Lotus based finial itself stood for both

To have reference on the referenced above from Indian side - given below:

- The early Māḍakoil system of Tamilnadu – Examples: Tiruchērai Vishnu Temple, Tiruvīḷi Miḷalajai
(திருவீழிமிழலை)
- Siva Temple in Tamil Nadu.
- The early platform -Temple of Guptas – Dasavatar Temple - Deogarh, Madyapradesh.
- The Osian Harihara temple at Rajasthan – 8th century
- KandariyaMahadeva Temple – Khajuraho – 10th century
- The Big temple of Thanjavur – 11th Century

The inspiration from Chola art

The Big Temple also built over a raised platform that visible daringly with three side of access by more stepped staircases. Actually it is not a platform but a base part or adhishthana. Further, this temple was built before to Angkor wat temple more than fifty years. In Khmer region, even in India, there was no such a big temples have built then. But, therefore, the true inspiration on wonder of the Big temple ought to be shared by the ambassador from Khmer court, sent by Suryavarman II (1112 – 1151C.E) to the Chola Court of Kulothunga I (1170 - 1125C.E.) [9] It is to be mentioned that the King Kulothunga I was a Powerful Monarch, whose reign have been engaged in converting the Chidambaram Nataraja temple a grand complex. [10] It is possible that the Khmer ambassador have to be visited the great temple of Thanjavur, when it was been with very fresh; and with clad-golden finial; the super structure also said to be dealt with gold cladding; even without the later additions of such as Amman and Murugan (Subhramanya) temples; the current giant Nandhi and its mandapa. He might be seen the very fresh and original condition of the temple with all its architectural and sculptural elements then was been in unbroken condition. Because the iconoclasm by Muslim Invaders that has held later. Therefore, each and every pixel of the temple with very sharpness due to the newly built and nearly just 160 years old then, which can be sensed and admired by him, at his King. The commentary may have been orally on Big temple by the ambassador, in other hand, perhaps, the ambassador himself could be an artist if, or the ambassador from official side who accompanied with an artist, if these so; the other possibilities of sketch and plan drawings can be made from Big temple and may be those shown at the King. Addition to this, a discussion on technical aspects with Chola artists may be held perhaps. Why because, there is possible of sharing from country to country, what the revolution was happened in art and culture. Surely, will be a tradition then, the tourists also came to visit as of now. The proud of the Rajarajesvaram built by Rajajraja the Great that could be the greatest among then contemporary religious structures. On the elegance of the mighty temple; and on its sculptural beauty; and on its engineering greatness would be the contemporary talk among the rulers, artists and society. Hence, for the reference may be an artist sent with an ambassador or the artist sent as an ambassador is having logic to think as so, for his grand project of Angkor wat. As stated below the alliance between the Chola rulers to Suryavarman I, is way upped easily to share the thought and technical sharing for his successors' grand project.

Khmer King Suryavarman I presenting gift to the Great Rajaraja Chola

The Khmer King Suryavarman I (1006-1050 C.E.) who was a contemporary to both Rajaraja I (985-1014 C.E.) and his son Rajendra I (1012-1044C.E.). Another interesting data is that Suryavarman I who made alliance with Cholas and presented a gift of chariot to Rajaraja. [11] We can take this as; the alliance could be perhaps marriage relationship or war assistance. It is possible that the history accounts on both Chola monarchs were busy at their schedules along the entire Bay of Bengal. Here remembering that the terms used once of the sea was known as the Chola Lake. Moreover, Suryavarman I sought aid from Rajendra Chola I this time, to tackle the conflict of Malay King who was enemy of Him. The Malay King allied

with neighbouring King Sri Vijaya that annoyed the Chola and thus he severely defeated them by with the ally of Suryavarman I. Due to this victory the Khmer King got the protection and stability to develop his King dome. Hence, to thank the Chola King, Suryavarman sent again a chariot as presentation that was used actually in the same war by him which yielded a great victory.^[12] The great victory that paved a way to great empire of Cambodia. Since, the continuous relationship kept firmly with the greatest Chola Kings who were the ever greatest at that period among the world. As well as, in art and architecture the two magnificent Big Temples of them of both Thanjavur and Gangaikonda Cholapuram were could be the wonders and a world records then. Thus this kind, the world's great kingdoms have proudly imposed such edifices to show their superior achievements on behalf of their beings. Such as: the Egyptians imposed the great Pyramids; the Mauryan imposed the great stupis; the Cholas imposed the great Temples; the Sailendras imposed the temple mounts. The Khmers imposed the stepped temple mountains and the Moguls imposed the beautiful Tajmahal.

The evolution of Khmer style

In fact, in early, the King Indravarman who created a major reservoir known as Indratataka which on he built the first stepped Pyramid, the Bakong in 881 C.E. This is a five stepped pyramid. The very distinctive feature of Angkorian constructional configuration was reservoir and moat. Almost of the temple-mounts were all encompassed within the moat system. As discussed earlier, this was the first temple-mount of Angkorian era and was a structure of post Borobudur.^[13] Because of the early attempt the Bakong temple at its summit has one main shrine, on its below platform there are twelve small shrines have situated. The other important stepped pyramid temple or temple – mount is Kho-Ker which is situated nearly 100 kilometres far from Siem Reap. We went there by car to study physically. This was a later one to Bakong temple built in 10th century C.E. by the King Jayavarman IV (928 - 941 C.E). The remaining of here and there ensures that it was built for Lord Siva. We measured it physically. Its height is up to 110 ft (approximate). Breadth falls as 194 ft x 194 ft. And it is seven stepped terrace that having 19.6 ft. width on each side, as well as, each terrace is having 19.6 ft. height. On its summit, no temple or tower was erected, since, instead of that a tall lingam was erected vertically but not seen now.

In fact, there is two type of cult worship have followed significantly; the one is as usual the protector of the whole - the almighty – the God; and the other is the protector of the people - the King. The latter is known familiarly as Devaraja cult. Hilltops also served as places of ancestral worship throughout Southeast Asia. Therefore, worship of predecessors followed on faith, since, the worship places were defined certainly in two different styles. Hence, the first, of the peculiar worship on God; they built temples, but added with sub shrines for their predecessors, as the secondary deities like the Parivara deities system of Indian temples. We can see of this configuration in the grand temple of Angkor vat that having four shrines at its cardinals whilst the main shrine that is garbagriha which standing taller than the fours. Here, should be considered of the sub shrines on behalf of the Ex-Kings which never deposited with their relics but dedicated the chapels to their sprits on belief. With this data at in mind, we

can see on the second cult of them that fully erected for the dead King thus the sepulchre kept at the summit temple which stood on the stepped pyramid. Kind of this, the three dimensional layouts purposively avoided the flatness for the sepulchre temples. It means the worship only possible to link the spirits of the dead kings at air, since, a considerable height they need as a right place. Due to this, such temples came with the system of stepped pyramid. Of these methodical manners this would have not been open to all; only to royal and official side, of course.

Evolution of architectural styles and elements

The grounds based or flat temples which their same methodology that is their adhishthana kept over on upana which has been treated but in next level as the stepped terraces. Since, the vimana over on the top terrace or the upana goes to very top. The two different cult's temple methodologies have been taken to form a new style as '*misra*' as how the Dravida and Nagara parented to the '*Vesara*' style. Hence, the ground based temple styles fused with mount based temple (stepped pyramid) styles to introduce a new vesara style of architecture. Therefore, the third style which lesser in height particularly of the base or stepped terraces strictly restricted with three steps, further those, were equipped with running gallery in all four sides. To this we have examples as the great and grand temple of Angkor vat and the Bayon temple of Angkor Thom.

The Novelty

It was a perfect time probably a last phase known as classic period according to Khmer art, thus the different and a novel thought blossomed over their ongoing style. Because, once the traditional free standing and grounded temples were kept aside or simultaneously built but more focus turned on the Temple-Mounts. The European scholars termed this particular period of art as '*flamboyant*'.^[14] Here to be mentioned that the European scholars almost and always having habit of linking with their side of movements on our art, further, applied the terms to our works thus this classical period of work was said as baroque style.^[15] The traditional temple mountain with stepped terrace and with unique running galleries in all four sides, which they set with cornered towers. The towers or the vimanas are seems to be a fusion of Dravida, Nagara, Vesara and even Buddhist art. The conical circular but faceted diminishing stories reach the summit and capped with lotus sikhara. The demarcation of each storey with horizontal plans and the absence of aedicules show the plain look. Why they left as blank is a question in fact could be nothing to define as pattern regards. Therefore; if they added aedicules; the long running vaulted gallery, the plus type of sala entrance, the conical tower are will be the three aedicules strictly suppose. However, the lengthiest running gallery is their highlight but it is not possible to show its lengthy proportion as an aedicule in diminishing floors of towers. So, they left plainly to avoid such a risk. However, this great technical risk stunningly tackled in the vimana of Gangaikonda Cholapuram by the Tamil great artists. Need to mention here, the alliance between the King Suryavarman II with the Chola King Kulothunga I was stood an important to his new art. Also, that made easy to follow his project in order to a continuation of grand series thus next to the Big temple of Gangaikonda Cholapuram. The very understanding and respect on Rajendra I, whose early

great help to his ancestor, that echoed even by the tower design of Angkor Vat which reflects the influence of the top faceted circular treatment of the Gangaikonda Cholapuram Temple. Nobody viewed this view as. Besides, Suryavarman II the builder of Angkor vat who had a best friendship with Chola that in an instant known by an Inscription that says: that a beautiful stone was shown to Kulothunga as curio (அரிய ஒன்றை காண்பித்தல்). On this, Sastri, raised questions as; when did he do so? Did Kulothunga visit Kambhoja, the Khmer kingdom? [16] We leave the question as it is, due to avoid diversion. Further, Sastri again accounts on the same inscription that the inscription from Chidambaram temple which is dated on 13th March 1114 CE and mentions the fact that Rajendra received a peculiar stone as a present from the Kambhoja King, and that caused this stone to be inserted into the wall of a hall in front of the shrine at Chidambaram.[17] Why we are providing these data here, is to support our interpretation that the Angkor wat Temple is based on Dravidian architecture in all aspects but handled carefully to avoid the replication.

Angkor vat Temple

The temple has three prakaras. Except these three, the very firstly situated prakara like a wall which being extremely outer around the whole that adjacent to the moat is really a city fort wall and provided with the same uniformed gates but not only of the temple itself. It is for the whole. Even though, we find some prime sculptures installed at western side of gallery like perambulatory passage probably those could be a later installations shifted from the second prakara or main sanctum. Hence, we can deal the second prakara as the temple's first prakara; right from here the temple starts. Therefore, Angkor vat is a temple city surrounded by a moat which runs all four sides measures nearly two and half mile with 650 ft breadth.

Western Prime entry

The temple faces west towards setting sun due to funerary function because; it is God-King temple, as a monument of Suryavarman II and as own sepulchre. [18] The broad way runs from western prime gate way to first gallery-prakara is 1560 ft long raised 7 ft. This is the first elevation probably. However, we dealt the first elevation as by 15 ft, because, the temple starts from first prakara as afore said, which stands with 15 ft height.

The critical height of 210 ft

The first gallery runs east to west is long with 795 ft. And from north to south runs along 672 ft. Hence, the total running length of the gallery is 3000 ft. Besides, the available sources say repeatedly of the central tower's total height as **210** ft, but roughly. [19] But I am differing by more than 30 ft level, which on further discussed below. We can understand from this, as no one measured the actual heights of the towers. Reason to this; shall be, according to its elevation which is in jerking manner or stepped elevation made tough to measure in single stretch. Also, it is now impossible by individual scholars without permission. Besides, the IIIrd Prakara of the main shrine is a square terrace having 130 ft x 130 ft which rests upon its below IInd prakara. The second prakara sized with 185 ft x 200 ft. [20] It has four corner towers all having equal heights but lesser according to the central main tower which the latter rises up to 90 ft. accordingly. Addition to this, the

third prakara also having four towers at their corners but none of them seem in full form. However, those could be heightened, according to me with 50 ft. Therefore, the height of the First prakara towers is 50 ft; the height of Second prakara towers is 70 ft; and the height of third prakara tower is 90 ft.

The Illusion of grand Height

According to my Point of view, the existing data by scholars all are giving the total height of Angkor vat temple as 210 ft uniformly, can be a wrong Measure. I am not saying it by holding the exact measures in my hand. However, the measures observed in situ by my eyes that has been taken to calculate and referenced with ex-data. The third prakara which is a central main terrace on which the central shrine or vimana or tower rose over 90 ft high, means six fold (6x15=90) according to first elevation from the plain ground which is 15 ft high. We can see the level differences by a table:

No of Elevations	Details of elevations	Heights in feet
Elevation - I	from the plain ground to I st Prakara ground	15
Elevation - II	from that 15 ft of elevated I st Prakara ground to the II nd Prakara ground:	30
Elevation - III	from that 30 ft of elevated II nd Prakara ground to the III rd prakara ground:	45
Elevation - IV	from that 45 ft of elevated III rd Prakara ground to the central tower's finial:	90
Total height		180

Hence, the total height is 180 ft roughly but shall be a very closer. However, the temple is having closer height to the Big Temple of Gangaikonda Cholapuram but looks very taller than it, even also to the Big temple of Thanjavur which is 216 ft. taller.

Observation on Hypothetical Illusion

On this; I observed three factors; the one is: the vast place in front of the temple helps to access the full view of the core temple without any disturbances. The second is: the surrounding corner tower's lesser heights additions illusively of central tower's height even it is being considerably taller. The third is: the shrine is built with stepped levels since, the last prakara that is the IIIrd prakara is situated above 90 ft high from ground level. **Erecting the main shrine with 4+1 slenderish towers such at 90 ft high of platform is the plus point and that cast such an illusion as colossal abnormally.** Everybody satisfied with self acceptance about its grandness. No need of doubts even. Even to me at very first sight. This is the secret that the temple being looked and written as very taller because of multilevel or three dimensional layout.

Conclusion

This article is eyed with new perspective and throws fresh light on the never read pages of Angkorian art of architecture. Plenty of researches have been done already on them. Almost, those all are chorusing. However, the repeated same news rarely tells few new data. Besides, and almost of those researches says the history about. Though, they are essentials

will support to further analysis technically and aesthetically. Though, they failed themselves to broadcast the world of skill and the world of creativity of artists. Further, the handled technical by Khmer artists will depict their intellectual calibration whilst the dealt-aesthetic will depict the whole cultural highness of the region. Therefore, this is a first article on Khmer art by me will continue further to seek the unread pages of them. In fact, the research had done on the spot to study the degree of inclination of the Indian art that in Indian colonial country of Kambhoja (Cambodia). Thus, though lesser in all aspects while comparing to Thanjavur and Gangaikonda Cholapuram Big Temples, the Angkor vat temple is having the other real beauty. Though, little lesser in height, the temple but looks very grandly by the support of its three dimensional ground plan that nuances the perpendicular raisings majestically to beat ever the victory drum of the Khmer who they had kinship of the East Indian people. So far From my perspective the temple appears undoubtedly very grand. However, the massive look because of the horizontal running galleries which seem in front, which upon, the behind stood towers vertically seems when we at in front area. Thus, the combinations of vertical and horizontal planes that emphasise the total view of the campus at least and do chance to think everyone as a massive-grand. The exact orthographic view appears with two sub towers without its other back two and with a central tower which is taller than the four subordinates. Addition to the interpretation, the central tower not rises from its base's top edges. It is further has dent from the same edges. For an example, the central tower's lower structure could be with 45 ft X 45 ft square, which on the super structure getting rise, according to me. However, the said former size is of the whole base is a plus typed (cruciform) structure. Since, its top portion could be restricted with 40 ft X 40 ft of square proportion inner ward and where from the pine-cone tower gyrates up to the lotus finial. Therefore, we can understand the tower's medium sort of height that could be according to again its medium sized base and further the stability according to its base size, since all were put in calculation and thus the height was restricted with 90 feet.

Therefore, the central tower is having lesser height perhaps, nearest to the Darasuram Airavathesvarar temple vimana, which its base too an average sized one. Besides, it has no any big volume indeed. Simply it is an average size tower, that's all. Also, other its sub towers at four corners on its own platform are lesser in heights. Since, those are having just 70 ft height from their base to finial. Of this configurative composing, those all five towers are looks very grandly with their horizontal structures as behemoth, even when we are seeing from far. The reason to this is; as discussed earlier, the technical configuration among the structures by stepped ground plans and the tactical organisation among the spaces by plain and structural gaps are factors to effectuate the natural elegance. Moreover, the simple towers of the five were set in topmost platform which situated upon 90 feet above is the subtle truth to the illusive-grandness. The two lower platforms are being with 15 ft and 30 ft heights respectively and giving shoulder to lift the IIIrd prakara as a trophy overhead. As seen by the above table, the first elevation starts from 15 ft. since; $15 + 30 + 45 = 90$ ft. Therefore, the top most IIIrd prakara or platform or stepped terrace situated above 90 ft high from the ground, as said before. Thus, if we add the

central tower's height to these three levels of height as $90 + 90 = 180$ ft which will be the total height of the temple. Therefore, **our interpretation on the height of Angkor vat temple is 180 ft.** To our conclusion, a reliable source also supports our view on that height, as 55m since, 180 feet.^[21] However that source never explain about how it get 180 ft.

Coming to final word, the Angkor vat temple is a wide spread campus truly having grandness by using more spaces especially at its Ist Prakara and its outermost wall. In fact, the vastness of the latter stood as a prime factor to stronghold even as wonder of the world. However, the true length and breadth of the temple fall in Ist prakara. The prakara itself have 795ft long at west to east side and 672 ft from north to south. In fact, it is much lesser when comparing to the Ist Prakara of Thanjavur Big temple which sized as 1172 ft. x 772 ft. the only different is it has no sculptural gallery as the former but having for painting. Coming to the IInd prakara of our topic temple, it has spread with just 185 ft x 200 ft. It is highly lesser than to Big temple, which its IInd Prakara (inner prakara) sized with 800 X 400 ft. Addition to this, the perambulatory passage of the Big temple (*திருச்சுற்று மாளிகை*) with 18 ft. breadth situated in this IInd prakara which is double decked one that holds mural paintings instead of relief sculptures as suggested above in its lower stretch.^[22] Moreover, the two tier (double decked) prakara is having more length than Angkor vat's single stretch is to be minded. There is no IIIrd Prakara to Big temple but the Angkor vat temple having it with 130 ft X 130 ft. This is just bigger than the big temple's vimana base structure size that sized with 99 ft X 99 ft. However, that is prakara; this is a structure of a sanctum sanctorum raised from its own leg up to finial. Very perpendicular to ground, since, the majestic raw height resulted as 216 ft. to the Big temple. Therefore, whatever admiration or if over praising can be continued on Angkor vat temple, however, the mighty Chola's dynamic architecture of Rajarajesvaram the Big temple, will be the true tallest muscular wrestler among the Hindu Temples in the world.



Close up view of the all five towers of IIIrd Prakara – Angkor vat Temple



Wide view - visible too with second prakara's ruined towers



While study at Angkor Thom - Bayon Temple – Cambodia - I the author (cap wearing) with my friend Sthapathi K. Dakshinamurthy

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