#### CHAPTER IV

#### THE DEVELOPMENT OF EARLY CHOLA ARCHITECTURE

#### INTRODUCTION

"A culture develops its own architectural dialect and strikes its own critial attitudes through a slowly formed concensus of opinion, that some of these combinations are more agreeable than others".

- Sinclair Gauldie(1)

Through a maze of Pallava temples, the first visual impact that the Early Chola temple makes is one of compact economy, modest scale and uniformity in plan. A square garbhagr ha, flat roofed, carries an ekatala or dvitala superstructure. From the garbhagr ha we are led into a rectangular flat ardhamandapa. Commendable articulation, they offer scope to spatial imagination in their chiselled and bare blocks of gneiss and granite walls.

The conquest of Tanjavūr and success at Tirupurambiyam about 878 A.D. saw an increased vivre in their art activities. The legacy of a rich tradition offered itself as a challenge for reinterpretations and innovations. The 'anukāya' elements were perhaps most attuned to cope up with such change, that gave both refinement and identity to the Chola. The unique way in which the elements were handled and rendered lift it out of its being a

general Dravidian idiom, to the only Chola and all Chola style.

Through odds when its tracts of land were being overrun with occupied areas; specially between 864 to 871 A.D. When adversity loomed large as the Pandyan and Pallava the Chola lay low, but not defeated. The Takkolam inscription of Aditya I himself confirms his ascension in 871 A.D. This is further attested by the absence of Pandyan and Pallava inscriptions, etc. open to politic and diplomatic office; and occupying much of Muttaraiya land it was natural to have intercourse with all. With an eye for the best they stole a march over friends, and adversa-They introduced 'inflections and accents' giving us a healthy view of their egoism and personality. Their urge shows us that "culture is not a mere reflex, but a progressive appropriation and renewal"(2). They are a 'family of mind' making choices and therefore show a 'classic stability'. However, the following sections show us that this was achieved by opposing factors of affinity and contradiction. It was not a single factor that predetermined their predeliction for style. A complexity of factors saw a mutuation of forms. It is our task here to explore these forms, how they began, evolved, changed and emerged. And thus is style determined.

Political chronology is used here for convenience, however, wherever the need arises, other aspects take liberty of moving in and out of this chronology which is not binding. Just as in the previous section, this chapter too is divided into the adhisthana, the Ist tala and upper tala respectively.

#### IV.1 THE DEVELOPMENT OF ADHISTHANA

Despite the traditional 'padabandha' being in popular usage the restlessness manifested itself in the search for new forms. The plainness of the padabandha was to some extent relieved by the galapada carrying relief sculptures of puranic and epic themes. These are casually carved, perhaps because they are in such places that did not call for great detail, or due to limited space, or because it was much too below the eye level to catch great attention. The episodic nature of sculpture was a change from animal or vegetative motifs.

This is found in contemporary Irrukuvel and Paluvettaraiyar architecture. It was an elaboration and sculptural play on form. What was a mere hint of lotus petal, like the first frothy wave that touches the shore and becomes a diffused trickle, became the wave that rode the crest. From mere incision the form was scooped out smoothened and carved into a passion swept wave like petal. This was his architectural precision. The kapotabandha seen in Pallava Olakkanesvara (fig.24) as the kapota of the

high upapītha, which was very rare - saw a sudden rebirth as the adhisthāna feature in the temples of Trarāntaka I. Once again it is the usage, transformation and persistence that established a norm here. Such variation of mixing, matching and alternating also saw the padmaka, vaprabandha, Sundarabja and pus' pabandha adhisthāna. It will be seen that the last became an all time favourite in the latter half of the tenth century A.D.

The making of Chola architecture began with Vijayalaya's conquest of Ko Illango Muttaraiyar's Tanjavur. the fundaments of architecture were already known, and thus in an advanced stage, sculpture too worked towards greater heights showing more promise. The Muttaraiya vassals were a class apart sharing the same Dravida legacy; they had established an identity even in a very short span of reign. The search for the Chola style must therefore begin somewhere here. When we say Vijayālaya we simultaneously mean Muttaraiyar or pre-Aditya or the post-Muttariayar-Chola style. Architecture does not preclude us here, in fact very artfully it confirms its presence and its influence. Similarly, the Irrukuvel and Paluvettaraiyar, also immediate neighbours, allies and vassals at different turns played a major role. The important thing to be remembered however is that with the Chola hegemony these idioms naturally gave and took from them and are called Early Cholanadu style with respective sub styles or idioms. These are called 'oscillations of artistic enterprise'. The Muttaraiyar were subdued while the Irrukuvēl were more Pallava vassals, yet they shared a comaraderie and a 'cultural nexus' with the Chola. Proximity was a major cause for architectural and artistic exchange.

The Vijayalaya phase naturally includes most of the Muttaraiyar sites as a prelude, to the Chola temples. of their temples the Panangudi Agastīsvara and Viralūr Bhūmīsvara (figs.38,39) are considered to be the earliest independent examples of the ekatala Chola vimana, with traces of subshrines. They are the 'isolated essays' of the Early Chola style. We tread surer grounds when we touch the Aditya I phase. The Anbil plates of Sundara Chola dated in his 4th year extol the virtues of Aditya I as the builder of lofty and . indestructible stone temples the banks of the Kaveri(2). Balasubramanyam has explored the authenticity of these and laid claim to thirty eight temples of Aditya I in the region. Inscription and paleography however pose a problem. Do the dates belong to its construction or terminus ante quem? Visual elements and style hence call our attention. The temples

become a cumulative evidence of the Aditya I phase. The Tirupurambiyam battle gave further impetus to political and cultural expansions into the heart of Tondaimandalam. From a buffer state, they rose into prominence as evidenced by a spurt of activity. The timing perhaps was right for a cultural ferment, with a much of the innoculum coming in from friends and foes alike. Partial to creativity, their artistic temperament couldn't be ignored. Propinquity was an advantage above all. The 'oscillations of artistic enterprise' couldn't have a better alternative. A Calukyan, Ganga, Irrukuvel and Pandya kinship and a complementary Pallava-Muttaraiyar-Chola one is suggested by K.V. Soundara Rajan. The Muttaraiyar as a primary agency for the assimilation of Pallava agencies transmitted much to the Chola. No temple in this phase can be used as a prop to chronology. Within a given time span they are placed and dated approximately. The Rajakesari inscriptions and biruda can perhaps be misleading due to their indiscriminate usuage. Renovation and reconstruction are partly responsible for their failing.

Nevertheless, the maturity gained in his phase is carried over gracefully into the reign of Parāntaka I. The embellishment of the adhisthana, on the threshold of fulfilment, continued with little change. Whatever change occurred

was affected during the latter's last years. Tiruccendural began to anticipate a general change and the temples thenceforth could be dated with more precision or a 'terminus ante quem'. The temples of this period are about two dozen in number, and included both new constructions and renovations. The general style is conservative and repeated olden patterns. The noticeable advances are made in the treatment of complex wall surfaces and quality of sculpture. With the end of Parantaka I's reign the Ist or Āditya phase come to an end.

The IInd phase from 940-970 A.D. began from the latter part of Parantaka I to the accession of Uttama Chola, as based on inscriptional and stylistic grounds. The temples of the latter part of his reign are crucial for the fulfilment and restlessness which moves towards a change.

The IIIrd or Sembiyan Phase that followed saw from Uttama's ascension to the reign of Rājarāja I in 985 A.D. Politically the Chōla were worn after the Takkōlam debacle. They were slowly recovering their losses. It was in such troubled times that Sembiyan Mahādēvi, the queen of Gandārāditya and mother of Uttama took up the cause of temple building. A combination of personal

losses and political setback drew her into piety. Her undivided attention to temple building and devotion to religious deed saw the fulfilled human and a fulfilment in art. From the Uyakkondan inscription, as early as the 34th year of Parantaka I to the beginning of the eleventh century A.D. - a period of sixty years she is extolled and remembered for her noble and charitable acts. It is within this ambit that we shall survey the emergence and growth of Early Chola style.

Instead of breaking up into historic sections, we shall take the individual adhisthanar and study the temples under each of these categories. The adhisthana ten in number are enumerated below.

- i) Padbandha
- ii) Pratibandha Pratikrama
- iii) Padmaka
  - iv) Vaprabandha
    - v) Padmabandha
  - vi) Padmapuśkala
- vii) Kapotabandha
- viii) Puspabandha
  - ix) Sundarābja
    - x) Śrībandha

## i) PADABANDHA ADHISTHANA (figs. 40a, b, c)

The padabandha was every man's heritage in the Dravida-With variation in heights they are seen in all the three phases of Early Chola temples. Its usage did not necessarily mean an altogether austere temple. Conservative, they are successive layers of geometric and mathematical precision over each other. Dominated by horizontals and lesser verticals they are basically To one who looks at them carefully they functional. are like exercises in scales, repeating the same note a little different from the other. These flat straight notes are the upana, jagati, kumuda, kantha and pattika. Kaliyapatti Siva, Panangudi Agastīsvara, Visalūr Mārghasahāyēsvara, Viralūr Bhumīsvara, Nangavaram Sundarēsvara, Tillaisthānam Ghrtasthānēsvara, Kilatt anaiyam Uttamanāthasvami, Nēmam Iravātēsvara and Nārttamalai Vijayālaya Cholīsvaram are Muttaraiyar examples of this adhisthana with no exceptional quality. (figs. 80,38,69,39, 71,42,70,41)

The Tillaisthanam temple has a pranala and slightly more pronounced features. This could be because the anga divisions are very distinct. The karna, salilantara and bhadra are clear cut. This also makes it more rigid. The Sundaresvara at Nangavaram has its adhisthana

buried upto the tripatta kumuda, only the kantha, pattika and prati are seen. The parivaralaya show the pranala cut in the pattika below the vedi. The Iravat esvara and Vijayalaya Cholisvara both Muttaraiyar Chola transition temples have galapada decorations either with a deity or puranic scene. The Early Chola examples of this adhisthana are numerous. The Tirutantorisvara at Tiruppanturutti Puspavanēsvara; Uraiyūr; Tiruppalanam Apatsahyesvara; Erumbur Kadambavanesvara; Uyyakondan Tirumalai Ujjīvanātha; Köyil Tēvarāyanapēttai, Matsyapurīsvara (fig.92) Turaiyūr Vismangalēsvara; Kovilādi Divyajnanēsvara; Tiruvērumbūr Piplisvara (fig.87) Punjai Naltunai are examples of the padabandha. Of these the Naltunai Isvara; Vismangalesvara(figs.43 A4,44a) and Piplīsvara follow the Iravatēsvara and Narttamalaid in galapada decoration. The first (fig.43) is an excellent display of proportion in elevation enhanced by a robust The galapada of the vedi and adhisthana padabandha. have a mini tableaux which show spirit and skill in terms of their composition. Vivid movement is caught in these rectangular blocks. A similar but coarser vivacity is reflected in the Visamangalesvara with lively animals like the bull, cow, rams and elephants (fig.44,44a). Epic reliefs of the Vali Sugrīva combat, Narsimha and Nataraja in the anandatandava are found on the vedi

galapāda. The Piplīs vara includes the floral motifs. Tiruppanturut ti Pus pavanēs vara has a praņāla at the upana level which suggests an earlier Muttaraiyar site. This is supported by the mātrika sculptures found there.

Surprisingly even the Sembiyan construction at Konērirājapuram Umamāhēsvara (fig.91), Tiruvidaimarudar Mahālingasvāmi; Anangūr Agastī svara; Tirukuruhavūr Tiruvellādai Īsvara, the Udaiyargudi Anantisvara (fig.90) are also on this simplest form of base.

#### ii) PRATIBANDHA PRATIKRAMA ADHISTHANA (fig.45)

The earliest examples of this adhisthana are seen in the Kanci Vallsvara, and somewhat ornated in the Jalanathesvara at Takkolam (fig.46) both Pallava temples. The Sendalai Sundaresvara (fig.47) and Kīranūr Uttamadānīsvara (fig.48,49) were two Muttaraiyar temples that give it their own special quality. Architecturally there is a cuboid like block that is seen just below the corner engaged pillars where the ends of the two floor joists are carved. A single vyāla and projecting bevelled member on the top, bottom and sides are seen. Below the intermediate pilasters two on each facade, the ends of floor joists are indicated by the smaller bevelled member projecting from the horizontal groove. The feature

that catches our eye is the curve of the kumuda which is asymmetrical and rounded. The ribs and minor cyma recta seen at Takkolam are not here; but the kumuda is more pronounced fleshy and confidently carved than even at Valisvaram. The Kiranur Uttamadanisvara has apart from a smooth curving kumuda a frieze of vyala which are facing breast front on faces turned sideways. The compact, neat rows are smooth and in a continuous rhythm. Placed at a very moderate height, one can observe three distinct shapes succeeding one another. The angular profile, the curved one and a dynamic one with forms of life.

The adhisthana is like a mirror reflection of the hamsamala and overhanging flexed kapota at the bottom; and act as if between them they hold up an austere wall, with equally austere Brahmakanta pilasters.

Sendalai and Kiranur, specially the former are trnasition temples.

# iii) PADMAKA ADHISTHANA

This adhisthana is a unique feature seen in the Tiruccaturai Odavaneśvara (fig.50) and the Kumbakonam Nagesvara (fig.51,52) both temples of Aditya I phase. The name

padmaka derives from the lotus, and it is the flowing wave like petals which come closest to our feet as we circumambulate the temples. This adhisthana is a flourishing touch on the padabandha. The artist in the architect sculptor breaks his upana and uses it as the ksudropana with the heart like lotus petals. This cyma recta moulding at the lower most section is carefully carved. It is more like a jeweller at work. This is all the more enhanced because the vimana is divided into a neat bhadra and karna, with the former just projected Relieving the harsher angles of the jagati, forward. antarita, kumuda now tripatta kumuda, kampa, gala etc. the cyma recta is a softer modelling of form. How it draws attention to itself is a question, perhaps it did not have such ostentatious intentions and was only the creative urge to soften, model and externalise a finer sensibility into stone. The Tiruccaturai has an additional antarita which Kumbakonam does not have. The latter takes the padmaka even in its ardhamandapa. The petals are more elaborate. The vimana is broken into the bhadra and karna too and adds to the rhythmic movement back The galapada have themes like Ramayana and forth. in shallow relief.

### iv) VAPRABANDHA ADHISTHANA (fig.53)

Innovative and original this takes a few more steps from the pratibandha pratikrama types. Upon a cuboid uapana and jagati rests the vrtta kumuda, the very word vrtta makes it curved. Clasping it on either sides are small closely carved lotus petals called adhah padma and urdhva Following this is the pratimukha. padma. enclosed on either side by the antarita and prativajana. It is seen that the gala in both pratibandha and vaprabandha are absent. The pratimukha carries a finely carved dynamic vyāļāvari. Examples of these types are the Tirukāttupalli Agnīsvara, Srīnivāsanallūr Koranganātha (fig.54) and the Allūr Pancanādīśvara. The jagati is these temples is relatively higher, and the kumuda more deeply cut specially in Koranganatha. This temple slightly larger than many temples of this phase is remarkable for its clarity and resonance of forms and masses. Powerfully rendered vyala. and a makaratunda carrying human figures form a vigorous garland around the vimana. into the karna, salilantara and bhadra there is a rhythmic flow of opposing forces that create greater The finer quality once again in barely perceptible to a common eye, for the adhahpadma is barely The urdhvapadma is carved out in shallow visible. relief, as if they replicate silver or gold filigree.

The galapada above the vedi are left bare. There is a slow building up of different human qualities from the basement till we reach its fulfilment in the life size sculptures (fig.54). The Tirukattupalli Agnīsvara is simpler with a smaller adhah and urdhvapadma and vyāļavari. The vimāna of the Allūr Pancanādīsvara is also a simpler version of the Koranganātha with a relatively smaller verta kumuda. The vyāļavari with elephants is less powerfully rendered.

The Manavālīsvara in Tiruvilākuḍi is similar to Koraṅganātha but adds an additional minor ksudrapadma between the jagati and upana somewhat recalling Tiruvāduturai.

A unique example of the Kodandarāmēsvaram (Ādityēsvaram) in Tondaimānād which is a pallipadai in memory of Āditya I was constructed in the 34th year of Parāntaka I i.e. 941 A.D. The only surviving adhisthāna of the Pratikrama Vaprabandha type it has a ribbed kumuda called katakāvrta kumuda. Its earlier prototype is seen in later Pallava temples of Takkōlam and Uttaramērūr. The vertically fluted and slightly curved kumuda have been subtly carved and have supported gracefully well rendered vyāla in high relief. Smaller than the Jalanāthēsvara and Sundaravarada of Takkōlam and Uttaramērūr resp.(figs.46,27)

the jagati carries the katakāvṛta kumuda clasped by adhah and urdhva padma. this type does not feature anywhere in the Early Chola temples. Both geographically and stylistically its leans towards the Pallavas. This kumuda relieves the rigidity of other components by its mellifluous wave like flutings. L ying in the heart of the Pallava domain, it naturally shows Pallava affiliations and handwork.

### v) PADMABANDHA ADHISTHANA (fig.55)

Temples of the Early Chola style, like the Kiliyanur Agast svara, Lalgudi Saptarsisvara; Pullamangai Brahmapurisvara, Tirunāmanalūr Tirutondisvara; Allur Pancandiśvara; and Valikandapuram Siddhanatha; Valikandeśvara follow the padmab andha adhisthana which is an elaboration of the vaprabandha with a padma or major cyma recta moulding in place of the jagati. The earliest development occurs in the Pallava Alaivai-kkovil at Mamallapuram (fig.22); the same is called padmopana above which stands the tripatta kumuda or its decorated version called Kairava. The padmaka adhisthana developed thereafter and the proper padmabandha, giving emphasis to the major cyma recta moulding occurs. The major difference is the treatment of this part. Apart from this in place of an angular kumuda it continues to use the vrttakumuda with adaha and urdhava padma as in the vaprabandha adhisthana. Three forms of adhisthana are combined here to create a new form.

Above the vrttakumuda clasped by the adaha and urdhva padma are the dynamically carved vyalavari.

The Saptarsisvara at Lalgudi (fig.56) shows us a curved in padma with the tips of its petal rising up like waves. The fall of the open petals from a small convex to concave, and rising back like the crest of a wave gives us the illusion of a full bloom lotus floating on the water surface. Complimented by a moderately curved kumuda, the mouldings have a natural fludity. The vyālāvari is the turbulent surface rendered with vigour. The necklace of leonine and elephant forms with riders and warriors thrown in are the dramatic and only such forms in the whole of the Ist tala. From ripples to high tide and turbulence the various mouldings take us through similar The wall kanthas are exceptional sculptured blocks bearing panels from Siva Purana and Ramayana. The makara tunda in each case are awesome.

The other interesting example is the Tirutondisvara at Tirunamanalur of the late Parantaka Phase, 935 A.D. This is not as exciting an adhisthana as the former,

but is relatively austere, and has a convex curve that opens slightly into restrained curves of the petal. The adaha and urdhva padma are also rounded, while the vyāla are not strung close together and are scanty. The closely packed lotus petals appear almost in a straight line despite the slightly projected bhadra.

## vi) KAPŌŢABANDHA ADHISTHANA (fig.57)

Kapotabandha literally means bound by the flexed or overhanging cornice. The earliest example of this feature occurs in the upapitha of the Pallava Olakkanes vara at Māmallapuram (fig.23). The interesting aspect is that this form had practically died out after Rājasimha Pallava. This form appears as a variation of the pratibandha with a major additional component. The Pullamangai Brahmapuris vara; the Somur ruined temple and the Tiruccenamapundi Ca daiyar kovil follow this form.

Pullamangai has a high kapotabandha adhisthana with vivid carvings of epic themes in the galapada. A rectangular block of upana carries a high jagati a vrta kumuda with only urdhva padma, kampa, gala and again sculptured galapada urdhva, kampa, kapota and the pratimukha or vyalavari with a makara tunda in corners (fig.58). The kapota is like the keel of an inverted boat and

is enhanced with valli in the corner, and candramandala along the rims. The vyāla and makara in the pratikantha are complimentary life forms. Mythic, floral and animal motifs find place in continuous blocks; clarity and perfection of each architectural form reflect the architect's fetish. Love for minute detail is seen in the careful carvings of miniature reliefs. Such crisp and sensitive details find place even in the kumuda, kantha and kapota. The kapota is the focus of attention.

The Cadaiyar Kövil in Tiruccenampundi (fig.59) was possibly rebuilt in 920-921 A.D. during Parāntaka I(3). Both vimāna and the ardhamaṇḍapa are on the kapōṭa bandha adhisthāna. The galapāda are not so remarkably adorned. The carvings are not as masterly. The vēdi has pāda adorned with charming miniature reliefs and floral motifs. This also has over the vṛṭṭa kumuda the barely discernable urdhva padma. The kapōṭa vaḷḷi are not overly commendable due to being partly defaced, but the precision with which the vyāļāvari runs round the vimāna is very rhythmic and compact. They can compare to Kīranūr and Srinivāsanalūr in their precision in workmanship.

The Somur ruined templed supposedly has a remarkable adhisthana standing on a very narrow upana, broader

jagati, a vrtta kumuda clasped by a shallow carving of adaha and urdhava padma, and an unadorned gala over which hangs a prominent kapota. This has a band of arabesque or kodikkaruku running on the ridge and a kūdu arch at equal intervals to relieve the linerarity of the band. The pratikantha or padmavājana carries the vyāļāvari and makaratunda at the corners.

## vii) PUSPABANDHA ADHISTHANA (fig.60)

Puspabandha literally calls to our mind garlands of puspa placed at the feet of the Lord. Euphemistic perhaps Moulding after moulding are interwoven garlands but true. of petals running round the vimana, perhaps the fervour reaching a fever pitch. The last years of Parantaka I saw the emergence of the puspabandha with auxilliary laminations of minor cyma recta mouldings for the first It was prominently used in the latter half of the 10th century A.D. This period, the last years of Parantaka I otherwise too saw advances made in some of the larger temples like the Tiruvadutuari Gomuktesvara and Punjai Naltunai Isvaram. New trends were ushered The former temple poses much problem in this phase. due to its controversial inscription and misleading word 'kūdapa dai'(4). D. Barret's investigation is agreed to be most plausible so far. The 25th year inscription

of a Parakesari Parantaka I, 932 A.D. mentions the construction by a Karralip - Piccan and a 38th year inscription of Parantaka I which records a donation of 500 Kalanju. of gold for the construction of the temple from the kudapadai upwards. This could according to S.R. Balasubramanyam be the donation made by the king before the final installation of a stupi in gold. Ghai and K.G. Krishnan call it the kumuda padai i.e. the temple was constructed from the kumuda upwards in the 38th year of Parantaka I, M.A. Dhaki takes the kumudapadai closer to its Sanskrit equivalent khurapatta, which is the jagati below the kumuda and is the first mouldings of the base, and thus began the construction from 945 A.D. onwards. The only valid alternative is that the brick structure constructed by Piccan Karrali was rebuilt by Parantaka I in stone, and this is the most plausible one, since both architecture and sculpture support it. The temple as a whole is complementary and conforms to its design. The interplay of different features with super skill makes it a royal, late Parantaka I foundation.

Tiruppāṇḍal Aruṇācalēśvara; the Tirunāgēśvaram Nāgēśvara, The Tiruvāduturai (nōmuktēśvara; Kīļappaluvūr Tiru Ālandurai Mahādēvar; Kuhūr Āmravanēśvara, Sembiyan Mahādevi Kailāsanātha, Tiruvārūr Acalē śvara and the Kāruntātangudi

Vasisthesvara fall in this category of adhisthana. these temples apart from the Arunacalesvara have series of padma from the upana to the vajana. upana are moderate sized padma which run around the vimana, parallel and running successively in the other mouldings, the inverted lower petals above the jagati are called ambuja. This is an additional new feature. Clasping the vrtta kumuda are the adhah and urdhvapadma. Above this is the kampa, gala, urdhva kampa, urdhva padma which clasps the mahapatti from below and the ksudra padma which does the same from above. The topmost section is the vajana patti. Thus every rigid geometric shape is counter balanced and relieved by the carefully and lovingly chiselled padma or puspa.

The Gomuktesvara (fig.61) ushered in this trend, and they were seen in the latter years of Parantaka I and justifiably carried over into the Sembiyan phase. the Tiruvaduturai temple also uses this form in its koshta panjāra. There are miniature panels on the galapāda of the vēdi. There is no māha-padma, but smaller ones. The ambuja and adhahpadma have the semblance of the plaited feature. Another notable feature is the intervening spaces have lozenge decorations which are rich and carved to minute detail. Such a unique base is found nowhere

in this phase again. The Sembiyan adhisthana do not come anywhere near these, while the Nageśvara and Aruna-caleśvara are also otherwise a little doubtful(5). The Second Phase anticipates this base in the Third Phase, but the latter lacked in surpassing the former.

### viii) SUNDARABJA ADHISTHANA (fig.62)

A rare form of adhisthana, there appears to be none other than the Āduturai Āpatesahyēsvara (fig.63) which has it. Very similar to the puspabandha in all respects, the only major change occurs in the major cyma recta moulding 'mahā-padma' which takes the place of both upana and jagati. It stands on a very slight ksudropana. Falling convex and then concave its petals rise gently. The total effect is one of a cascade. The vrtta kumuda is less prominent because of this and the adhah-urdhva padma are barely discernible. the kantha or galapāda is bare. There is such a dominating spirit in the mahapadma that the other features appear comparatively subdued. This adhisthāna combines the puspabandha and padmabandha adhisthāna.

# ix) SRĪBANDHA ADHISTHĀNA (fig.64)

The human urge to mix and match, put the pieces of a jigsaw together are suggestive of man's restlessness

and dissatisfaction. When a skill is not yet acquired, his ego refuses to acknowledge his defeat, and so he tries it over and over again. Once the means and end have arrived the rest takes on a meaninglessness; i.e. an 'intended effect' once produced kills interest in it, and the unquenching thirst takes them to newer heights. Exposure to other types of development and guilds have played a role in the emergence of this type of adhisthana.

The three major temples which follow this adhisthana form are the Vrdhacalam Vrddhagirisvara, Kuṭṭālam Uktavēdīsvara, and the Tirupurambiyam Sāksīsvara; and all these belong to the Third or Sembiyan hase. The Gandārittam Sokkēsvara and the Govindaputtūr Gangajatādharēsvara also follow the same.

This adhisthana has a medium padama above the ksudropana, a jagati, the ambuja and adhah padma, the vrtta kumuda, the urdhva kumuda, gala, kapota, pattika, padmakampa and prati. The ambuja is also called ksudrapadma and has an antarita or alinga above which comes the adahapadma. The cyma recta mouldings which besides differentiating also intergrate the other features carefully.

The Tirupurambiyan Saksīśvara (fig.65) is more ornate, in that it has a dressed kapōṭa with kodikkaruku and

a kūdu arch. A vyāļa frieze is also seen. This kind of adhisthāna is described as śrībandha in the Vaikhānasa Āgama and Mārīcisamhita. The vyāļa friezes are not impressive, while the jagati vrtta kumuda, gala etc. are dominating. The minor cyma recta mouldings are like delicate ornaments over the body of the major mouldings. The valli and kūdu arches also appear graceful and modest. Interestingly the lowermost section, where the pillars of pañjārakōstha stand are projected with pairs of vājana puruśa holding up the same.

The Vrddhagirīsvara and Uktavēdīsvara are similar. Both have modestly carved adhisthāna. The latter is on a high base, and the vēdi kantha show carved episodes in relief from Siva Purāna and secular themes.

# x) PADMA PUŚKALA ADHISTHĀNA (fig.66)

The adhisthana with the mahapadma as in the padmabandha, and the vrttakumuda clasped by the adhah and urdhva padma as in vaprabandha go into the making of the padmapuskala. Although relatively simpler it is one of the most graceful and austerely rich. They are the perfect bases for one of the most perfect examples of the Irrukuvēl and Paluvēttaraiyar temples under the Early Chōla style. Upon a very usual upana, in place of the jagati are

the most elegantly carved mahāpadma. This is surmounted by the vrttakumuda with the adhah and urdhva padma with the antarita below the former. The pratimukha of vyāļa recall Kīranūr Uttamadānīsvara (fig.49) of the Muttaraiyar. Perhaps the Cadaiyar kōyil at Tiruccenāmapundi and Koranganātha at Srinivāsanallūr both drew from these sources (figs.54,59).

The best examples at hand and the best preserved ones are the Kodumbālūr Mūvar Kōil, Tiruccendurai C andra-sēkhara both of the Irrukuvēļ idiom, the Kilaiyūr Agastīśvara and Chōlīśvara, and the Pancanādīsvara at Tiruvaiyāru (figs.76,77b,67,68).

The Mūvar Kōyil shows large or broad cyma recta mouldings which again fall into upturned tips of petals. The incised carved out areas give an elegant shape to the form. Not too fleshy, but with sufficient emphasis, they come close to naturalism. Surmounted by the vṛttakumuda it is only upon close observation that the adhah and urdhva padma are visible. The vyāļāvari need no further commendation, they are a rhythmic flow of dynamism and vivre. The Candrasēkhara at Tiruccendurai is similar.

If the Irrukuvel's ample sweep of the mahapadma and the striking quality of the powerful vyala characterise

these temples, the Paluvēṭṭaraiyars were none the less. The perfect carving of the slightly smaller mahāpadma make it appear rich and velvety. Pouring over, the petals have a double curvature effect. This is an example of the conquered medium and outstanding architectonics. The vṛṭṭa kumuda with the adhah and urdhvapadma are cushion and lace, as if embroidered upon the docile stone. The vyālāvari in contrast is all animation above the subtility of the lower components and these are reflected both in the Chōlīsvaram and Agastīsvaram at Kilaiyūr.

The Pamcanadisvara in Tiruvaiyaru sees this kind of adhisthana, where the mahapadma is similar to the Muvarkoil. The adhah and urdhva padma pulsate with life as if impatient to grow.

General observation shows us that despite the large number of temples both new and renovated, the Chola temples proper used the padabandha most frequently. The puspabandha was the uniquely new feature while all the others are found in the Pallava, Irrukuvel Muttaraiyar and Paluvettaraiya temples. It is their play of changing, interchanging, emphasising and giving expression in their own precise way that calls forth for them accolades. It is also seen that those temples which

cause us some doubts regarding history, dating, etc. come up with these variations, like the Gomuktesvara, or the Muvarkoil. Falling under and within the Early Chola reign, the Irrukuvel Muttaraiya and Paluvettaraiya sources have contributed to a large extent in this madness towards the hybrid form. The yield needless to say was a rich output of architecture and architectonics, forms which metamorphosed over and over again into new shapes, carrying a revived life, perhaps the life elixir. Royal patronage appears to have had a key role in determining the relative importance of these temples.

The form and texture so go together that the qualities of shape are manipulated by the Chola with dexterity. Emphasis or blur is shown on the surface which enhances or conceals accordingly. The human urge is hence both exhibitionist and reticient, where enhanced display and camaflauge give it that unique identity. They are evocative compositions in stone.

### IV.2 THE FIRST TALA (THE WALLS OF THE VIMANA)

"Above the adhisthand rise the walls of the temples, (called the first tala). These are large fields of beautiful and accurately worked hard stone left plain, and

carefully placed pilasters and engaged pillars were used to articulate the wall surface. The effect achieved is one of classical precision and severity, and the architect is never tempted to emphasise his decorative detail at the expense of his forms"(6).

#### - Douglas Barret

The above description is most succint and complete within itself. It is for us to identify, sift and then see the emergence of style from this part of the temple. The visual impact upon this area is very relevant, for falling within the human vision and proximity the space is aptly utilised for both elaboration and education. The wall with its focal niches became the spokesman for all that stoods for religious thought. From being a very necessary and strictly functional architectural component it metamorphoses into a play field, which the artist sets off in a love affair. the walls of the Early Chola temples stay apart, beyond all compare, accessible yet not accessible, proud and aloof, commanding the respect and reverence of its sculptor - architect lover.

The wall proper begins at the vedi and ends at the vyālāvari or kapota. Discrete punctuation by pillars

and pilasters of different orders - The Brahmakanta, Visnukanta, Isakanta, Indrakanta and Saumyakanta are seen on the wall. They offered great scope to the sculptor, for upon its surface he created and tamed the medium to his will, and dressed them in ornaments in the malasthana, lasuna, ghata and mandi. This finely finished member carried a palagai some times. vimana had either one or different types of pillars pilasters, while the ardhamandapa was usually punctuated by the Brahmakanta. The interiors had Visnu, Iša or Indrakanta types. The Brahmakanta was never used as a free standing pillar. These pillars are either bare or dressed in shallow relief. shaft or kal is either square, round octagonal, polygonal and fluted delicately. The fluted shaft was referred as the 'sundobheda' - one like the split bamboo. Resting on a square base saduram, the 'kal' carries a kalasa bound by the padmabandha moulding. At this point malasthana with either tasseled decorations, muktavali floral or foliate motifs. The capital which is above has respective members; the vase like kalasa surmounted by a moulding 'tadi' (echinus) which spreads in a convex profile. The kumbha a rounded vase topped by a padma cyma recta, with its tops curving inwards makes a powerful torus moulding. Some times indentations mark the petal tips called 'munai'. The palagai or abacus surmounts this; they carry the ' $\bar{v}$ irakantha' which appears to be inserted into the pottika.

The pottika is either plain and angular, or the taranga type we have already seen in the preceding chapter. The arms are hewn off at an angle of approx. 45°; and could be either plain, or with the slanting and horizontal faces with roll or reed moulding taranga. A plain or decorated median band 'patta' holds these in the centre. In the plain angular pottika this patta The prastara rests on this pottika; and is prominent. often has mouldings called the uttira and valabhi (a strong convex moulding bearing the hamsa or mala which kind of bind and perform aesthetic functions). Overhanging on this is the kapota, which is basically employed to throw off the water and protect the beams and joists of the roof. The flexed curve became the sculptor's delight and carried the patralata or kodikkaruku in the corners, and centre. They substitute for the kona patta which braced the corners of the kapota in its wooden prototypes. The lower ridge of the kapota have rows of flat bosses or candramandala which again take off from the metal bossing upon the wooden proto-Above this at uniform intervals occur the kudu (nasi ), horse shoe shaped with simhavaktra finials The gadha cavity may or may and mukhapatti. be filled with motifs. Above this is the vyalamala between the prastara and the hara of the second tala. first glance all these components look the same; and infact they are common to all South Indian architec-The relative emphasis and articulation make one aspect more dominant or recessive than the other. The Pallava pillar for instance is shallow, using very The kalasa ran smoothly into the little recession. shaft preserving the columner aspect. The Sundaravarada Perumal at the Uttaramerur shows the padmabandha recession, the inward curve of the base of the kalasa which is basically the nature of manupulation. In contrast to this, the nature of the Chola articulation is more vibrant and expressive. On one hand the quality of architectural precision is at the fore, sturdy and dominant while on the other the sculptural empressement reflects his urge for freedom of expression. This is seen in their adhisthana superstructures and walls. The Early Chola pottika is a complex profile of vertical ending fascia, with an angular throating. The Lalitankura at Tirucirappali anticipates the roll ornaments and its use at the lower angle of a large role with an 'incised volute'. The South Indian prastara is more or less the same, the change is upon the dressed surface for the Pallava finial of the kūdu is shovel shaped
while the Chōla finial is usually the lion mask and
an overflowing arabesque.

The devakostha, one of the most important features of the wall becomes next important to the garbhagrha with It is usually the vehicle for religious the mula devata. thought and mythology. Elongated and rectangular, this recess is shallow or deep. It is a classic understatement - for with restrained elegance, it draws our eye to the enshrined god. They are framed by two split pilasters of the Brahmakanta type, with a pottika virakantha or palagai, a lintel of two straight mouldings and separated by the cyma recta of lotus which may or may not be carved. Crowning this is the torana, simple or elaborately carved with either floriate or geometric motifs interspersed with human or semidivine figures and a central lalatabimba. This tympanum is usually a 'makara torāna' which is as old as the cave temples of the Pallavas and seen in the Dalavanur Satrumalla, and the Trimurti cave temple (figs.10,16). It is said that the Pallava never forgot the original function of the tympanum which was that of the lintel for support. To be able to make any change in it was a professional

risk. The risk however we see was overcome, and the spirit of adventure was fulfilled in the Early Chola torana.

With this brief description this section is divided into four parts or phases.

- i) The Pre Aditya or Vijayalaya phase (850 A.D.)
- ii) The Aditya I phase (870 907 940 A.D.)
- iii) The Second phase (940 970 A.D.)
- iv) The Third or Sembiyan phase (969 985 A.D.)

The temples dealt in these phases are more or less stylistically grouped, except in some rare cases where doubts exist they are treated as close as possible to whatever prediliction they show.

# i) THE PRE ADITYA OR VIJAYALAYA PHASE (850 A.D.)

The lesser or smaller temples of the Muttaraiyar which are closest to the ekatala vimana of the earliest Chola temples are clearly articulated by the Brahmakanta pilasters minus the devakoshta. The Kaliyapatti Siva, Visalur Marghasahayesvara (figs.80,69) are apt examples. Shallow, but nevertheless they relieve the bare walls. An incised band for the malasthana continues with barely

any change into the lausuna or kalasa. Over this is the tadi, kumbha - the rectangular cushioned capital and palagai over which is an angular pottika. Hidden above are the uttira, valabhi and prastara components by the kapota. This austere kapota has a patralata at the extreme corners followed by two rounded kudu arches minus the finial. A candramāla runs along the rim of the kapota. Slightly recessed in the prastara is the vyālāvari, with pairs of vyāla breast front and facing each other sideways.

The Viralur Bhumīsvara (fig.39) is larger and has a central devakoshta and crude remains of a torana. Framed by split pilasters it is narrow. There is a merest hint of the bhadra and karna., with the former ever so slightly projecting. The pilasters are the Brahmakanta two are the corners of the bhadra and pairs on the extreme ends of karna. The Panangudi Agastīśvara (fig.38) finds the Brahmakanta with plain angular corbels too. The ardhamandapa here also has evenly spaced pilasters. Rectangular niches at the entrance are present to receive the  $d_{V}$  arapala. These are the earliest and simplest forms of the Early Chola vimana. D. Barret says "the question remains whether it is a true primitive of the style", due to lack of

other really usuable material. The Bhumisvara still has sculptures that could be dated to this formative phase on stylistic grounds.

The major temple on this Chōla conquered Muttaraiya tract is the Vijayālaya Chōlisvara (fig.41). Here again we encounter slightly pronounced Brahmakanta pilasters with the projecting palagai and plain angular pottika. The vertical shafts are minus the lasuna. The unique identity of this temple wall are in the paired row of pilasters in contrast to the mushrooming upper talas. Unarticulated upto the tadi, by virtue of their simplicity and thinness they give a heightened elegance to it. Flat ribbon like, these pilasters frame the wall in five sections while the geometrically plain and angular corbels rise upto merge with the uttira. The ardhamandapa pilasters are similar but barely pronounced.

The pillars in the interior are massive, cut square at the top and bottom and octagonal in between. They derive from the Pallava and the Pandya cave temples. The front corners have Brahmakanta pilasters with the pottika decorated with large even rolls bound up with a plain median patta which indicates a throating - very much the Early Chola.

The Nemam Iravatesvara (fig.70) also has simple Brahmakanta with archaic decor on its kalasa. Like the Tirupattur Talinatha there is a slight incurving of the kalasa just a slight play is also shown in the pilaster of the same order. The variation is an intentional one to show the difference between a supporting pillar and a relieving one.

Ghṛsthāneśvara at Tillaisthānam (fig.42) ushers in features that become typical Chola. The wall section leans heavily on the formative Chola idiom, and is a definite advance over the Muttaraiyar. The Visnukanta is prominently used in the karna and the Brahmakanta for the sham niches in the recesses, and the bhadra The bhadra itself is framed by the Rudradevakoshta. This is exceptional because thus far the Muttakanta. only used the tetragonal Brahmakanta. is archaic decoration on the malasthana and the kalasa as at Panangudi Agastisvara. The walls further are dependent on the offsetting basal divisions and are thus also enhanced by them. The two pairs of Visnukanta for corners distinguish that particular space with greater clarity, while the simpler Brahmakanta underplay the sham niches in recesses. The Rudrakanta are used as dominant frames that enclose the bhadra which has

a deep devakoshta framed by split pilasters. Variety or variation create a visual logic of forward backward, high and low rhythms. The pillars and pilasters are roll or taranga pottika throated with a plain median The interior pillars have cushioned capitals, patta. less pronounced shaft and slightly projecting saduram. The Sundaresvara at Nangavaram (fig.71) also has Visnukanta pilasters without the lasuna on the corner pilasters. The pillars and pilasters have the roll taranga pottika throated with a median band, which is a rectangular fillet, they are not as slender and elegant as Tillaisthanam, specially the pilasters are high with a cushioned ghata or kumbha, and lesser in the mid section with a slightly more prominent saduram similar to Tillaisthanam. Unlike this temple, the Sundaresvara does not have dēvakoshta .

This temple poses a problem of chronology. The inscriptional evidence is somewhat confusing. A 10th year inscription of Parakesarivarman 337 of 1903 which refers to a munificient gift by a lady Solapperundeviar (Perungangai consort of Sembiyan Irrukuvel). The Parakesari perhaps refers to Parantaka I. The fabric supports a date within the first two decades of the 10th century A.D., according to D. Barret and thus in the Parantaka I

phase. Looking at the wall treatment there are Muttaraiyar features, whereas the superstructure upto the dvitala (from hāra to grīva) share in Irrukuvēl features. It can best be called the Early Chōla style of the mixed Muttaraiyar Irrukuvēl idiom. The Muttaraiyar Irrukuvēl comaraderie during Cattan Māravan period is a historical fact; so was the social connection strong due to marriage ties between the Irrukuvēl and Chōla (7). It was not otherwise strange to share certain cultural traits and not others. "The architecture shows a kinship with that of the Early Chōla, though not identical. The differences are enough to admit a cognate Kōnādu idiom within a general Chōla framework(8).

#### ii) THE ADITYA-I PHASE

The Aditya I phase proper ushers in a new confidence. Apart from the stylistic evaluations, there are supporting inscriptional evidences that build and sustain the Chola idiom. Only temples which offer us some clues and are relevant to causing style are taken here.

The Tiruccatuarai Odavanēsvara (fig.72) shows fully articulated Brahmakanta with taranga pottika and a median patta. The vimāna is similarly divided into anga like the Tillasthānam temple but with a projecting bhadra.

The pilasters with the kumbha, the lasuna or kalasa and mandi are all carved with elegant floral arabesques. From the padmabandha to palagai are various jewellery like vegetative scrolls. Such jewellery like workmanship is seen in the Tiruppanturutti Puspavanēsvara (fig.73). Finely carved filigree the aesthetic aspect outdoes the functional one. With the treatment of medium showing such skill and care as the goldsmith would show his gold. The tympanum is not very clearly readable, while the corbelling is taranga with a plain median band. An interesting feature is the muktāvali on the underside of the lower ridge of the palagai, adding delicate grace to the spirited florals of the echinus.

The Sundar esvara at Tirukattalai (fig.74) which is again partly a mixed idiom of Chōla-Irrukuvēl is similar to the Tiruccaturai; the difference is in the shallower and narrower dēvakōshta and less sharply distinguished anga. The exquisite scroll work from the mālasthāna is a simultaneous occurance. The interesting feature is the introduction of rearing vyāla in the corner of the vimāna front piece, standing upon the palagai with head reaching just below the kapōta. They are placed at angles, so as to conform to the corbel projection as if meeting their weight. Does this occur for the

first time? Perhaps within the Chola, but a variation of this is seen in the Arjuna ratha in larger number (fig.19). All the pilasters but the corner ones flanking the images carry it on their corbel. The very early precedent was known and reused here similarly. There is also a protractor like torana above the pottika of the split pilaster that sits on a base of minor cyma recta moulding.

The most typical and remarkable temple is the Vedapurisvara at Tiruvēdikudi (fig.75) we now have an established corbel order with a decorated median band. is a variation of the Tillaisthanam pillars and pilasters, while the anga are not on a straight manasutra, they project here in the bhadra. The pilasters vary according to this. The karna take Brahmakanta, the bhadra corners Visnukanta these have fine lasuna carved from above the malasthana. The pilasters bordering the niches are round Isakanta, with cushioned capitals. All these show us a close link with the Muttaraiyar temples at Nangavaram, Nemam and Narttamalai. these types or was the emergent Chola showing residual elements, is ponderable? The compulsion to settle this question before the beginning of the 10th century A.D. is overwhelming, and a few more Irrukuvel examples

and other types will precipitate an answer based on The Kodumbālūr Mūvarkoil (fig.76) and the visual. the Tiruccendurai C andrasekhara (fig.776) should perhaps help us. The former, a delight in architectural poise and perfection is divided into the anga with the bhadra slightly projecting. Over the dynamic vyalavari rises a classically austere wall relieved by graceful Brahmakanta and very lovingly carved malasthana. muktavali, floral tassels, foliate bands, the same motifs of lasuna, and the floral one on the ghata show familiarity but excellent workmanship qualitative. The temple poses a chronological problem. the base shows the typical phase-I style while the sculptures otherwise, and the superstructure a mid 10th century A.D. complex(9). The other temple, which is also of this idiom is the Tiruccendurai Candrasekhara. Less ornamented, perhaps closer to Tirukattalai, architecturally a similarity is shared, but a lot of the ornamental features are blurred. A dynamic torana of the makara type is fairly pronounced. The central medallion figure is a dancing gana, surrounded by a loop of muktavali bearing alternate figures of vyāļa and gana. The catch here is in the bold lines and bolder execution of the motif. A nervous rendering aiming at dramatic form is apparent.

Drawing our attention simultaneously and compulsively is the Paluvettaraiyar, Kilaiyur Avanikandarpa Isvarīgrham. The twin shrines of the Agastisvara (fig. 67) and Cholisvara are about the same time in 884 A.D. If Kodumbalur is the 'pièce de resistance' of the Irrukuvel,, then these twin shrines are nonetheless of Paluvettaraiyar.. In their pillars and pilasters are seen a delicacy of equal measure. The malasthana are superbly rendered crowns a slender flame form, as if turned to clay and by the sunlight spun into gold. These temples show skilled hands at work, there is not a trace of tension or uncertainity in any feature. Distinct padmabandha, lasuna of flowing scrolls and tassels and quktavali add to the solitary grandeur of these temples. The kalasa takes the kodikkarruku or patralata in an inverted The central motif flowing down and opening out arch. and again upwards was a popular feature. The kumbha or ghata the pali, carry an indu-mandala on the palagai. The southern wall pilasters have a fine echinus with a row of hamsa-mālā within a sprouting vegetation. The forms are biomorphic, growing and merging to intri-The ardhamandapa is also supported by four cushion type pillars of Isakanta simhapada. The sculptor architect has turned his blocks of stone into fluid, malleable and ductile forms. These are flame likefalling, winding meandering into spirals suggesting movement and growth. The torana are equally elaborate and classically carried upon simple Brahmakanta with tapestry like ornament on the kalasa, with palagai and angular corbels. They rise into a crescent filled with an exquisite embroidery of forms. field has an eight armed dancing Siva flanked by gambolling Two flying deities are present on on music. The muktavali carries flora, fauna and either side. gana , spewn from the makara mouth. There are horsemen, vyala and gana. Agitated movement but with a definite format is seen. there is struggle to eliminate or create the unknown; but having reached a totality of conception the sculptor now only attends to the task of giving the final or finishing touch. The motifs are like a birds eye view of green vegetation upon a sea of wall. The Cholisvara imitiates its twin with perhaps just a little less finesse. the mandapa pillars are simhapada below the malasthana, while two other pillars are leonine and elephant faced; the Agastīsvaram also has these, and recall Pallava precedents.

The Tiruvaiyaru Pancanadīśvara (fig.78) now only in fragments has the taranga pottika, with decor comparable to Tiruccaturai and Tiruppanturutti and shows the similar

mode of flame like jewel on the lasuna, kumbha and palagai.

The Lalgudi Saptarsisvara (fig.56) comes to us replete with Pallava Pandya, Paluvettaraiyar and Chola inscriptions(10). Well preserved, the Visnukanta has taranga pottika and decorated median bands, the saduram is cut in the Brahmakanta and the shaft is fluted. other parts are decorated while the capitals have flutings falling in line with those on the pillar. The mandi run is octagonal and simulates the large petals of the padma in its segments. The palagai is over the taranga pottika meeting an uttira and then taken over by the valabhi with bhuta. This bhutavalabhi is in consonance with the same in the adhisthana. There are detailed blocks of sculpture in wall kantha. carrying puranic The split pilasters of the same Visnukantha type imitate the main pilasters and carry elaborate but eroded makara torana. There is no central medallion with clarity but the muktavali loop has nothing in them. From the mouths of the makara are spewn, figures. The emphasis here is given more to the sculpture, adhisthana and to the superstructure.

The other very important Chola temple the Kumbakonam Nagesvarasvami (fig.79) rebuilt in 886 A.D., shares

in the many features seen thus far. The typical Brahmakanta pilasters for karna and bhadra on a straight line, the recessed hara recesses recalls Tillaisthanam The important feature is the presence of (fig.42). dancing figures of apsara for the first time. We have seen these in Tirukattalai as rearing vyala but the dancing figures do not occur elsewhere. Their order is seen thus, the karna carry the apsara, and the vyāla: are on bhadra pilasters. There is a fine row of bhutagana under the kapota. The central devakoshta has split pilasters and is further flanked by cantoning The salilantara recesses have figures too. This kind of wall treatment and ornamentation foreshadow many decorative aspects of the full fledged Early Chola temple.

The straight ardhamandapa has a central devakoshta and two bald niches on either side. The recesses connecting the ardhamandapa to vimāna show female figures. A continuous row of bhūta run under the kapōta but visible only when carefully seen. It is seen that the walls are relatively unadorned here. The bhadra and hāra recesses are carefully used and this was perhaps deliberate, to facilitate a greater focus on figurative sculpture. A snapshot frieze was probably

intended to capture attention in the finer details and aspects of such sculpture that would stand on the threshold of life, upon an austere and bare surface. The Aduturai Apatsahwesvara (fig.63) is similar but highly misleading due to its paint and stucco; it is not fair to discuss it in detail. The feature that is noteworthy is the complex wall treatment of the anga. which only carry the misraka variety of pillars and pilasters - Visnukanta for karna, Brahmakanta for hara recesses, Brahmakanta for bhadra and Rudrakanta for central devakoshta. The centre two and karna pillars carry a padma mandi with the torus of padma with its munai. This is a new feature not seen anywhere in the Chola land, however, a tentative crude form is seen in the Kanci Matangesvara and Muktēśvara of the Later Pallavas in the post-Rājasimha phase. This is improved in the Koilpatti Purvanathasvami temple in Pandinadu about 878 A.D. and comes closer home, where they are confidentially carved.

A word about the kapota - most of these share a similarity. If Kāliyāpaṭṭi (fig.80) shows two nāsi on the kapoṭa, from the Viralūr Bhūmiśvara (fig.39) onwards they appear in allignment and in pairs with the pillars and pilasters. So much to so that in the Nārttāmalai it (fig.41) shows even pillar and pilasters carrying

the kudu in alignment with the mukhapatti and with human faces. Most of the temples show two, one, one, two for the karna, bhadra, bhadra and karna and thus totally six. In between are kodikkaruku, with the ridges carrying candramandala. Some of the gadha cavities carry floral motifs or nothing at all.

Thus far we are in the germinal state. Most known features and few unknown features are brought together and being reconstructed and some of these similar and new characteristics have been highlighted here. Their purpose is more than description. They show the direction forms were taking, there is no alienation and nothing we have seen is such a uniquely isolated phenomena. The phase of conforming and assimilating is yet on; the general trend ascertained – we move on to the more definite Parantaka I phase, the latter part of Aditya I phase.

# ii) THE ADITYA PHASE [THE REIGN ON PARANTAKA I (907 - 940 A.D.)]

The trend was ascertained in the last decades of Aditya I.

There was no friction in the cultural output between
the overlord, vassal or foe. A momentum had been
gained and alongwith it the format had been finalised,

the fulfilment had not yet reached a plateau. Conservative and restrained (or disciplined) they used and reused the older patterns. There was certainly no eivdence of a 'creative menopause' because advances were not blatant. The wall surfaces were being qualitatively improved, so was the sculpture. Qualitative change is also one of the determining factors of style. A few temples stand in testimony to heights achieved by the sculptor architects of this period.

The wall is treated with a wider variety of pada and pilasters distinctive in decoration and character.

The Kailāsanātha at Allambākam, Allūr Paśupatisvara and Andanallūr Vaḍatirthanāthar have Brahmakanta pilasters, pillars with plain angular corbels. The tympana are barely discernible, and do not show anything unique, nor does the Mucukundēśvara at Koḍumbālūr. Even if these temples don't suggest anything more than self compliance, they are compact, limited - in their wall treatment, superstructure and sculpture, suggesting a uniformity in style. The Kumbakonam Nāgēśvara had made an impact in certain aspects like sculpture; but not as such otherwise. Pullamngai Brahmapuriśvara or Paśupatiśvara (fig.81,82) with an elaborate scheme

like Tirupāllanam is the crème of architecture, sculpture and architectonics. There is such an interplay between the three that together they blossomed as winners all the way.

The temple has no Aditya I inscription. five Parakesari ones, of which three are Parantaka I and one of Ganga Prithivipati II, a feudatory. a royal construction of the 3rd year of Parantaka 1. Consciously or unconsciously we react at once to space, shape, form and the play of light and dark. than vision alone, something else intimates to us the presence of these. The relationship of these parts brings about such an evocation. The bhadra and karna are clearly defined and offset with the mysteriously recessed harantara. It is in this offsetting that we are aware of the light and shade; enhancing the same. Well propotioned wall sections with ornate pillars and pilasters of the misraka type are, the Visnukanta for the bhadra, split Isakanta for the central devakoshta, and Brahmakanta for the and panjārakoshta. karna: These components come to life with floral and vegetative patterns, fauna and human figures ensconsed within a muktavali or other creeper forms. The malasthana is a complex design of even spiral or circular motifs with small carved figures, while some figures are seen The kalasa has the flame like design in the loop. we are now so familiar with. The kumbha is also adorned, while the palagai gracefully holds up amara, apsara and vyala on the corner. Even the taranga pottika are decorated on its median band with a patralata and can be called patra pottika. A vigorous bhutamala appears below the kapota. The love for detail and embroidery like decoration was an overwhelming feminine aspect of creativity. It reflects the sensitivity and touch of graceful elegance. The Visnukanta flank the dēvakoshta have a vivid mālasthāna with dancing figures between the flutings and a muktavali loop enclosing them. The kalasa and kumbha are also fluted and have the flame like decor. The split pilasters are Iskanta with square bases, with a garland of pearls for the malasthana, floral scrolls like filigree. The muktavali seen in the padmabandha, lasuna etc. are more or less similar, but the execution and detail are one of clarity and precision. What is felt here is the positive and definite use of spaces. they are marked for elaboration and ornamenting not in the usual manner, but highlighting these minor features and making them stand apart. They are deliberately isolated and carved out for more than a passing glance. They are there, compulsive and beckoning us to enter into a sensual and aesthete experience.

The torana is the final building up, the highest note or crescendo, vigorous and in consonance to the mellifluous pilaster ornament, they abound in the wild growth of the vines, berries and foliate details.

An interesting feature is the chattra over the deities both in the vimana and ardhamandapa. The earliest and crude manifestations are seen in the Harihara niche in the Varāha mandapa and the Adivarāha caves over the four armed Durga in Māmallapuram (fig. 104). is found in Kanci Sālākāra shrine of Mahēndra III Pallava. It is also seen closer home in the Cholisvara at Kilaiyur over the Daksinamurti (fig.125) and in the Erumbur Kadamabyanesvara as a shallow inverted lid (fig. 162). The Takkolam Jalanathesvara also has this. The Brahma and Ganapathi (figs.139,143) have half a sphere over their heads. The upper dome is in the form of huge petals dropping into a rim of a tiny muktavali; of a straight row of pearls and looped pearl strands below, and motifs within. The perfect hemispherical chattra stands out as a remarkable feature suggesting divinity and royalty. On either sides are gana, musicians,

mooshika and the gala with seated devotees and standing figures. The Brahma is flanked by two seated adorers in three fourth profile. The vyāla and bracket figures add to the sense of heightened theatrical forms of Pullamangai.

The replicating of details of the adhisthana and the vēdi in the kapota on the inner niches of the vimana and the central section of the ardhamandapa wall are The kapota form surmounts the niches over the corbel and bhūtavalabhi. This kapota has a pair of kapota nasika with a floral motif encircling it, as it emerges from the simhavaktra or simhalata and mukhapatti. The rim of the kapota has perfectly proportioned candramandala and a remarkable valli or cakravāki motif. Over this is a vyalavari which carries a minor niche 'panjārakoshta' with deities or amuna. These figures are flanked by Brahmakanta pilasters and carry miniature models of different types of vimana with a gadha of the major kapota māsi of the simhavaktra, from the mouth of which pours out the patralata or circular floral bands. The corners of the palagai here also carry rearing vyāla.

Pullamangai is the water mark of the Ist phase. The architecture is a grand culmination of this phase -

expressed in an equally elaborate articulation of the wall which is totally trnaformed into a complexity of architectonics. The texture and quality make it the most satisfying of all temples. Crisp and sensitive, the love for detailed carving makes it an architectural and sculptural haven, the small similarity to the Kumba-konam Nagesvara carving on the Kantha and pillars is only incidental; Pullamangai is the dream realised.

Closely related to this is the Cadaiyar Kovil in Tiruccena mapundi (fig.83) about 920 A.D. with incontrovertible Parantaka I inscriptions from his 14th to 37th year. Another Nrpatunga Pallava inscription of the 22nd years suggests its rebuilding in stone during Parantaka I. The plan shows and advance over many other temples of the phase. The bhadra and karna are very slightly differentiated. This has misraka order with Visnukanta for karna with the padmamandi with the torus or the munai visible above the bun like kumbha. The hara recesses have Brahmakanta split pilasters with a decorated lasuna and cushioned ghata. The central bhadra have Indrakanta pilasters. The mandi of these pillars is the pali form. The Rudrakanta flanks the devakoshta. The finesse of Pullamangai is absent here, yet a balance and austerity is easily perceivable. There are simhamaddaļa in lieu of the bhūtavalabhi. The corbels are taranga type with a plain median band. The central devakoshta is dressed with a blurred but elaborate torana. To torus of the padma carved with a munai is similar to Tirupāllanam Āpatsahāyēsvara. This is mature realisation of the earlier attempts. The mastery and perfect finish give it a unique place for a realised anukāya element of the pillar and pilasters. With the superstructure present, this temple would have certainly commanded a special stature in the Early Chōla period.

Within a span of the next seven years, more or less contemporary to the Cadaiyar Koil is the Koranganatha at Srinivāsanallūr (fig.54). The earliest incontrovertible inscription here belongs to the middle and second half of the Parantaka I reign(11). Stylistically the temple supports 927 A.D. It ranks with Kumbakonam and Pullamangai; both in its architectural and sculptural output, larger than the afore mentioned; this vimana is divided into clean anga on a straight line; but with hara recesses pushed backwards. The wall treatment is a rich expe-Karna support Brahmakanta, the hara recesses have Īśa or Rudrakanta, while the bhadra dēvakoshta has split Rudrakanta, and the cantoning pilasters of the bhadra are Visnukanta, all carry cushioned capitals,

while the Vismukanta takes on a fluted form. The pali and padma mandi are present together and carry rectangular palagai. One of the Visnukanta pilasters and a split pilaster show an octagonally cut shape according to the echinus of mandi. The pali form is seen over Brahma and Visnukanta pilasters, the Isa or Rudrakanta takes on the padma form with the torus of the lotus very slight. Both the kalasa and mandi are very carefully shaped and the decorations variegated richly. Exquisite pearl and scroll festoons, musicians and dancing figures, a complex patterning of human and other decorative motifs abound. There are exquisitely elaborate torana - spewn from the mouth of makara both from the top and centre. The kapota is high and in place of vyāļāvari vertical lūpa are found, (similar ones are found in the Dharmapuri Mallikarjuna temple complex of the Bana in the second quarter of the 9th century With this classically majestic temple there A.D.). is a sudden lull and no really remarkable structure to compare.

The Tirunamanallur Tirutondisvara 935 A.D. has over superlative padmabandha an austere wall with central devakoshta in a very very slightly projecting bhadra. The really striking feature are the apsara on the palagai

in sharp angles on the outer side of the pilasters in various poses. The bhuta on the bhutamala alternate with mrnalika (eve strut). These are first examples in the Chola temple. to be brief only the impressive adhisthana and the newly occurring mrnalika: are notable.

The Ujjivanātha Uyyakondan Tirumalai shows bold decorations on the mālasthāna, lasuna, pāli etc. The usual figural and floral motifs appears and are only shown here to point out the continuing trend of the same.

Grāmam, Palūr, Vālikandāpuram and Tirukandiyūr vimāna have nothing much to show in either architecture or sculpture.

# iii) THE SECOND PHASE (940 - 970 A.D.)

The last years of Parāntaka I usher in once again new trends simultaneously as they preserve some of their heritage in other temples. These latter temples need not be sullied, but may be considered to be modest outputs in a tradition bound society. Innovations and variations, and creativity are seen in select vimāna. These are relatively larger and due to proximity of the ruling house, important in status. Royal patronage became vehicles for incorporating both the old and

the new. Once these trends were introduced in an already accepted and existing format, they become the regular features of the later temples. Some of these temples are highlighted to pin down the continuing and the newly introduced features.

The near end of Parantaka I's reign becomes the beginning of a new phase. It is the Naltunai Isvara at Punjai which open the door. Less elaborate of the Chola temples, the tour de force in this vimana are its galapada reliefs, pilaster carvings and remarkable sculptural finesse. Despite the lack of architectural rhythms of the anga it maintains a unique identity. The misraka variety of wall pillars and pilasters are used, with the Indrakanta for the split pilasters flanking the deva-The devakoshta of the ardhamandapa uses koshta. the Brahmakanta. Graceful, they are treated very carefully (fig.84,85,86). The malasthana is treated as mala and malasthana, the lower vertical section and the upper horizontal band are separated by a fine mukta-The lower sections have looped garlands, with fine tassels in between, and the interiors of loops carrying intricate scroll work. The kalasa or lasuna in contrast are left relatively simpler, with only the flame like motif. They are in much clearer relief.

human figures seated, while others have beside the scroll patterns clearly delineated dancing figures. The padmabandha shows clear lotus petals clasped on either side by a strand of pearls. The cushioned ghata show floriate scrolls on the corners and centre. padmamandi are in a process of transformation. are no longer exact lotus petals, but move towards a more animate form which are fully and better expressed in the ardhamandapa and in other temples. The Visnukanta pillars also show the artists love for detail. The loops of pearls with floral arabesque, the pearl tassels, and the horizontal band of mala with circular motifs set within the squares all follow the planes of the flutings. The padma bandha has softly modelled lotus petals clasped on either sides by the strand of The flame motif is seen, and the pali is cut octagonally holding the palagai. torana arches carry miniature scenes, with lively naturalistic human figures. The Agastya and Ganapati both have torana not clearly The taranga pottika is seen with a plain median band; and the vigorous bhūtamāla. The ardhamandapa shows an interesting feature which is the extending of the flutings into the capital and the nagadala form of the mandi. Here the huge lotus petals transform into snake like hoods with a sharp munai. The quality

makes it a key transition from the Parantaka I to the Sembiyan phase. S.R. Balasubramanyam puts it in Āditya II's period, D. Barret calls it one of the best Early Chola temples 'essentially a transitional monument though far less advanced than Tiruvāduturai'.

The Tiruvaduturai Gomuktesvara approx 845 A.D. (fig.61) is more elaborate. The bhadra projects forward, while the karna is pushed back slightly with elaborate projecting panjārakoshta, similar to Pullamangai. The finish and quality is lesser than the latter, but it is next only in beauty and importance to Pullamangai. The feature par excellence are the architectural grandeur of the pillars cantoning the karna and bhadra. Boldly ornamented, the Visnukanta stand on alternating geometric and flexible floral pus pabandha adhisthana. The architectural members of the walls show a vertical domination. The mala and malasthana are in the vertical and horizontal bands in harmony with the sundobheda fluting. The scrolls form a bold 'S' curve of pearl garlands while the flame like motif is stylised in the ghata, pali and hiraka. The shorter pilasters of the panjarakoshta have besides the above features figurative reliefs on the malasthana. The palagai are squarish, with corbels of the taranga with a plain median band.

vigorous bhuta appear to support the roof and kapota like vajanapurusa. The kudu on the kapota have the mukhapatti from the Simhavaktra. The sides have The ridge has candramandala and cakrasingle kūdu . Between the corbels these features vāka birds motifs. appear in much smaller form on a miniature panjarakoshta which reaches up below the kapota. The mukhapatti, simhavaktra and kudu are rendered with dynamism, and are more sculpturesque than architectural, to balance the geometricity of architecture. The ardhamandapa shows a similar complexity.

The controversial inscriptions spell gloom due to one damning word 'kūdapadai' used in an unexplained context, which meant either the adhisthāna or finial which are the lowermost and uppermost parts of vimāna(12). Stylistically it points to the late date of Parāntaka I's reign which D. Barret says could be his 38th regnal years. The changes and features of the temple as a whole mark the real movement taking off in a newer and definite direction.

The eve of the battle of Takkolam saw a dark phase for about nearly two decades. Paucity of temples after Tiruvaduturai is seen. The scale could also not be

maintained. A few odd temples, not of royal patronage were seen in the shrunken kingdom. They are Kövilädi Divyajñeśvara, Tiruverumbūr Piplisvara, Turaiyūr Visamangaleśvara and the Perangiyūr Siva temples.

The Tiruverumbur Piplīsvara (fig.87) also controversial in chronology has mixed inscriptions(13). Based on the format it is closer to 952 A.D. The projecting pañjarakoshta, the high adhisthana with vedi and wall kantha are the horizontal flow counterbalancing vertical. The pillars and pilasters have heavy ornament in their upper components, except the lasuna and pāli. There is no unique aspect calling forth description. The plan however is not found in phase I, and therefore posits a later date due to the miśraka order, panjārakoshta etc. It is very probable that the brick structure of the 19th year of Aditya I was rebuilt in 952 A.D. by Velan Viranarayanan in the third year of Gandaraditya.

The 5th year inscription of Gandārāditya found in Turaiyūr Visamangalēśvara (fig.88,89) posits 955 A.D. as its date. This temple due to lot of oil paint is difficult to decipher, but has the mālasthāna, etc. in the similar style; so are the anga differentiated and the panjāra-

represented. The capital is topped by a full kõshta hooded nagadala mandi. The framing pilasters of the pañjārakoshta are octagonal above the oma or saduram; and above this is the Isakanta which is unusual. Although the ardhamandapa shows nothing unique, the Brahmakanta have four triangular motifs which have not been encoun-Similarly the Perangiyur Siva temple tered before. also has a malasthana with floral and human figures. Some pose like dvārapāla guarding the linga while the others are in dance postures. Generally the finish if observed carefully, brings out the care taken by the sculptor while carving these.

# iv) THE THIRD OR SEMBIYAN PHASE (969 - 985 A.D.)

The death of Aditya II, accession of Uttama as defacto ruler and the slow convalescence from the ravages of Takkolam gives us a confused picture of the Chola. A visible laxity in temple building after Tiruvaduturai shows a preoccupation with more practical and political matters. The finale had been reached at Pullamangai and Tiruvaduturai, and there were no new innovative or radical changes worth their name. There is a plateau on which sprouted indistinguishable temples, but neither was there a downhill trend. Whatever changes occurred were not architectural by nature. They were concerted

efforts in the iconographic programme, and positive crystallisation in the iconic conventions in the third quarter of the 10th century A.D. There was a new convention where the ardhamandapa walls received a hieratic meaning and specific Saivite images.

The gradual reclamation of their lost land, as well as some in Tondaimandalam, peace and security again led to the revival of the nobler arts on a grand scale. The credit of fairly well dated temples goes to Sembiyan Mahadevi. Her name occurs first in the 11th year of Parantaka I and was seen continuously till the beginning of the 11th century A.D. as a munificient and pious donor.

One of the earliest temples of this phase is the Kāṭṭu-mannārgudi or Udaiyargudi Anantisvara (fig.90). The walls show those features which are of the miśraka columns, with the usual ornamentation; the planes of certain pillar faces are used according to their shapes in the decoration. The new feature that is seen are the hamsa just above the oma carved out fleshily on the pilaster. Meaty sworling forms, they sprout out as contrast to the angularity of the pilasters and delicacy of ornamental detail. The temple is a probelm poser. S.R. Balasubramanyam feels it is an ancient Parantaka I

foundation in character with incontrovertible inscriptions of his 33 to 38th year. D. Barret offers two suggestions based on the ardhamandapa. The plan of the ardhamandapa is new and is seen only in Tirukuruhavūr, and Vrddhacalam, of Uttama's 12th and 13th years and therefore belong to his IIIrd Phase(14).

Konērirājapuram Umā Māhēśvara (fig.91) is a key monument of the IIIrd Phase and is closely dated between 969-74 A.D. The south wall inscription say it is a Sembiyan Mahadevi construction(15). A 7th year inscription of Uttama(16) corraborates this. No new features are seen. There is only a heavily treated wall with misraka columns with inferior decoration. The decoration and wall treatment is similar in the Mahālingasvāmi at Tiruvidaimarudar; the plan shows projecting bhadra Qualitatively the Anangur Agastisvara is and karna. also similar (fig. 25).

The Matsyapurisvara at Köyil Tevarayanpettai (fig.92) austere and utterly simple, is usually said to belong to Āditya I reign(17) but the Ist tala is very close to Kilappaluvūr (fig.93) of the IIIrd Phase; specially its sculptures. Divided into sharp anga the wall is treated with Brahmakanta and its decoration; the karna

carry panjarakoshta which is a IInd Place feature. The flair for aesthetic excellence is also seen in the Tirukodikaval Tirukotisvara (fig.94). The rich decorative bands almost occupy half the pilaster. Using the alongated loop motif within which is encased a floral foliate arabesque, the malasthana is a horizontal gushing of This is discretely offset by the padmascroll work. bandha, above which the lasuna again expresses dynamism in its flame like motif. There is a rare nagavaktra mandi in the capital section. Though the relief decorations are shallow they have a rich textural quality. The pillars and pilasters of the ardhamandapa have the torus of the padma carved with a munai. An earlier Kō-Illango Muttaraiyar temple existed here, but the 11th year inscription of Uttama refers to its construction in stone by Sembiyan Mahadevi.

The Sembiyan munificence is seen in the 12th year inscription of Uttama in the Vrddhagiriśvara Vrddhacalam (fig.95), where the Śrī Kōyil, snapana mandapa, gopura, suralli (covered verandah) and the subsidiary shrines were Sembiyan constructions. The wall features are not unique, but again the level of artistic output is superior. The dexterous art of carving intricate floral and foliate arabesques, the dynamic reliefs of deities

and animals from mythic scenes, the muktavali where gross stone is carved out into small pearls, where every motif is so articulated are such that they appear to be a tapestry. The ardhamandapa has the central devakoshta and two additional ones one on either side. The recessed wall spaces have devakoshta with tympanum enclosing a single lozenge piercing. a rather perfuctory method of accommodating the full iconographic scheme on the ardhamandapa. This phase shows many temples like the Kailasanatha at Sembiyan Mahadevi, the Tiruvellarai Isvara temple at Tirukkuruhavur, the Gangajat adharar at Govindaputtur the Manavalisvara at Tiruvılākudi, Amravanēsvara at Kuhūr and the Nāgēsvara at Tirunagesvaram; however there are no architecturally unique features really to be discussed.

There are two temples that need to be briefly discussed. These are the Tiru Ālandurai Mahādēvar at Kilappaluvūr (fig.93) close to Kilaiyūr; and the Sāksisvara at Tirupurambiyum (fig.65). The former poses a dating problem. There is an inscription in the south wall ardhamandapa of the 15th year of a Parākesari which states that the Paluvēttaraiyar chief Māravan Kandan built this temple. There is apparently some confusion regarding the biruda. S.R. Balasubramanyam calls it a Parāntaka I

inscription; but stylistically, the temple posits a later date in the Uttama period(18). There are thin pilasters with the Brahmakanta, Visnukanta and Isakanta. bhadra projects slightly forward. The central devakoshta is flanked by split Isakanta, whereas the bhadra pilasters have Visnukanta, the karna have Brahmakanta pilasters on the panjarakoshta.. There are rearing vyāla on to palagai. The tympanum are elaborate but short. There is a fer ociusness about the makara. from the mouth of which emerge warrior and the like. The centres of these lalatabimba are the Nataraja in ananda tandava, Narasimha, Gajasura etc. The Aduturai Apatsahayesvara also has similar features with lesser finesse carrying the rearing vyāļa but no panjārakoshta.

The Sāksisvara (fig.65) has differentiated karna and bhadra on a straight mānasūtra. All the pāda are Visnukanta with typical Sembiyan carvings and bases, the bhadra dēvakoshta however has split Īsakanta. Over the vyālavari with corner makaratunda rise the vēdi with the decorated wall kantha. The recessed spaces of the wall kantha are carved with full lotus discs which is a late feature. The panjārakoshta reach the kapota which are elaborate with two ornamented kūdu and elaborate konapatta. Above this rise minia-

ture shrines of the sala type. The other pilasters carry the taranga pottika with rearing vyāļa and bhūtamāla. The temple walls are overly articulated with a change in the panjārakoshta and the full blown lotus motif in the wall kantha recesses. The ardhamandapa is equally elaborate, but is relieved by the central dēvakoshta flanked by recesses - two on either sides carrying divinities. The torana is relatively small and ordinary.

The Sembiyan style continued even after the accession of Rajaraja I, till his royal and imperial construction The Tirunaraiyur Siddhanathasvami eclipsed all else. with the 2nd year inscription of Rajaraja was a lesser known temple. High quality decoration is seen on its Visnukanta and Brahmakanta pilasters. The other features we are now aware of prevailed with only some variation due to different men at work. The Samavedisvara at Tirumangalam has miniature relief sculptures in oma of padas, which was not common in Chola architecture; but is as old as the cave temple of the Pallavas. Such a feature is also seen in the Mallikarjuna temple at Dharmapuri which was a Bana foundation. This rare occurrence was not even a trend setter, but an isolated feature. The notable feature is the prominent padmakara mandi where the torus of the munai is sharp at the ridges. This is also seen in the panjarakoshta. the panjarakoshta is a notable feature and shows a kapota surmounted by a larger mahanasi and a face on top. A bhutamala runs beneath the kapota. This is generally a neat temple.

The Acalesvara, at Tiruvārūr (fig.96) is also an example a qualitatively neat and interesting temple, this is specially in respect to its sculptures. The anga of this temple are clearly defined with the bhadra further having the subhadra. The Visnukanta has a padmakara mandi, while all other misraka pillars and pilasters have the pali type. The niches have moderate If the sculpture reflects the importance of this temple, architecture speaks up for the Uktavedīsvara at Kuttālam, differentiated into various anga, it also shows the miśraka variety type of columns. The major feature that again draws our attention is the strongly formed panjarakoshta inserted in the centre of the karna, which extend upto the bhutamala. Rudrakanta pilasters have a prominent padmākara maņdi The oma of the pilasters show for the or nagadala. first time mukula endings and a median band of carvings. This feature will be seen much later and more popularly in the 13th century A.D.

A typical Sembiyan example almost at the fag end of the century before the imperial structures began is, the Sakalabhuvanesvara at Tirumiyaceur. The decor, the pilasters with padmākara mandi, sālakoshta kapota, mahānāsi, gādha cavity and the simhavaktra are the fully developed Sembiyan decorations. In place of the panjārakoshta is the sālakoshta. This is one of the later Sembiyan temples that goes into the Rājarāja Phase.

Thus far these phases have shown us the articulation of the walls with the Brahmakanta pilasters, gradually including the misraka variety in the Aditya I phase. Their places are determined for karna, bhadra, corners, and for those flanking the devakoshta. The torana from being coarse turn into intricate diadems. The recessed space from carrying sham niches or shallow ones begin to take the panjārakoshta or sāla koshta. niche is narrower. Although the torana maintains a fluidity of highly stylised forms, they also tend to become more The shovel shape finial is altogether semispherical. replaced by the simhavaktra, specially noted in the panjarakoshta. An important feature is the Early Chola corbel that supports on the virakanta or palagai a lintel of two mouldings separated by palin or carved lotus It is over this that we see the demilune. petals.

This became an area for great elaboration - festoons and people garlands issuing in massive curves from the mouths of makara or simha. At the top of the curve addorsed makara heads receive the garlands with deities or mythic scenes. Such is the making of the ornament into a habit.

# IV.3 THE UPPER TALA (SUPERSTRUCTURE)

Temples are classified either by their size or the number of floors or tala. They are either alpa vimāna or mahāprāsāda. When they have one tala or bhūmi, they are ekatala prāsāda. Depending on the number of tala thus they are eka, dvi, tri tala etc. When their shapes have to be referred or identified they are sama caturāsra, vrtta, caturāsradīrgha, gaja or hastiprs tha, vrttāyata, shatakōna or astāsra. They are also generally referred to as kūtagāra caturvarga, sadvarga sālakāra, cāpakāra, gajaprs tha, miśra Visnucchanda, Brahmacchanda, Rudracchanda and miśraka.

D. Barret rightly says that the tower is the most difficult part of the Early Chola temple to study, due to peripheral mushrooming of other structures, or thick coats of stucco in all its stages of wear and tear.

The Early Chola sikhara is either domical or square and very rarely octagonal, with a pronounced waist above The topmost section the outward curve at the base. is the stupi, which adapts according to the shape of the sikhara. The stupi base is generally not a flat one but is a circular row of open lotus petals. sikhara is concave but has an incurved feature like a waist that slightly skirts out at the base. From the base of stupi to the base of the sikhara run ribs with floral mantling called the patralata or kodikkaruku, which spreads on the outward curve of the sikhara. There are also recessed bands of flat circular bosses. are compulsive habits that didn't die and had their These were the metal roots in the wooden prototypes. bracings with function, which became non functional decoration.

The sikhara is supported by a square, octagonal or circular clerestory called gala or grīva. This has four grīva koshta facing four cardinal directions. They contain sculptures, and are called the vimāna dēvata. This is surmounted by the kūdu or mahānāsi instead of the makara torana of the first tala. The mahānāsi has a simhavaktra which extends high above the waist. If the first tala shows the makara torana, it now combined with the kūdu and became a highly elaborate mahānāsi

from the mouth of which are spewn floral and foliate mukhapatti enclosing a gadha cavity. These were again habits left over from the past, for they replicate the dormer windows of their wooden prototypes.

It is also a noticeable feature that between every section or tala there is a frieze. In this case at the top of the grīva just below the sikhara curve is a frieze of hamsa supported at the base by a simple series of projecting and recessed mouldings. In turn the grīva rests on a wide square platform surrounded by usually vigorous vyālamāla. At the prati corners are the vrsa or nandi - when the prati with the vrsa and the vyalamala became the topomost members supporting the sikhara immediately after the wall, kapota and prastara it is called the The variation and number of storeys ekatala vimana. other than this occur when additional members or tala are introduced between the sikhara and prastara. Between these two, every 'tala' that is introduced is repetitive. The principle of design for every tala is the same.

The Early Chola vimana are usually ekatala or dvitala and usually encourage a great clarity of design and proportion between the component features. The variation of scale and detail of individual forms are a total blend of the two, the individual and collective.

The Pallavas had already exhausted their reportoire. Two hundred years of mastery show a variety of sikhara, This repetition does alongwith the stenciling of tala. not reduce the coherance of forms but its gradual reduction in size builds up the magnificience of height. may or may not be used. It may be added around the grīva platform, particularly obscuring it. This further enhances and encourages the vertical or pyramidality The griva and sikhara are not to be of the temple. treated as a tala. Any additional tala would include a vyālamāla above the prastāra upto the vyālamāla below The components of the hara are the prati or hara. from top to bottom, the kodungai or kapota with bhadra śala or koshta in the centre with the simhavaktra nasi. This is a rectangular wagon roof attique. A little higher up in the corners are the tilanāsika or kūdu similar to these in the kapota. This is supported by a grhapindi which may have a niche just below the nasi in the bhadra-sala itself. There are karnakūta in the extreme corners with nasi and in between there may or may not be netrakoshta with small nasi on the harantara. The karnakuta may carry in its central koshta a deity. These small supporting pilasters are called vitardika. The portion just below the karnakuta is called manca. It is beneath this the vyalamala garlands the tala.

This makes up the second or dvitala or the hara, and every additional one makes it another tala.

Thus far we have observed certain features that persist. These are the kūdu forms - the mahānāsi, kapotanāsi, tilanāsi. Right from the sikhara to the kapota of the first tala. Sāla, kūta and kapota are also noticable features which provide the right space for the different kūdu forms. These are the ornaments of the vimāna. They are more pronounced as decorative motifs and are the field for artistic expression, experiment and preservation of tradition.

The Early Chola temple specially is a play of opposing forces. This is what preserves its identity - that of balance and unsurpassed poise. Every feature which demands a geometric concept of horizontals and verticals, is balanced by contrasting forms. The sculptor and architect were constantly striving towards a balance. The wall and the griva were the important components which provided a clear vertical thrust to counter balance the horizontal aspect of the tala and adhisthana. The griva also separates the sikhara from the tala and gives it a unique identity.

The hara it may be noted was an ambulatory parapet in the Pallava temple, while in the Early Chola vimana

it became a mere architectural repetition.

The superstructures follow the same phases; divisions we have seen in the earlier section.

## i) THE PRE ADITYA OR VIJAYALAYA PHASE(850 A.D.)

The earliest ekatala vimana lie in the heart of the Muttaraiyar land. These are the Visalūr, Kaliyapatti,  $\overline{V}$ iral $\overline{u}$ r and Panangudi temples (figs. 69,80,39,68).

Over a kapota, dressed austerely with two kudu, vallimandala and the candramandala, rises the vyalavari,
Paired vyala facing each other, and on a smaller base
above this is the prati bearing vrsa usually.

The Kaliyapatti Siva, Panangudi Agastīsvara and Visalūr Marghasahāyēsvara have square grīva with centrally placed grīvakōshta, intended to carry the vimāna devata. This is surmounted by another kapōta or ridge of the sikhara which is square. There is no vyālavari in these. Instead the ridge is ornamented by the band of candramandala broken just at the centre over the grīvakōshta to form the mahānāsi. The Panangudi and Visalur vimāna have the simhavaktra spewing the mukhapatti and a central gadha cavity; the Kaliyapatti temple

does not have it or must have lost it. The waist or curve of the sikhara has the vallimandala or kodikkaruku. Visalūr has one that extends all round the grīva waist. The outward curve of the sikhara now closes into support the padma-pītha with its sweeping petals which carries the stūpi. This stūpi is made up of the stūpika, kumbha, nālika and mukula. The ridge from top to bottom may also have a foliate strip as at Kaliyapatti. The Panangudi tries to simulate the shape of the sikhara very slightly.

The Viralūr Bhūmīsvara has a circular base carrying a circular grīva and sikhara; and therefore appears bell shaped. A vyālāvari runs beneath the circular ridge of the sikhara, while the grīva has grīva koshta framed by split pilasters. The simhavaktra mahānāsi the candramandala on sikhara ridge, the padma pītha, around the stūpi are all visible. The Kannanūr Bālasubramanya of Pāndinādu looks similar but with a sharper waist in the sikhara.

These are the closest to and within the Muttaraiya-Chōla tracts; however, the farthest we can trace back takes us as far back as the Satvāhana and Ikśavāku relief sculptures. The structural stone examples are of course fully evolved in the Ramānuja cave, Arjuna's penance

and the Trimurti caves at Māmallapuram. The Northern Pidāri ratha is an example of the basic kind of vimāna which undergoes a metamorphosis of shape and size with elegant and curvilinear bends.

However, there is a sudden burst of energy that mushrooms into the Vijayalaya Cholisvara at Narttamalai (fig.41) as a tritala vimana, with the astaparivaralaya. classic example of proportion and architectural display, the kapota carries a single nasi for each pilaster below. Surmounted by a dynamic vyalavari, the second tala is seen to rise over a manca with a vitardaka, the parapet walls decorated with a series of miniature shrines called 'panjara'. The corners have cubical karnakūta. The centre has bhadrasala with the bhadra koshta. In the interspace are jutting sala forms over the parapet with dancing figures. This second tala over the garbhagrha merges with the ardhamandapa. Above this rises the third tala within a smaller area, so that the structure becomes a diminishing one. This hara is similar to the second one.

Surmounting this is a circular feature, grhapindi. There is a kapota which carries the kūdu and above which is a circular hamsavājana. Above this is the circular

griva with vrsa on the prati corners. The grivakoshta carry vimana devata facing the cardinal directions. The semi circular sikhara has four mahanasi, mukhapatti of simhavaktra type, with an empty gadha. There are smaller anunasi in the interspace. It is also observed that the grhapindi is square upto the square section and become round at the base of the griva. Another observation is the cloister above the grhapindi of the second tala is formed by the karnakuta followed by two sala instead of one which is a Pallava convention as also its form. The style here is mixed. It draws from the common South Indian heritage. This temple shows the Pallava and Muttaraiyar conventions.

The parivārālaya show square sanctums with bulbuous sikhara and rectangular open mandapa in the front. These are a contrast, for they are simple ekatala vimāna models also seen in the afore mentioned temples.

The typical Muttaraiyar features are the amaza with rounded shoulders and arms in the kuta and śala (fig.112).

A feature to be noted is that the ardhamandapa has a prastara topped by a cloister of kuta and central śala which are seen in Pallava and Early Calukyan temples.

A few more specific temples which take us closer to

the formation of the Chola style are in this Muttaraiya-The Nemam Iravatesvara (fig.70) is a Chola idiom. dvitala vimana and shows the kapota with paired kudu with kinnara heads in the gadha cavities. an unclear mukhapatti and finial. The kapota is dressed as usual with the kodikkaruku and candramandala too. A little to the back and above is the vigorous vyālāvari. The manca is above this and carries the hara of karna kūta, našika koshta and bhadra sala. The cloisters contain male divinities, similar to those in Narttamalaı. These divinities are crowned by the nasika the gadha in very shallow lined relief. The plane surface is cut into small lozenge shapes. There is apparently a hamsavajana beneath the soffit of the sikhara which is square, but heavily renovated. A circular stupi is found 'in situ' but lying on the ground. Other aspects appear suspicious and could be later additions.

The Ghrsthanesvara at Tilaisthanam (fig.42) is also a dvitala vimana which ushers in typical Chola features; a broder line case it leans more heavily towards the Chola and falls in the early years of Aditya I Chola. The same features of the kapota as in Nemam are seen here too and are typically Muttaraiyar. The features like the manca and hara are similar. In place of standing

divinities there are seated figures. The corner figures are females in semi-profile; and the central ones are seated males, facing frontally. The figures are more relaxed and forms more flexible, expressing those qualities which make Chola sculpture stand apart, as we shall see in the following chapters.

The grhapindi also supports another kapota with the same ornaments and is surmounted by the vyālāvari. The components like the prati, vrsa, a square griva, grīva-koshta etc. are normal features. The same goes for the square sikhara. There is window like lattice work in the gadha cavity of the mahanasi. The stupi Features like the paired alpanasi, archaic is modern. bhutamāla and figures on kuta and sala are Muttaraiyar features undergoing slow and steady changes. form, the body language now come closer to Chola so does the waist of the karnakuta. The grīvakoshta figures maintain the Muttaraiya features. The vrsa also become more poignantly naturalistic, in that they are slightly built and bovinely expressive. The netrakoshta in the harantara and vrtasphutita in the gr.hapindi are close to the Irrukuvel-Konadu idiom.

Showing such a mixed idiom is the Nangavaram Sundareśvara a dvitala vimana (fig.71). Resembling Nemam in the

kapota and Tillaisthanam in the harantara they also carry both standing and seated figures. This temple shows carved nāsika, skillfully tilanāsika and mahanasika. The grhapindi is specially subdued or indrawn and creates a chanda which is the intermediate between the arpita and anarpita (with or without hara). The kapota above this is like all the other examples of this phase. vimāna dēvata are modern. The subdued grīva draws our attention at once to the crowning sikhara with prominent mahānāsi and gādha cavity. Both the sikhara and stūpi are renovated. The feature that shares a strong kinship with the earlier and smaller Muttaraiyar temples is the strong flexed karnakūta roofs as seen at Visalūr and Kaliyapatti.

The subshrines show for the saptamatrika the sala type, Ganes a the gajaprs tha and for the other two existing shrines rudracchanda.

These were temples with mixed features but establish certain norms that will keep occurring over and over again with barely and change.

## ii) THE ADITYA PHASE (870 - 907 A.D.)

The temples briefly surveyed in the earlier phase also continued well into the Aditya I phase. The Aditya I

Phase proper begins with the Tiruccaturai Odavanesvara (fig.72) a dvitala vimana with a square griva and sikhara and stupi. The super structure is a individual variation of the same types encountered so far. The seated deities or figures are close to Tillaisthanam. Stucco hides what could have been a fruitful exercise.

The Tiruppanturutti Puspavanesvara is an ekatala vimana, with the kapota, vyalavari etc. The griva is surmounted by a semi-circular sikhara of brick. The vrsa are Perhaps well articulated then today, it is again covered with impenetrable stucco. The Tirukattalai Sundaresvara (fig.74), of the mixed Irrukuvel-Chola idiom, a dvitala vimana is in fairly good condition. Nangavaram, Tiruccaturai and Nemam temples with scroll work on the kudu and kapota with remarkable The harantara features are now established and show in the koshta or panjara seated figures. śāla, are slightly recessed and have prominent tilanāsika with the simhavaktra finials. The bhadraśāla show horn like incurving feature on the sides; quite different from Nangavaram or Tillaisthanam. The tilanāsika frame human and decorative motifs. Behind this we can see the high grhapindi carrying the hamsamala and then the pitha carrying the yali frieze. The Rudracchanda

grīva and sikhara changes its contour to a less formidable one. The features of kapota and hārāntara are similar to the temples already seen, while the slightly flexed waist recalls Tiruvēdikudi. The vṛṣa become more and more naturalistic. The delicate waist draws our eye to its inward curve close to the Agastīsvara at Kilaiyūr. This is only smaller in size. The padma-pītha and stūpi are the crowining glory of the excellent workmanship. Infact every normal architectural feature in this temple is accentuated by fine jewellery like decor.

excellent workmanship marked the Paluvettaraiyar-Chola idiom, the Irrukuvēl-Chola idiom is no less. The temples combine rigorous principles of architectural discipline, as well as the freedom to create. A curious blend produced such a harmony. Not very different from the Kilaiyur temple in architecture is the Tirucendurai Candrasekhara temple (fig.77a,b). The square grīva and sikhara of this dvitala vimana is replete with anukaya The harantara or hara sections show no new elements. feature, except for two additional Brahmakanta framing the central bhadrakoshta. These have four complimentary The Lalgudi Saptarsisvara which alpanāsi therefore. is ekatala shows in place of the candramandala in the kapota, rosettes. Besides this the gadha cavities don't show figures. A round bulbuous sikhara crowns the grīva. The Nāgēsvara at Kumbakonam has a barely discernible superstructure due to garrish renovation. Stripped of this it may well be close to the temples thus far seen. Problems of renovation and repetition have beset us, but the superstructure calls forth again and again mere repetition. The Tirupāllanam Āpatsahāyēsvara is such an example.

One example shall conclude the description of this aspect. The Muvar koil of the Irrukuvel at Kodumbalur (fig.76,98) carries a superstructure of remarkable clarity. a beautifully carved kapota with paired karna kudu, bhadra, pilaster nāsika, the vallimandala and the candramandala, a vigorous vyalavari is seen in contrast to the mellow kapota. This is surmounted by the manca vitardaka, karnakūta and bhadraśāla with the hārāntara. The nasika at the karna kuta are single. ksudrawsika in between and four nasi for the bhadrasāla with four pilasters. The bhadrakoshta has deities in dynamic action. The grhapindi raises the bhadra sāla with a prominent nāsi. Two important vrataphūtita elements of round pillars as if bearing the weight of The dynamism of the vyalavari the kapota are seen. is now left behind and we reach up the soulful vrsa,

and the most natural but ethnic sculptures of vimāna dēvata. The well flexed waist of the śikhara carries Kodikkaruku, candramandala and a mahānāsi with the simhavaktra spewing intricate scroll work. The stūpi compliments the curved kūta type śikhara. The gādha cavity carries a lattice.

From the afore details it can be safely concluded that the plan of the vimana was usually square, on a straight or differentiated manasutra and anga. These anga are the karna and bhadra emphasised by the salilantara recesses. The ekatala prasada was generally favoured although dvitala is common and tritala, as in Narttamalai, Pullamangai and Tiruvavūrare very rare. The grīva is often stone but the sikhara a brick reconstruction. The dvitala vimana carry the full kuta, hara and sala elements and the ardharika walling of the dvitala carries its own prastara and is then topped by grīva and sikhara. The kuta and nāsika carry am or rsi. The sāla and grīvakoshta also carry these figures of deities may often be in hieratic consonance with the figures of the first tala. Since temples are mostly Saiva ones, the prati corners take vṛsa .

The sikhara are usually Rudracchanda vrtta sikhara while the dvitala and tritala favour Brahmacchanda stūpi

for karnakūta. The sikhara follow the configuration of the roof, those for the sala are of course round.

One of the most unique temples of this phase which is a little confusing is the Koranganahaat Śrinivāsanallūr (fig.99). Above the first tala rises the grhapindi which is as high as the first tala. It replicates all the features of the ground tala and then only shows the hāra, kūta and śāla sections. Even these are relatively tall and carry almost round nāsika and are flanked by Īśakanta pillars. The kōshṭa are all bare. The relative proportion of the diminishing features are therefore interlinked. This superstructure is an isolated example.

The Parantaka I phase, the Second and Third phases do not offer us much scope for any relevant study of style; and have therefore nor been singled out. Apart from this, heavy stucco work render us perplexed, and cause confusion even to the most shrewd.

## SUMMING UP

Looking at the repetition and details in the same architectural components, one is more and more convinced that the Chola style proper and its extended idiom are typological variations. The interaction and architectural

programmes were handed out to them. They didn't have to formulate anything functional, but improved upon the structural embellishment was found more on an aesthetic The adhisthana showed this in need than functional. its architectural bloom of new types. The walls say it all in the same vocabulary but heightened by a keen sensual and mathematical precision of forms. The superstructure only gave a final contour; and recognised the advantage of the more compact eka and dvitala. Aesthetic decisions thus evolved perhaps over years through the interplay of ideals within a group. This Early Chola form as a whole was a successive series of intentions woven together and realised. 'Coherance' was its sus-It may well be remembered too that "aesthetic intention is not merely grafted upon the functional and structural intentions but is rooted in them and even inspired in them, he derives his organic unity from these itself"(19). It is not perfunctory cosmetics but a far deeper interplay of form and creative urge which culminated into an understatement called Chola.

The awareness of space and structure are clearly understood and exploited by them in gauging distance and height. The structural soundness shows the immanent rightness in organic forms and 'logical response to forces like gravity, wind pressure and balance'. They reflect in the hara and harantara, the ability to distinguish patterns of repeated movements. There is a visual line of communication as well as an auditory one that we can apprehend. The eye traverses the facade and records the up and down high and low, curved and geometric and alterations on walls and superstructure. features. This rhythm indicates a visual movement and occurs due to the enriching of vocabulary through stone, texture, placement, alternating components etc. It is following and recreating these conventions in their own way that a unique dialect of architecture developed and a style was recreated. The pillar was more than a supportive block, it was a visual refinement and an aesthetically more acceptable one. The scale was one of moderation, neither human nor superhuman. The right scale of the vimana suggests the proper awe, power and autocracy. The base determined this aspect to some extent. proportional relationship was established - he reduced disparities and irregularities increasing visual correspondence and ordered it based on the earlier compendium He took every 'visible module' worked of knowledge. at it and achieved a subtle correspondence'. This dimensional correspondence is seen in the rhythmic scale of successive storeys or tala and hara. Discrepency and

and monotony in turn are reduced. There was an enhanced use of solids and voids, vertical versus horizontal causing in their contrast a 'continuity'. This harmony of contrasts gives a special identity to the Early Chola vimana and is the 'potential energy' elastic and vital but well in The flaccidity of some of the Later Pallava temples perhaps influenced the Chola temples towards a sustained energetic form. These are very obvious in the hara and kapota with a touch of freedom and a dose of discipline that is self imposed; to check the vulgarity of excess. The style shows no divorce between freedom of expression and discipline, aesthetic urge and structural logic, extremes of plainness and confusion. The kudu with soft curves give relief for example to preponderantly rectilinear grid of proportions, while the flutings malasthana etc. in the pillars and pilasters. are magnetically attracted.

The subconscious awareness of mass, saw a balanced and not too unweildly temple. The weight of certain architectural components are discretely reduced by the embroidery like decoration and shapes. The centre of gravity was apparently so well conceived that the vimana carry off well with stability. The principle of compression was precisely applied because they stood for

The Early Chola temple was strength and stability. compressed enough. This was reduced however by the variation of curved and delicate architectonics. The prastara of every tala, the manca, vitardaka uttira, vallabhi etc. are all features which are compressed aspects for stability, but their rigidity and probably uncouth weight was reduced by the vajanapurusa, vyalavari and hamsamala which encourage movement. are active curves as opposed to passive. The quality of shape are further made stable or light by emphasising or blurring the nature of the surface. The decorative aspects all camaflouge the gross form and in using these cause an opposite feature, a light but firm one. texture was so manipulated that it became evocative. "Texture can mitigate or reinforce the suggestion made by the shape which carries it (20).

The word decoration has appeared successively through out; this is because they were a special enrichment. They articulated the unwieldly form. It is the "nature of ornament to seize and hold the eye by a display of energy, it provides a most obvious means of focusing attention and thus of making a distinction between one part and another"(21). This decoration is further used to enrichen the verticals as verticals and horizontals

as horizontals, too sometimes. The pillar or column emphasises itself as something that stands, the entablature as something that lies. The articulation is supplied by ornament, when the structural system provides none. This is seen in the pilaster, kūdu and tympanum, so forth.

Early Chola architecture was not revolutionary in nature, but more evolutionary and embellishing.

## REFERENCES

- 1. S. Gauldie, Architecture The Appreciation of Arts, (ed. H. Osborne), London 1969, p.14.
- 2. H. Focillon, The Life of Forms in Art, New York (2nd English ed.), nd, p.57.
- 3. M. Meister and M.A. Dhaky (ed.), Encyclopaedia of Indian Architecture, Pennsylvania 1983 M.A. Dhaky The Colas of Tanjavur Phase I, Early Colanadu Style c. A.D. 850-1000, p.169.
- 4. D. Barret, Early Cola Architecture and Sculpture, London 1974, pp.79-81 and S.R. Balasubramanyam, Early Chola Temples, New Delhi 1971, pp.50-54, 221-2, 258-64.
- 5. S.R. Balasubramanyam, Early Chola Art, Bombay 1966, pp.176-177.
- 6. D. Barret, Early Cola Architecture and Sculpture, London 1974, p.32.
- 7. S.R. Balasubramanyam, Early Chola Temples, New Delhi 1971, pp.109-115.
- 8. M. Meister and M.A. Dhaky, Encyclopaedia of Indian Temple Architecture, Pennsylvania 1983, M.A. Dhaky, Irrukuvēls of Kodumbālūr, Early Colanadu Style c. A.D. 850-1000, p.200.
- 9. D. Barret, Early Cola Architecture and Sculpture, London 1974, p.86.
- 10. Ibid, p.74 and S.R. Balasubramanyam, Early Chola Art, Bombay 1966, pp.97-99 see for further details.
- 11. Ibid, p.74; pp.100-101.
- M. Meister and M.A. Dhaky (ed.), Encyclopaedia of Indian Temple Architecture, Pennsylvania 1983, M.A. Dhaky's Colas of Tanjavur Phase I, in Early Colanadu Style, c. A.D. 850-1000, p.175.
- 13. Ibid, SRB, pp.114-123 and DB, p.83.
- 14. D. Barret, Early Cola Architecture and Sculpture, London 1974, p.108.

- 15. S.I.I., Vol.III, 146, 450 of 1908.
- 16. S.I.I., Vol.III, 151 and 151A, 635 of 1909.
- 17. S.R. Balasubramanyam, Early Chola Temples, New Delhi 1971, p.218.
- 18. D. Barret, Early Cola Architecture and Sculpture, London 1974, p.98 see for more details.
- 19. S. Gauldi, Architecture The Appreciation of the Arts, (ed. H. Osborne), London 1969, p.5.
- 20. Ibid, p.115.
- 21. Ibid, p.122.