

CHAPTER III

TEMPLE ARCHITECTURE

INTRODUCTION

"Architecture is a product of the interacting influences of history, structural technique, materials comments and reflection on the values of society that produced it"(1).

- Sinclair Gauldie.

The temple in South Drāviḍadēśa was not a limited set of symbols. It was an endless development and reflection of the human enterprise and potential. It is a monumental expression of sanity and sanctuary in an otherwise complex world. Of this architecture it can be said that it was quasi religious and profoundly influenced by the 'exploration of the possibilities of form which is encouraged by the intellectual climate of the society"(2). Summing it up in Gombrich's words "All culture and all communication depend on the interplay between expectation and observation, the waves of fulfilment, disappointment, right guesses and wrong moves that makes up our daily life"(3).

A few of these aspects form the substance of this chapter. It will be seen that society strictly binds its architect by an approved

stylistic correctness. Without making major structural departures the forms are played with, and they may resurrect the vocabulary of older forms and use them in new ways. If the technological development is advanced, it stays steady, but the aesthetic exploration was not always so. This lent itself in different directions.

Architecture through literary sources leads the way into the advanced but compact structural Chōla temples. In part review and part interpretation the emergence of Early Chōla architecture is read through more than theory or the sense of vision alone. Intimations of space, sound and sensation (tactile), form the components of total experience and assimilation.

III.1 TEMPLE ARCHITECTURE THROUGH LITERARY SOURCE IN SOUTH INDIA

The urge to create a tangible form of worship is common to all mankind. He nurtured upon the scaffolding of his ideas; and a physical or material set of symbols emerged. These sets of symbols were the abode of the local deity which they conceived. To us they are the village or grāma dēvata . Their origin probably dates back to the transition period, from the nomadic to the pastoral; and gradually absorbed in the high culture. However, both the Little tradition and the Great tradition form a part of the Indian psyche.

Of birth, life and death manifested the cults of the Mother, Fertility and Death. Localisation gave them identities, and around these or in the periphery there grew the personified forms of village guardians, protecting deities etc. Male and female deities emerged. They were "Ayyanār, Mun Aḍiyan, Madurai Vīran, Karrupān, Piḍāri etc. There also existed deities of and in, serpents, trees, arts crafts, spirits boundary stones, hills rivers and forests.....!"(4). These were forms of nature and livelihood. Tracts of land for example were divided into the sylvan (pastoral), riverine (agricultural, desert (arid land), hilly and littoral (sea side). The presiding deities for these were Mēyōn, Vēṇḍan, Valiyōn, Korṟavai (Kaḍukal) and Sēyōn. This was the earliest indigenous religion in South India. With syncretism or concord the incoming cultures saw an eclectic absorption and integration of the two. The local Mēyōn got identified with Kṛṣṇa/Viṣṇu, Valiyōn with Balabhadra, Sēyōn with Murugan or Kārtikkēya and Korṟavai with Durga.

The growth of temples for these deities can best be gleaned from the Saṅgam anthologies - Narrinai, Kurunḍogai, Ahaṇānūru, Pauranūri, Pattu-p-pāttu and Tolkāppiyam (the Tamil grammar). K.R. Srinivasan writes "Saṅgam

literature in general mentions the existence of megalithic monuments of different varieties and shapes, funerary or sepulchral in character. All these were associated with large stones reflecting a material culture. These erections were usually in honour of the dead e.g. naḍukal (stone erection)..... worship of gods, spirit and religious practice before the advent of Brahmanism, Jainism, Buddhism and that of the Ajivika . Worship of local gods and animistic worship of tree inhabiting spirits, rivers, hills or guardian dieties of villages, cities, cross roads, sea shores, ghats, lakes and tanks were similar and parallel to the bhūta and yakśa etc.”(5).

- The earlier Tamil works refer to a 'mēḍai' of platform under a particular tree. On this was a 'kandu' or post representing a deity. The place was called 'andu-dai-p-poḍiyal, the common place of worship. References to tall temples of burnt brick are also made and called 'sadu-man oṅgiya neḍunilaikkoṭam', and architects 'nulari pulavar - those knowing the śilpa śāstra . If the above mentioned 'mēḍai' were hypaethral there were sabha type temples called 'manṛam', koṭṭam of the kōshṭa or sāla type, kōil or royal residence which is used for both the temple and palace. If the temple

had tala , its was 'madam' and if it was called 'nagaram' it had four sided, square domical roofed śikhara. The use of different terms or nomenclature indicate the types of architectural plans; and these may well have depended on the medium used. Descriptions are replete. For example a kūta could be flat or domical, a kūdu like the eyes of a doe, or animal. The texts thus reflected the life style and architecture employed. A more precise but brief account follows.

The Paripāḍal not only speaks of temples but also of the paintings contained in them. A temple of Subramaṇya in Madurai had a special pavillion called 'eḷuttumaṇḍapa'. It had iconographic descriptions of Muruga, and referred to as 'sevvel'. It also describes the four vyūha forms of Viṣṇu, called 'Tirumāl Irunjōlai'. The Madurai Kāñci talks of temple painting and ritual showing a sectarian predeliction towards Śiva - who was the creator of the five elements and the other gods. The Tamil grammar Tolkāppiyam in its lexicon divides the tracts of land with different guardian dieties presiding over them as Mēyōn, Sēyōn, Vēṇḍan, Varuṇa and Durga. Their tracts were mullai, kurinji, maruṭṭam, neydaḷ and pālai resp. The Ahanānuru has the worship of vṛkṣa and vṛkṣa caitya as abodes of deities. Trees like the

Ālai (banyan), Arasu (pipal) and Kadamba the favourite of Murugan formed the hypaethral temples of the period. Verses 167 to 369 describe brick temples with the principal deity painted on the rear wall. Wooden reliefs were placed on a platform, resting on the rear wall. Lines 13-15 state the placement of painted icons and say it must be in stucco, mural or a wooden plaque. These continued till the period of the Pallavas. There is a casual reference to edifices being raised on the mortal remains of four brave Pāṇḍyan in the "Pūraṇānūru". Soundara Rajan mentions the use of phrases like "cittira madattu tunjiya nanmāran where cittira could connote architecture, sculpture and madam a free standing visible raised structure or a chamber borne on pillars. Kūḍagarattu could mean a vimāna closest to the curvilinear, which is seen much later in the Durga ratha at Māmalla-puram"(6).

The Pūram 1 invokes Śiva Ardhanāri wearing the Konrai flowers (Cassia fistula) and the crescent, with Umā on his left and the vṛsa to the right..... Pūram 6 which refers to a temple built in honour of a 'Mukkat-Selvān' is called a 'nagar'. Invocations to deities like Ardhanāri, Tripurāntaka, Kārtikkēya etc. are replete with iconographic descriptions. Pūram 56 and 91 adds

to this bounty and is full of the Draviḍian Āryan imagery.

Pattina-p-pālai an anthology of the Pattu-p-paṭṭu dedicated to Karikāla Chōḷan describes Kāvēri-p-paṭṭinam (Puhār) and the temples therein with Tiru and Lakshmi in their gateways.

The Mullaipāṭṭu, mythological in nature shows us Māl (Tirumāl) weilding the Śaṅkha and Cakra with Śrī on his chest (lines 1, 3). The Trivikrama aspect is prominent here. The Purumpanaruppāḍai also describes the Śesasayi aspect.

The Tirumurugarruppāḍai speaks of the six 'paḍaivīdu' abodes of Muruga. A 'nagara' for him was in Tiruvavinankuḍi (Paḷani). The Neḍu-nal-vāḍai mentions secular and religious architecture. The commentator states that the śīlpa śāstra followed was Mayamata.

The post Saṅgam classics Cilappadikāram and Maṇimēkhalai describe and use terms like kōyil, nagaram, koṭṭam and palli and speak of the Āgama and śīlpaśāstra to which architects owe much fo their knowledge.

There is mention of 'paḍi maṇṇam' or temple of the Bodhi tree and they are seen in reliefs at Amarāvati

and Nāgārjunakoṇḍa. Gōpuradvāra, palli-p-pāḍai are often referred to. The first section of Cilappadikāram discusses numerous shrines. Section II makes reference to the sleeping Viṣṇu at Tiru Araṅgam (Śrī Raṅgam) and the Lord of Tirivēṅgaḍam (Tirupati). Section XII finds the avatāra aspects of Viṣṇu, the Vana Durga, temples and temple building, consecration rites, deities, bali pīṭham and maṇḍapa, mentioned very casually. Lastly, the Avanti Sundari Katha Sāra(7) Section III mentions the worship of Guha by a queen of Rajahamṣa at a guhā-laya - or cave temple. The 'bhiṭṭi citra' showed Guha playing with his parents, and this is seen later in the Pallava Sōmaskanda panels. Thus evidence tells us of innumerable temples, but sadly in perishable medium. The Mandagapaṭṭu inscription of Mahendravarman I Pallava clearly mentions the existence of perishable mediums and modes of architecture. It also introduces to us the use of stone as the new structural medium.

What we have briefly seen thus far are only in the nature of an inventory. What is more important is the textual sources that have either direct or indirect influence on architecture. It has also been hitherto observed that there were forms, plans and layouts, all dependent on the object of worship and the method of worship.

It is apparent that certain common principles of design and construction were followed by both craftsmen and the priesthood. For ritual, the mode of worship and architecture to collaborate, there must have been a sound background. It is known that "Sthāpatis and śilpīns who belonged to the same guild of artisans had common principles and set methods of design and construction and they worked in collaboration with the priesthood which knew the rituals, the nature of the objects of veneration and the modes of their worship, they together determined the forms of the temples with such modifications as suited to their respective cases, as also the fixation of features of the principal deities and the decorations of the structure, with iconic and other sculptural embellishments. As a result the vastu, silpa and agama texts and canons as described in the sastras were evolved and the creation of temple and the conduct of worship therein codified. Thus the Indian mind the indigenous architecture remain basically and essentially Indian. It cannot be subordinated into what is usually attempted to be made out as Hindu, Jain or Buddhist architecture".(8).

The thought transference was one of memories old. The evolving of śāstra was born of hard learning and expe-

rience; and these in turn to the gross material form. The human body (śārīra) as gross and the soul (ātma) as spiritual combine to articulate different parts of the temple. The spirit was a 'collective' one, caught by the masses. Upon this common belief there emerged an ordered universe in the temple and codified texts. The developing cultures, preoccupied with mōkśa led to "notions associated with form and materials of buildings..... paramount is the identification of the diety with the fabric of the temple or identification of the form of the universe with that of the temple. Hence the significance attached to the site of the temple, its ground plan and vertical elevation a sacred mathematics is created, composed of a language of precise measurements, which permits a symbolic realisation of the underlying cosmic ideas. The relationship that develops between forms and their meanings within the Hindu temple is essential to its function"(9).

Kramrisch in her 'Hindu Temple' takes much from Brhat-samhita, Purāṇas and Āgamas. The concept of 'vāstu puruśa' she deals with dates back to the Śrauta or Vēdic fire sacrifice which is the all pervading principle. The cosmic puruśa and other related deities find place in the vāstusāstra, sources like the Pañcarātra, Vaikhā-

nasa and Śaiva Āgamas by and large show an integrated approach to architecture, astrology, astronomy, maths, line sketching, śilpa and yantra karma and as all being allied branches of architecture and both the sthāpati and architect must be well informed in them. Be they Matsyapurāṇa or Mānasāra (Śilpa lakṣhaṇa) they go into details of origin, function and standards of śilpin, sthāpati, sūtragrahi (draughtsmen), vardhaki (one who calculated proportions) and the takśaka (engraver or stonemason). The sthāpati was most important and the expounder of sastra to all others. The 'acārya' was the title for one who was well versed in the śruti and ślōka. The takśaka was well versed in carving. All these were connected to architecture, specially sculpture, and thus an image or icon had a place in architecture and was conceived as a part of it. It existed in harmony and total integration with it. However, it evolved in the Chōḷa period as a distinct form with an identity of its own.

The South Indian Vimāna followed the dictum of the human form - the śadāṅga in its vertical segments. The base adhithāna, foot or pillar pāda, entablature - prastāra neck - gala grīva, roof or spire - śikhara and the finial stūpi. A later inscription(10) includes other parts like

the ardhamañḍapa, snāpāna mañḍapa, uttiram, poṭigai, jagati, paṭṭiga, kaṇṭam, kumudam etc. The sanctum sanc-torum or garbhagr̥ha with the installed main deity had the ardhamañḍapa directly in front of it, with an occa-sional antarāla or vestibule in between. The adhisthāna is made up of further divisions upana, jagati, kumudam, gala, kampa, gala and paṭṭika. There may be an upapīṭha below the adhisthāna. The walls carry the sthambas, dēvakōshṭha and tōraṇa . The tōraṇa is found over the dēvakōshṭha as a decorative feature. The Mānasāra mentions four types of tōraṇa, the patra, puspa, ratna and citra. They are the crescent arch foliage, when a makara is added they become a makara tōraṇa; when they undulate five times and have either a swan or bird form they are citra tōraṇas, the floral is puspa tōraṇa, while the ratna type may carry vidhyādhara , bhūta , simha , yāli, haṁsa and gaṇa forms. They carry flowers and precious gems emerging from the makara mouths. A dēva may be placed centrally in the tōraṇa (figs.250,251).

Similarly the śikhara which is the superstructure is classified according to its size, floor, shape and design. Depending on their storeys tala or bhūmi they are ekatala, dvitala, tritala etc. Their shapes are caturāsra, vṛtta, caturasdīrgha, hasti or gaja pṛstha, vṛttāyata, śadakōṇa or astāsra. The Mayamatam, Īśāni Śivaguru

dēvapaddati and the Mānasāra obviously were the architecture lexicon. The kriya and jñāna pada of the Āgamas were also in usage. The Kāmika and Kārana Āgamas were important for iconometry, iconography, rituals and architecture. The relevance of these texts to us is not in their usage 'in toto' but they existed as sound concepts from where the architect drew his fundamentals from. He converts his information to a form that is an application and creative possibility. The very term Mānasāra means māna-measurement and sāra-essence. The essence of measurement. The key is 'essence', which is altogether different from 'rote'. This leads to broad norms within which the architect functions. When one sees the chapters 14, 15, 16 & 18 they deal with upapiṭha and adhisthāna, pillars entablatures etc. Chapters 46, 47, 48, 49 and 50 deal with abiseka, adorning of gods and men, Brahma in sculpture, Lingōdbhava, and seated forms resp. The Viśvakarma class, sthapati, sutragrahi, vardhaka, taksāka were well versed in these. Those with such precise knowledge and information used them with insight. They were visionaries in their own right.

III.2 THE BASIC CONCEPTS OF DRĀVIDA ARCHITECTURE

The village gods and higher gods caused the development of Drāviḍa architecture. To honour and dedicate and

propitiate are still profound human impulses.

From the primitive society of non-iconic worship which saw its gods, godlings and spirits in nature we come to the worship of posts and stones placed under trees. Often times the tree itself could be a symbol of, or embodiment of some spirit benevolent or malevolent. The Vēdic Āryanism was integrated in the southern soil which was often scattered with sālagrama , linga or Vināyaka amidst a paddy field or under the tree by a riverside. A favourite tree often became an object of worship and this tree got integrated into the higher tradition as a sthala vrksa of the temple complex, later.

The quasi religious practice of which Longhurst writes, does not relate to any particular diety, "in ancient India the ancestor worship or more broadly the cult of the dead, formed the staple of religious belief of the original inhabitants"(11). But apart from this there existed other forms of worship. The 'cult of the 'manes' for instance was a link between the past and present. Of this we have the concept of 'vīran or vīrulu ' the heroes, who died valourous deaths. The received worships and were assumed to be spirits. In propitiation arose symbols like trees magic circles, stone rings, cromlechs

and dolmens over their graves. These were the first material physical objects. Essayist John Buchanan writes that this class of 'vīrika' were both demonic and divine and thus became the spirits of the border land dividing the heaven, earth and nether worlds. N. Venkataramanayya states that "we are introduced to a phase of religion which exhibits a tendency to obliterate the distinction between the demon and the deity. The obliteration of difference becomes complete in the cult of the village deities. A large number of deities begin their career from the confines of a graveyard. In the course of time their origin is forgotten and they are established as powerful deities(12).

Dr. Elmore in his 'Dravidian Gods and Hindu Religion' says these gods are human beings returned to earth. The ideal of 'power' plays a role here, because they are the embodiment of it. This is confirmed by the presence of temples by the smaśāna or cremation ground. Maṇimēkhalai refers to one such Kāli temple near it. This is further corroborated by the 'hut urns,' hut shaped urns with the ashes of the dead and they often resemble a class of temples dedicated to the village deity.

The dolmens and shrine of grāma dēvata show chamber, additional maṇḍapa with or without an antarāla roofed

by three roughly hewn flat slabs of granite. The ground plan and superstructure were similar. The grāmadēvata shrine was often oblong. Lack of evidence gave rise to a lot of speculation, of which Longhurst postulated the stūpa theory, from earth mound to brick. This is more funerary than sectarian. He says the stūpi is related to the stūpa, the tree planted over the stūpa becomes the chattra which in due course became the pyramidal vimāna. This chattra concept is seen in the 'Sūdalai Mādan shrines' of Tirnelvely. The Drāviḍa temple perhaps borrows from all this (13) and is part of a pan Indian tradition.

The period of structural temples, crusaded by the Pallavas is the key to our understanding forms both past, present and future of that architecture. This is the period of renascence in art, architecture, literature and religion. From Buddhist caves which replicate wooden, domestic and civil architecture under the Satvāhana and from reliefs at Sāñci, Bhārhut and Āndhra; it is possible to derive the architectural vocabulary for the pan Indian period and also to show its stages of mutation and evolution into different types. All of Drāviḍa shared a cultural heritage, a connected history. "Till at least the mid tenth century A.D. a cognate expression in art

and architecture as well as in iconography are distinct (but) not totally unrelated to corresponding traditions of contemporaneous provinces in the north¹¹(14).

Stone was not only an abundant available resource but also happened to be most non-perishable. The 'permanent' quality was perceived in it. The use of it had permeated deep in the commemorative worship, and naturally led to its being of funerary association. Some times scholars rightly feel that such association could be deterrent for its use in religious worship. When the Buddhist used it, it was "for rock excavations and in the encasement of brick stupas they could do so since stūpa as in essence act as memorial for the departed masters". Thus, the Drāviḍa vimāna has its beginnings in the dolmen and boath. The boath specially was indigenous to South India. "It is (perhaps) the superimposition of the boath on the dolmen and further subject to Buddhist influence, which is possibly the seed of the pre-Pallava temple"(16).

From the premise of speculation we move on to the most relative source - the study of reliefs in Āndhra. The rudimentary elements which contribute towards plan, elevation and decoration are traced in these reliefs from Amarāvati, Nāgārjuna Koṇḍa, Jagayyapeta, Ghaṇṭasāla etc.

In the narrative reliefs of the Jātaka are carved the architecture preceding the Pallavas and in which lie the source of all later architecture. Vṛtta, ayatāsra, cāpa and kūta huts are represented. The tōraṇa, pillars, stūpa and caitya temples form parts of the cityscapes. The secular hut types reflect the gradual evolution of it into the śikhara of the later temples. The Mithavindaka Jātaka (fig.1) shows the vṛtta kūta, ayatāsra śāla, gajapṛstha and cāpa types. Each of these types finds its way in the South Indian vimāna at different times and in different parts like the kūta, śāla-pañjāra of the hāra enclosure etc. Similarly the Mahāvana Kūtagāra-śāla of Vaiśālī from Amarāvati (fig.2) has the cāpa vimāna and gavākśa arch in the front. The gajapṛstha vimāna takes three stūpi on its ridge. There is a tōraṇa mukha-paṭṭi with a small flat finial that frames the front end of the śikhara. To the left is also a vṛtta caitya. Apsidal structures raised above the ground by five pillars here, are called in Tamil maccudvidu or paran and exemplify the 'harmya'. The Saṅgam refers it as 'aramiyam' of a multistoreyed temple which suggests its position as always in the top section. There is mention of a 'nila murram or veyā murram' which mean moonlit or non-roofed terrace and could suggest an open courtyard with parapet. A relief (fig.3) showing the city gate "itself has a śāla

structure with a row of finials on its ridge, with two projecting pañjāra cages and flanked by the kūta and śāla. This is the likely source for the hāra enclosure.. which acts as railings around each terrace storey of later South Indian temples"(17).

The Amarāvati reliefs in the Madras Museum show components like the vēdika, kapōṭa ālinda, nāsika, kūtagrha with astāsra śikhara stūpi, kūtagāra etc. (fig.4), circular stūpa caitya, domical superstructure with gavākṣa at cardinal and sub cardinal points. This is found in the rudra and vr̥tta candra śikhara later (fig.5). Extant use of astāsra śikhara for kūta of small vimana are seen and become the later Viṣṇuccanda astāsra śikhara and carry the four mahā nāsika (fig.6).

Nāgārjunakoṇḍā reliefs, a century later show us the āditāla of a vimāna (fig.7). A sōpāna leading to structures raised by free standing pillars with two square caturāsra tāla are seen. The dvitāla shows projected nāsika with caitya arches, vēdika and square kūta. "Such instances indicate secular prāsada became temple prāsada having successive storeys diminishing in size. Each floor a variety of chambers (kūtagāra, siṃha pañjāra, śāla, harmya etc.) each with

separate roof, these ultimately resulted in a form resembling the Dharmarāja at Māmallapuram(18).

Jagayyapeṭa reliefs show sculpted figures by the pillars which perhaps become the dvārapala (fig.8). An interesting aspect is the sabhā-śikhara roof from ṣannati. This is rectangular and crowned by two stūpi, this is rare, but one can find them in later temples dedicated only to Naṭarāja and the Saptamātrika..

The Ghaṇṭasāla relief (fig.9) shows on the wall sections between ghanadvāra small slight projecting square windows. The bhitti or wall has a continuous upper kapōṭa aligned with the kapōṭa of the prastara part of nāsika projections. This makes it appear more as a tala than a griva for the śikhara placed squarely on it. Such a feature is seen in the Mahākūtesvara in Malegitti and the lower Śivālaya in Badāmi. The Pallavas changed it slightly by raising the grīva above the hāra of the topmost tala.

III.3 EARLIEST EXAMPLES OF DRAVIḌA ARCHITECTURE - HIGHLIGHTS OF THE PALLAVA ARCHITECTURE

History has not been kind to us between the post-Saṅgam and pre-Pallava years, and we are left with a dark phase - the Kālabhra interregnum. Around the mid fifth

century A.D. this historical eclipse faded, but devastating those splendours of the perishable medium highlighted in the Cilappadikāram and Maṇimēkhalai. The political change saw the Pallavas of Siṃhaviṣṇu line, and the Pāṇḍya of Kaduṅḡon line rising out of these ashes. The rulers of Toṇḍaināḍu and Pāṇḍināḍu were resurrected.

Toṇḍaināḍu in time extended upto Tirucirāppallī and Siṃhaviṣṇu was extolled in the Mattavilāsa Prahsana, whereby he had vanquished the Chōḷa, Pāṇḍya, Kālabhra and the Siṃhala (19), while the Udayēndram plates of Nandi II shows his predilection for Viṣṇu. On the other hand it also reads that Siṃhaviṣṇu's mother was of Jaina leaning. This is testified by the existence of a Jīna Vardhamāna temple in Kāñci then.

The development of architecture henceforth owed much to the enterprise of Mahēndravarmān I (580-630 A.D.). Inscriptions and examples of rock cuts reflect the urge to create with stone. The Mandagapaṭṭu inscriptions gives us evidence of his varied taste and pioneering efforts in stone. His biruḍa included, saṅkirṇajāti, mattavilāsa, guṇabhāra, citrakārapuli and Kurrambu in Saṅskrit and Tamil. His more aggressive spirit is reflected in his initiating the Pallava-Pāṇḍya-Cālukya feuds, all

aimed at a small delection called Chōḷa. The period was one of literary, religious, artistic and political ferment.

Narasimhavarman I succeeded the throne around 630 A.D. His conquest of Cālukya Vātāpi(20) and Simhala under Siruttonḍar are hallmarks in Pallava history. 13 years sway in Cālukyan domain doubtless to say left an indelible mark in the culture and arts of the people. This is important because Narasimha's contribution to rock cuts and sculpture owe much to the Cālukyan connection. Thence, it grew from the shores of Māmallapuram into the hinter land, a cluster of structural architecture.

There was paucity of art activity between the periods 672 to 700 A.D. of Paramēśvaravarman I. The Gaṇēśa, Dharmarāja, Rāmānuja and the completion of Draupadi ratha are attributed to him. A staunch Śaiva, he introduced cult images in the sanctum - as the rear wall bas-reliefs. Sōmaskanda was introduced and became a popular feature. It occurs in the Mahisāmardani maṇḍapa and upper tala of Dharmarāja ratha. K.R. Srinivasan opines that even the Durga image in the Draupadi ratha was popularised from the time, and the period saw for the first time the use of granite slabs for the vimāna.

Such attempts are seen in "the Vidya Vinita Pallava Paramēśvaragṛham at Kūr am"(21).

The Rajasiṃha phase saw both peace and spurt of temple building at Kāñci, Panamalai, Nāgapattinam, and the Shore temple at Māmallapuram.

Mahēndra III and Paramēśvara I added further to the Kāñci Kailāsa(22). There are scenes of historical sculpture in the Vaikunṭaperumāl at Kāñci showing wounded soldier (Mahēndra III) being brought to Rajasiṃha and his queen. This was the battle with Gaṅga Śrī Puruṣa(23).

Nandivarman II had a long span of 65 years and witnessed the period of Rāṣṭrakūṭa-Pallava alliance between Rēva, daughter of Dantidurga and Narasiṃha III. He built the Vaikunṭa Perumāl, Mukteśvara, and Mātangēśvara in Kāñci. Here are found historical narrative sculptures too.

The accession of Dantivarman began the second phase of the baroque temples like the Sundaravarada, Kailāsa and Vaikunṭa Perumāl at Uttaramērūr etc., and then on there was a decadence.

A few temples of their periods will be taken to highlight those features that continue to dominate, or fail to change

in the subsequent Chōḷa temples. Being the pioneer trend setters this section needless to say is partly review and partly a tribute. They will show what they are while the subsequent chapters what was done to them.

III.4 THE PERIOD OF PALLAVA CAVE TEMPLES. (580-630 A.D.) (THE MAHĒNDRA PERIOD - PHASES 3)

There are 10 cave temples in this period(24). The general plan is simple. These are single celled, pillared verandahs with a shrine cut in rear or side walls, depending on the facade. For the north or south faces, the shrine cells are cut laterally so as to face east or west. For the east and west faces they were cut behind the maṇḍapa. These pillared halls were open or closed with flat or sloping roofs with a shrine in the centre behind. the proportions are in 'proximal and distal' sections, which are the mahā and ardha maṇḍapa. Most of these temples have four pillars and pilasters. The two extreme columns are pilasters 'in antis' and the two intermediate ones are pillars. Parrallely there is a similar inner row. This also separates the most bare mahā maṇḍapa from the ardhamāṇḍapa. The shrines were generally excavated in the hind walls and were also more than one sometimes. The number of shrines and their disposition are in accordance with the pillars

of the maṇḍapa .. Each shrine opens into a corresponding inter columnner space - 'aṅkaṇa' between pillar and pillar on one hand, and between one pillar and another on the other.

The architectural elements in these temples are minimal. There are massive poṭṭika , kapōṭa of the crude type, for the overhanging ledge above the beam of natural rock. Only Dalavanūr Satrumal Ēśvara has a flexed kapōṭa with kūdu arches (fig.10), while Pallāvaram Pañca Pāṇḍava has a crude one.

One is not impressed by the not too pleasant effect of the characteristic squat, unwieldly massive pillars. The top and bottom bases are cubical and called 'Saduram ', while the mid section 'kaṭṭu' is octagonal. Corresponding pilasters are seen in Mandagapaṭṭu, Vallam and Siyamaṅgalam. There are also tetragonal shafts. The palagai a rare feature appears above the top saduram and below the poṭika. These are plain, but Dalavanūr has lotus petals on the underside (fig.10). Some temples have plain saduram while some are ornamented with circular lotus medallions (fig.10). Besides this makara , kinnara , mātaṅganakara, floral-foliate scrolls, haṁsa, and patralata type of medallions are found. The Siyamaṅgalam Avanibhājana

Pallavēśvaragr̥ha (fig.11) has a bas-relief panel in place of the medallion on the top.

Massive pillars support massive corbels with a curved or bevelled angular outline. The underside have a series of roll mouldings taraṅga paṭṭika or a flat median band paṭṭa, which architecturally bind the moulding. Siyamaṅgalam Avanibhājana Pallavēśvaragr̥ha and Tirucirāppalli Lalitāṅkūra (figs.11,12) have additional taraṅga and paṭṭa.

The only form of sculpture we see at this stage are dvārapāla on either side of the facade of maṇḍapa, or enclosed inside sthamba tōraṇa, or on either side of the shrine entrance (fig.100). Some caves do not have them. The other examples of sculpture are in the Lalitāṅkūra at Tirucirāppalli and Trikkalkuṇṇram Orukal maṇḍapam, they are the dvārapāla and the Gaṅgāvatāraṇa and celestials in vismaya and kaṭihasta in bas-reliefs respectively (figs.101,102).

The Mahēndra style also has its IIṇd phase. This period shows the kapṭha with kūdu arches over the shrine entrance, minus figures in the gāda cavity. A very noticeable and characteristic change is the relative thinness of

the pillars. Looking at them, they are attributable to the Early Māmalla phase on stylistic grounds. There are d̄varapālika very similar to those in the late Draupadi ratha at Māmallapuram. These were perhaps the earliest examples of female door guardians. There is a gradual increase in the sculptural iconography.

The Singavaram Raṅganātha temple also shows a four armed Mahiśāsūramardini in a niche beyond the façade, flanked by a devotee in adoration and another cutting his hand (fig.103).

The third phase yields no relevant information to our study.

A summing up tells us that a tentative, unweildly and crude beginning, was due to the lack of technical skill in the manipulation of the new medium, 'stone'. The squat, massive and heavy pillars show that the qualities of the medium were as yet unknown, and the craftsman untutored in its manipulation. The second phase shows more relaxation - this is reflected in the slender pillars, the introducing of a finished kapōta, kūdu and carving of the more subtle female form. The pillars gradually transformed by using decoratic medallions. The relative

change in potika conformed to the size of the pillar. The tarāṅga and curved profile poṭṭika were the Cālukyan influence, but transient, the poṭṭika with angular profile sustained.

A notable feature is the absence of the rock cut linga and its pedestal. These are present in the Muttaraiyar and Pāṇḍyan idioms however. A small platform, rock cut is present over which the deity was placed(25). The absence of the praṇāla justifies this. This absence of praṇāla is very noticable but only in the Mahēndra phase, but in all rock cut and structural temples of the Pallavas. Literature makes mention of abhiśēka, but these were possibly conducted on snāpaṇa bēra (26). The Muttaraiya and Pāṇḍyan temples didn't have praṇāla proper but they had a channel cut at the base of the avudaiyār.

A limited repertoire of sculpture begins at this juncture. The Gaṅgavatāraṇa bas relief in the Lalitāṅkūra at Tirucirāppalli and gradually the increased Sōmaskanda in Śiva temples, and Viṣṇu or Durga during Paramēśvaravarman period are seen. In sculptures the Pallava dvārapāla are two armed and in profile or frontal view. Dvārapālika are seen for the first time in Dēvi shrines, while dvārapāla in Viṣṇu shrines, minus their clubs.

III.5. NARASIṂHA I 'MĀMALLA' PHASE OF CAVE TEMPLES

Independent of Mahēndra I, Pallava architecture saw a transition. From relative primitivity, it evolved into a youthful challenge during Narasiṁhavarman I (630-638 A.D) phase. Significant new features in the nature of plan, moulding, ornaments, entablature, facade and column types occurred. This phase is further subdivided into the Narasiṁha I Paramēśvaravarman I, Rajāsiṁha - Nandi II - also called the 1st phase and Later Pallava phase or IInd phase from 706-980 A.D. In the unfinished Cave temples, one can still see the full model of the Drāviḍa vimāna of the śadvarga and āstavarga types.

The Narasiṁha I examples can be seen from the Konēri and Varāha Pañcapāṇḍava and the Trimūrti cave temple all in various stages of completion (figs.13,14,15,16). On immediate observation it is seen that the central, extreme and shrine fronts are projected, and two intermediate ones are recessed. We are also struck by a set of five dvārapāla, all different from each other. This marks the beginning of the Mahēndra Māmalla transition(27). On either sides of the shrine entrance cut in shallow niches are fine bas-reliefs of dvārapāla in pairs, but differing iconographically. This is the earliest attempt at deliberate and conscious sculptural

display. The sthāpati had so coordinated that he placed his sculpture in the carved out architectural niche of projections and recesses.

The Varāha maṇḍapa (fig.14) also has the front maṇḍapa with a shrine behind. The facade has a row of two pillars and pilasters with an ōma moulded adhisthāna cut at the base(28). The arrangement of hara is important; each hārāntara portion, connecting passage from one śāla to another is an āvaraṇa or hāra of shrines forming a covered cloister. One has to lift his eye below the coping where the cross beams end, to notice this. The coping is like a curved roof emphasised by a finial on top. Such extension of the hāra members over the prastāra is the first of its kind; it is seen in the Muttaraiyar Nārttamalai Vijayālaya Chōḷīśvaram (fig.41). The projecting shrine cell also has its front walls with four pilasters. The inner two, flank shrine entrance and outer two are almost cantoning pillars. And between them are sunken niches with dvārapāla in semi-profile. Similar ones are seen in the side wall. The visible side of the maṇḍapa projecting from the rear wall suggests the attempt at monolithic rock cut.

The Trimūrti cave temple (fig.16) in its elevation and frontal aspect from the adhisthāna to the first tala are

all placed contiguously, with the central section standing just a little forward. This is an example of the trikūtācala or vimānatraya. This is seen in a slightly changed form in the Irrukuvēl, Mūvarkoil. The Trimūrti has a limited availability of architectural space, which has narrowed down the niches. If this posed a problem to sculpture, the limitation was overcome by slightly turning the sculpture, and placing it in 3/4th profile. What came as a problem became one of the accepted norms, specially exploited in the Early Chōla period. The southern most Durga shrine has a contoning pilaster with taraṅgapoṭṭika, a sōpana, and pilasters at corners. This is given a more substantial form in the elevation of the Draupadi ratha, minus the prastāra and śikhara. This is a laudable architectural attempt assigned to Paramēśvara I (also called Īśvara). The relevance of frontal elevation and facade was recognised as a special factor because it determined the impact it would have on the devotee. Narasiṃha I enlarged and improved also the qualitative and quantitative aspect of sculpture.

The first or earliest attempts in the afore mentioned cave temples was an attempt at manipulating the medium to cause permanent and grand structures. However, the massivity of the rock medium was overwhelming and

uncouth. The modulation had to take place. Awareness of mass was a subconscious recognition; and its moderation for example began to be apprehended as early as the Mahēndra I phase and rectified to some extent in temples as Dalavanūr (fig.10). The quality of material used in structures called forth for a compression, and this had not yet been recognised. It is also seen that the earliest preoccupation was with the interior, and so the outside was neglected. It was in the IIInd phase of Mahēndra that the importance of the exterior was explored and attempted. By use of ornament or decoration the process of reducing the awesome took place. The pillars and pilasters and the kapota were the right places to start with. The Māmalla phase elaborated upon these with some success. Massivity was further reduced by the cutting out of stone into more slender and ornamented pillars, without affecting its stability. Furthermore decoration was a means of not just relieving the boredom of bare spaces, but also involved the creative and aesthetic urges. It assumed the function of engaging the spectators attention to the finer aspects of structure, 'to seize and hold' is its quality. It also added or reduced the emphasis to distinction.

A very important feature seen is that from a bare mānasūtra, a very rough rhythm is created in the facade broken

by pillars and the kapōṭa with kūdu in equal intervals at Dalavanūr (fig.10) in the Mahendra I phase. This is also seen in bare space, carved space, pillar space and pillar arrangement. This awareness of space and structure began to be gauged by distance and height in the Konēri, Varāha maṇḍapas and the Trimūrti cave temple. Awareness of rhythm, repeated movements of moving back and forth in space visually and physically became a reality. The walking through pillars or colonnades, or the vision as the eye traverses the facade with patterns of alterations - in projection and recession come into being. The relatively straight mānasūtra change into angular projections and recessions indicating movement. The theme unfolds sequentially, and at such crucial junctures emphasis is created by sculpture. These are again form and texture that are controlled by curves and human qualities to counter balance the angularity of architecture.

III.6

HIGHLIGHTS OF PALLAVA ARCHITECTURE (CONTD)

This section covers the major architectural components in three parts. Structural and functional intentions, scale, order, rhythm, proportional relationships, spatial correspondence, shapes, enrichment of form and ornament are some of the features seen here. These simultaneously show traits and their change in their lifetime.

The three sections are :

- i) Adhithāna (moulded base)
- ii) The Ist Tala (Walls of the Vimana)
- iii) The Upper Tala (Superstructure)

i) THE ADHISTHĀNA (moulded base)

The adhithāna or moulded base formed the lower most section of the temples. The most popular and simple one is the pādabandha (fig.17). Some of the earliest cave temples from the Mahēndra I phase do not have a particular adhithāna. They are merely elevated or raised platforms. Wherever there are, they are the pādabandha type. The components of this adhithāna are the jagati, kumuda, kaṇṭha and paṭṭika. Sometimes there may be a upana mahāpaṭṭi. Some random examples can be seen in Dalavanūr, Varāha and Konēri maṇḍapam, Trimūrti cave temple etc. (fig.10,13,14,16) These are basically horizontal rectangular strips mounted one over the other, their function is obviously to provide a steady base, to carry appropriate weight, the walls and roof.

The adhithāna in Māmallapuram are carved out only in five instances, in the Draupadi, Arjuna and Dharmarāja ratha (figs.18,19,20). The first two are pādabandha and the latter is kapōṭabandha, which is used for the

first time. The name itself suggests the curved in cornice or flexed overhanging cornice type. This only varies from the plain pādabandha in this aspect. These are the simplest constructions where the rock are carved out in rectangular horizontal slabs. These type emerge from the wooden prototypes for support; however, their function for support is not important in the rock cuts, and perhaps occur from force of habit. The Dharmarāja relieves the monotony of lines by the use of kapōṭa above the gala and urdhvakampa. A further elaboration occurs in the kaṇṭha vājana section which have widely spaced vyāḷa or elephant figures. This idea also has its sources in the engraved metal plates used at critical joints in wood to give it more support; but its recreation in stone is again habit. There are holes in the Draupadi and Arjuna ratha perhaps to receive vyāḷa or elephant busts. These two ratha also have an upapīṭha, which is prominent. It adds to the elevation and enhances the height of the rathas, being just a plain additional basement below the jagati without kumuda but having upana, kaṇṭha, paṭṭika etc.

The pādabandha is seen in the Kūram Śiva temple. The upapīṭha which is also present uses granite slabs of varying dimensions and bricks for the upapīṭha. The

use of vertical and horizontal slabs of relative thickness, and size aims at a sound base.

The Rajasiṃha phase continued the use of pādabandha. The simplest surviving example, Mukundanāyanār in Māmalla puram the pādabandha adhisthāna supports walls with padas minus the vyāla which is unique. The temples at Kāñci - Aiyavatesvaram, Muktēśvara, Mātangēśvara, Vaikuṇṭha Perumāl (fig.21), and the Kūram temples of Perumāl and Vidyavinita Pallavēśvaragrha have the pada-bandha. They are singularly lacking in ornamentation, but are bold and austere. The mañcabha dra upapīṭha adds partially to the severity of the base.

The Māmallapuram Alaivay-k-kōil sees a variation of the pādabandha. In place of plain rectangular slabs there is a very prominently moulded padmōpana, a bold tripaṭṭa kumuda and leaping vyāla frontals at the corners of the mahāvājana and kaṇṭha moulding. This is characteristic in the Rajasiṃhēśvaram of this complex (fig.22). The Kśatriyasiṃhēśvara also has a similar one with bolder members and greater embellishment. We find the corners dressed with vallimaṇḍala scroll in the padmōpana, the tripaṭṭa kumuda show padmadala on the upper face and ratnapaṭṭa on the medial face. The Olakkanēśvara at

Māmallapuram and Tālagirīśvara at Panamalai have granite bases (figs.23,24). They are characterised by recession and projection. The latter uses the large padma base in lieu of the jagati and tripaṭṭa kumuda. The medial face has ratna padma. The bevelled faces show urdhva and adhah padma decor. The kaṇṭha has galapāda with elephant frontals at the corner. The Olakkanesvara shows above the kapota a row of evenly spaced vyala figures both in the upapīṭha and adhisthāna (fig.23). The Kāñci Kailśanātha (figs.25,26) saw a culmination in the saturated ornamentation of its whole complex. Geometric thus symmetric mouldings offer framed spaces for filling up. A very high pādabandha would otherwise appear out of place, if not embellished. The jagati face is divided by galapāda, particularly in the corners at its projections and recesses. The flow of the scroll design reduces the angular hardness. It also forms an ornamental frieze framing, bṛta. with animal, human and demonfaces, gambling, dancing, singing and carrying weapons. This dynamism is balanced by the cubical and circular rosette borders on its upper side. The tripaṭṭa kumuda is clasped on either side by the padmadala over the upper and lower bevelled faces. The medial vertical face have alternating foral and rosettes of ratnapaṭṭa motifs. The prominent kaṇṭha over the kumuda has galapāda

reinforced at angles by elephant heads which support the projecting paṭṭika above. Dynamism and movement caused by such figurative ornamentation reduce the harsh angularity; however, it also suggests that while causing this, the sculptor's mind and energy could have run riot, leaving us with more than what we desire.

The IIInd phase of the Pallavas or the Toṇḍianāḍu style between 800-900 A.D. makes a significant departure from the Nandi II or Rajasimha phase. The mañcabhadra upapīṭha is continued, using elegant vegetal decoration specially on the faces of the galapāda and rampant lions on the corners. A new variation of the kumuda is called the katakāvṛta. These are straight or curved fluted lines, carved vertically on the horizontal medial band, with the urdhva and adhah padma. The Sundaravardā at Uttaramēṛūr is a variation of the pāda and padma bandha, standing over an ornate mañcabhadra upapīṭha. The carvings are chaste, the galapāda enriched by vegetal motifs which share in the grandeur of the rampant lions in the corner in the upapīṭha. In place of the jagati is the mahāpadma with flowing cakravāki and vaḷḷimaṇḍala in the corners. Above the katakāvṛta kumuda and adhah padma are vyāḷa in profile in the kaṇṭha vājana. The corners show makara. The vyāḷa in the inner corners

are sometimes replaced by squatting bhūta . "This combination of the two types is a bold and effective innovation by the designer"(figs.27,28,29). Our last example is the Tirukkalkunram . Bhaktavatsala (fig30). Here the adhisthana has a fairly big jagati, but a very short and plain paṭṭika over which is an elaborate adhah padma - which almost becomes a padmōpana. A narrow kampa and short gala bound by a similar narrow urdhva kampa is seen while another padma vājana and prati or ksudra-kampa enclose it from above. Mouldings like those of upapīṭha are also used here.

Thus far it is seen that using the same kind of adhisthāna the architect and sculptor tried to create variations by ornament. There was no structural change, and the basic pādabandha continued. It was left for the others to bring in changes in this architectural component.

ii) THE FIRST TALA(walls of the vimana)

Rising above the adhisthāna are the walls of the vimāna. This section from the adhisthāna onwards is called the 1st tala. Generally of sandstone and sometimes granite they are any artist's delight. The joy of architectonics finds its source in an awareness of space. "Space is liberty to movement. That is its value to us and as

such it enters our physical consciousness". Architectonics is realised like a montage upon these large fields of stone. The treatment of wall, plays a major role in the formation of style, because upon its empty field is expressed the artist's creative sensibility. The availability of space, the nature of space to some extent guide its articulation. The walls use pilasters and pillars. These columns began to show different types as early as Narasiṃha I phase. The Varāha maṇḍapa showed vyāḷa based pillars and pilasters. The facades show siṃhapāda pillars. The Mahēndra Narasiṃha I types became slender, from geometrical symmetry they became curved and faceted. The embryonic seed floating aimlessly found a place during Narasiṃha I's reign and began to be nurtured. This nurturing is seen in his cave temples and monoliths at Māmallapuram.

The respective members of fully developed pillar and pilasters are the kalāśa and its moulding saduram , kal, taḍi, kumbha, padma, palagai, pāli, vīrakaṇṭha and poṭṭika all conjoined to one another organically.

The dēvakōshta , niches for the deities are also important features of the wall, they combine space framed and enclosed which enshrine divinities. Their placement

and ornamentation contribute to the visible formation of style.

The pillars and columns found expression in relief as early as the Nāgārjunakoṇḍa Amarāvati phase. Just as the complement parts of the South Indian vimāna are seen, so too do we see the pillars with pūrnaghaṭa bases. Ribbed ghaṭa or amalaka, shafts carrying kalaśa with pāli and palagai were common. These were crudely expressed in Mahēndra I period (fig.31), and also improved from there on from unadorned stumps to ornate ones. They were generally divided into three parts, the saduram on the top and bottom and the kaṭṭu in the middle. The kaṭṭu were fluted or had bevelled facets. The saduram was topped by a poṭṭika which was a massive block with angular or curved profile, proportionate to the pillars; called paṭṭa or taraṅga poṭṭika. The paṭṭa may or may not have meandering lotus or creeper design. This bevelled corbel or poṭṭika became the rule for Pāṇḍyan and Muttariaya temples, while the taraṅga poṭṭika was transient Cālukyan influence. The angular corbel sustained.

The upper saduram also gave way during this phase and the kaṭṭu extended into a padmabandha, palagai and

poṭṭika. The śāstric convention however, maintained that the termination beyond the capital 'vīraṇṭa should always be square. We are also aware of the medallion scheme followed in some of the cave temples that need not be discussed again; but they are a variation of saduram or square section of the pillar. The pilasters were usually in consonance with the pillars.

The Narasiṃha I Māmallā phase saw remarkable changes. The śāstric Brahmakanta, Viṣṇukanta and Idrakanta type of pillars are used with the pāli formed mandi and ghaṭa for the first time. A new innovation was the elimination of the basal saduram. It is at its earliest replaced by the Siṃha vyāla in the Varāha maṇḍapa (fig.32). "These newly introduced column types are in part generally related to those in the Deccani caves at Vākāṭaka, Traikūṭaka, Maurya, Kalacūri from 540-600 A.D...."(30). Tall and slender the Māmallā pillars are a take off from Mahēndra pilasters or kūdyastambha. Faceted with sixteen sides and circular they have corresponding pilasters with four sides. The changes that have occurred are in the embellishment and motifs like the madhya bandha, padmabandha, patralata or kodikkaruku on the corners of capital members. The poṭṭika in keeping with the slender pillars are smaller and proportionate.

The taraṅga poṭṭika continue till about Paramēśvara I. The Konēri maṇḍapa (fig.33) marks the transition from the Mahēndra to Māmalla style and thus combines both features. The columnation is wider and gets set for all the later temples. The uttira becomes thinner and thus carries a relatively proportioned taraṅga poṭṭika. The mukhamāṇḍapa shows pillars and pilasters of different shape width and features. Ornate with capitals and fluted corbels, they stand on unfinished 'ōma'. The mid shaft has a mādhya bandha, and the top padmabandha decor with padma patra above has a fine kodikkuruku. The lower part has muktasāra (mālasthāna). Above the padmabandha the usual parts of kalaśa, taḍi, kaṇṭha, kumbha minus the palagai and padma are seen. Sixteen facets come above the padmabandha and they preserve the cylindrical form because there is only a touch of flutings. With an eliminated palagai, these pillars and the new paṭṭa on the poṭṭika mark the transition (fig.30).

The inner pillars of the Mahisāsūramardini cave temple mark the characteristic Māmalla style, for they herald the vyāḷa bases. They show padma and madhya bandha the mālasthāna etc. The capital has the padma and palagai, the pillars are circular and fluted like the split bamboo 'Sundobhēda'. The ōma of one southern

most pillar has a bhadra pīṭha with mouldings. The poṭṭika does not have taraṅga ornamentation.

The Varāha:maṇḍapa, more or less follows these forms, but 'in antis' are found pillars and pilasters with 'lotus bases' - padma pīṭha, over which are sejant vyāḷa squatting on hunches. The vyāḷa are almost half the height of pillars adding to proud regality. The shaft above is decorated with mālasthāna and padmabandha. The poṭṭika is taraṅga without a median paṭṭa. An observation is the facades were conventional but interior pillars were subject to experiment.

This trend was carried over to the monoliths at Māmalla-puram. The pillars were siṃhapada. Viṣṇu or Indra kanta in the mukhamaṇḍapa, with corresponding half pillars of siṃhapāda Brahmakanta. The pilasters have Brahma and Viṣṇu kanta types. The poṭṭika was taraṅga. The wall sections were left either plain or with slit niches, which are shallow and often carry figures.

The Arjuna ratha has elegant vyāḷa figures over a palagai supported by Viṣṇukanta pillars in the salilantara sections. The west side has pillars supported by squatting lion. The Bhīmaratha also shows the Māmalla pillars, while

seen so the Dharmarāja has *simhapāda* pilasters. It is in the Gaṇeśa ratha we see beaked *vyāḷa* figures. The Rajasimha phase shows the emergence of the *vyāḷa* and *nāgapāda* pilasters specially at corners.

The Olakkanēśvara has *vyāḷa* based pillar pilasters and the recessed walls with *gajapāda*. The rampant *vyāḷa* are eyecatchers. The rearing *vyāḷa* and *nāgapāda* are seen in Alaivai-kōil, while the Gaṇeśa and Sahadēva ratha show in their mukhamāṇḍapa *gajapāda*, *nāgapāda* *mēśapāda*, *bhūtapāda* motifs. By the time we reach the Kāñci Kailāsa the cantoning pilasters carry rearing *vyāḷa*. Brahmakanta define main niches, while the karna show *vyāḷa* and *simhapāda*. The pillar shafts are both sandstone and granite. These are all seen more or less alike in the other Pallava temples.

During the close of Nandi II's reign some temples like Uttaramērūr Sundaravarada; Kailāsanātha and Vaikuṇṭha Perumāḷ near Kāñci, and the Saptamātrika and Varadarāja Perumāḷ at Alambākkam in Chōḷanāḍu show some significant departures. The walls have Brahmakanta or Indrakanta pilasters and pillars. The poṭṭika was changed it was bevelled and of the tenon type. They show a penchant for arabesques and motifs on the padmabandha and mālasthāna. The

Kailāsanātha has exquisitely fluted gourd like ghaṭa . The padmabandha was slightly recessed and the kalaśa above runs smoothly into the line of the shaft. The ardhamandapa has recessed padmabandha and kalaśa with inwards curves making it vase like. This gets a unique identity and articulates itself in the Early Chōḷa pillars with unsurpassed distinction (fig. .). The Varadarāja Perumāḷ in Alambākkam is called the provincial example partly in local Chōḷa and Pāṇḍyan style. The poṭṭika is in a mixed idiom. It is however, in the Candramaulīśvara in Brahmaḍēsāṃ we see that the carvings come closest to the Early Chōḷa examples. The pillars and pilasters have their upper shaft, mālasthāna delicately and sparingly carved. Corbels have a median paṭṭa and are Late Pallava in character.

The pillars and pilasters were more or less fully evolved and when we confront them in the Chōḷa temples they are already expressive of an excess which was being resolved by effective reduction but precise accentuation. The nature of emphasis and articulation began to change.

The dēvakōstha, niche for the image was a special place, imbued with sancity. Placed on the walls between pilasters they carry divinities, semi divinities, noble personage

or the major deity in his various forms. The earliest are bare, shallow, rectangular recesses with no mouldings. The emphasis was perhaps on the enshrined deity itself. Some times two split pilasters supporting a *poṭṭika* and *palagai* may accompany or frame it. The Mahēndra I cave temples have the two cut recesses to receive *dṽārapāla*. They are 'sham niches' because they lack some of those features which make up the *dēvakōshṭa*, Frame of jambs, sills, and torana topped by lintels, pilasters form a full *devakōshṭa*. The Varāha maṇḍapa has deeper sunken niches carrying *dṽarapāla* in semiprofile (fig.14). The layout of pilasters on each side and three intervening niches suggest the rock cut model. The near complete *dēvakōshṭa* is seen in the Trimūrti cave temple (fig.16). The eight armed Durga stands within a 'sthambha tōraṇa'. The pilasters are surmounted by a *makara tōraṇa* over the *palagai*. The *makara* have floriated *tōraṇa* tails curling and cascading out on the sides with small riders on the top. Issuing from *makara* mouths are floral arches thrown in loops forming wave like features. Inside the arches are carved figures. The trough of the loop is supported by a lotus bracket and above this is the *simhalaṭāṭa*. This according to Srinivasan "combine the form of the *sthamba* and *bhitti tōraṇa* in as much as it is on the wall and over the *kudya stamba*, or a *dṽāra*

śobha adorning a shrine entrance”(31). This is seen in the Dalavanūr Satrumalla entrance (fig.10). The Trimūrti cave temple has it gracefully positioned on the wall. To the Pallava this tympanum framing the niche was first of all an architectural lintel and beam with its original function. The rock cuts at Mām allapuram continue the shallow niches carrying divinities, adorers or dvārapāla. It is only when the central bhadra niche appears that it is properly decorated with the makara tōraṇa. The Draupadi ratha has a crowning makara tōraṇa (fig.18) carved during Paramēśvara I, while the northern Piḍāri ratha shows an exaggerated freely flowing one. The temples show elaboration to the excess. Apart from the articulation of shrine niches, they show a complete filling up of forms, going crazy over graphic narration. The Olakkanēśvara, instead of the bhiṭṭi tōraṇa on the dēvakōshta. shows projected nākulapāda with bhūta bases. Kāñci Kailāsa shows deep cut niches carrying dramatic forms, opulent tōraṇa of the makra, patra and ratna types. There are besides main niches, narrow slit niches carrying opulent figures of divinities and the semi divine. Powerful tōraṇa top the central niche. The Iravātēśvara in Kāñci shows much flourish in its tōraṇa over the central dēvakōshta. They are so broad and flowing that they eclipse the austere plan of angular architecture.

The IIInd phase temples show a relative reduction in the finish and finesse of dēvakōshta tōraṇa . There is a general impoverishment of ideas and deterioration of style. The niches again become shallow. One example we can take is the pakśasila balustrade in Uttaramērūr (fig.35'), where enshrined divinities are capped by shallow tōraṇa . Squat makara curled up frigidly, let emerge from their mouths a loop surmounted by a square top within which is a vyālamukha. The saturation point had reached.

iii) THE UPPER TALA (Superstructure)

Above the walls rise the superstructure. The Amarāvati relief shows a Bōdhi tree surrounded by double storeyed malika with projecting alpanāsika on each storey (fig.36). Another shows an upper hāra with two projecting simha pañjāra with amalaka like capitals (fig.9). The Mitta-vindaka Jātaka shows us different roofs, circular, rectangular śāla, kūta etc. These three forms ring the storeys (tala) of the South Indian vimāna as the kūta, śāla pañjāra elements associated with the hāra enclosure. Another fragment from the Madras Museum shows us a kapōṭa, vēdika, alinda nāsika, a kūtagrha, an astāsra śikhara and stūpi (fig.4). The relief from Nāgārjunakoṇḍa shows from socle to spire the component

features like the kapōṭa over palagai, with alpanāsika and on this recessed course an antari with a projected moulding ālinga above. At the end of this is the parapet, and at this corner appears the square vimāna. There is also a grīva like structure and an aśtāsra śikhara with a stūpi. This could be the wagon vault śikhara which later became the central śāla of the hāra parapet in most vimāna. The wooden prototypes were replaced naturally by stone.

The Dharmarāja ratha shows individual features like the vēdika railing, alpāsika, mahanāsika etc. as seen in the sabhākāra temple at Jagayyapeṭa (fig.8). The Sannati relief in Gulbarga museum shows a harmya with two gavākṣa and jāli door on the 1st tala. The upper storey sabhāśikhara is only found and very rarely too in Naṭarāja or Saptamātrī shrines.

Over the poṭṭika and above the uttira rises the vājana moulding and kapōṭa, over this is the prastāra carrying the upper tala. K.R. Srinivasan believes that the rock cut architecture was not architecture in intent but sculpture on a grand scale. It copies and faithfully reproduces in stone every aspects of its wooden prototypes, "even those members which in monolithic are functionless, such

as ribbing below the kapṭha, eaves, nails with boss head, the timbering and curved rafters below roofs, domes and vaults such imitative reproduction of the details of the timbering is found for more than thousand years This tendency is carried beyond even to structural temples but the exact imitations changed in course of time into conventional motifs such as the projecting ends of the timber beams and rafters in brick and timber temples decorated with vyāla hamsa or makara transforming into decorative friezes..... the bhūtamāla , padma and other bandha . The metal ringing of wooden pillars are imitated in koṇapaṭṭa simulating the bracings of the roof planks or eaves boards"(32).

The Pallavas reproduced most of these wooden counterparts. The elaboration of kūta and hāra began to be seen in the Mahēndra I phase with strings of miniature shrines, square in plan with domical roofs, oblong, wagon vault type etc. All these are interconnected by a parapet like hārāntara, specially emphasised in Māmalla phase. Such features as hāra of kūta and sala pañjāra are also commonly used in the upper tala of mukhamāṇḍapa of later temples. The kūdu or alpanāsika as ornament never faded.

The Mahēndra I PañcaPaṇḍava cave temple shows the crudest and slightest of kapōṭa, barely cut. The Dalavanūr (fig.10) kapōṭa is a fine example of a full kapōṭa with kūdu or alpanāsika and simulating a terrace over it. Proportionate kūdu arches with gandharva faces and the shovel shaped finials (śakti-dvaja) embellished with scroll work is remarkable for its clarity. The flourish of the foliate mukhapatti with two outward facing makara, rosettes in the arches are delicate craftsmanship in a relatively formative and new stage. The mouldings above the kapōṭa are the ālinga and antari simulating the terrace.

The transition phase of Mahēndra-Māmallā temples show a marked development. The hara with cloister like hārāntara connects a series of śāla which form an enclosure like parapet over the flat edge roof of the maṇḍapa. This shows us a central open court on the roof, 'candra-śāla' or a hall (harmya) which is surrounded by a series of śāla and kūta connected hārāntara. Above the taraṅga potṭika is thus seen an elaborate prastara.

The Konēri maṇḍapa fig.(13) shows an elegant kapōṭa carved with a fine set of kūdu arches with a row of miniature shrines on top. Five projecting śāla with six lengths of hārāntara connecting them is seen. The

śāla have an oblong masurka showing the vyālāvāri and the projecting makara heads at corners. There is also an oblong recessed grīva over it carrying a śāla śikhara with a medium and frontal alpanāsika ornamented by a tōraṇa arch. Four stūpi top the śāla ridge. The hārāntara have each two frontal alpanāsika and makara arches with the usual shovel shape finial. The ridges of the hārāntara also carry stūpi. There is a full fledged vyālāvāri below the kapōṭa. The ten nāsika or kūdu on kapōṭa match as a pair corresponding to the projecting śāla over the aṅkaṇa (bay). A brand new feature is the underside of the kapōṭa which is well channelled and has a valabhi carrying a frieze of haṁsa on a vājana plank. The kapōṭa corners are worked with scroll patterns representing the corner koṇa-paṭṭa. This point is supported by rampant vyāla on the palagai of the pilaster. They represent the koduṅgai or mṛnālīka. The vyālāvāri over the shrine are in pairs of two facing the centre.

The Varāhamaṇḍapa (fig.14) has over the poṭṭika the uttira, vājana and vallabhi with a decorated frieze of haṁsa alternating with foliage of no commendable finish. The kapōṭa which curves over this has three pairs of kūdu arches, with each pair coming over the aṅkaṇa

or bay formed between the pillars and pilasters. The cavities are filled with lotus instead of gandharva faces. A candramaṇḍala decorates the lower ridge of kapōṭa. A vyālāvari is seen above the kapōṭa and then the rows of hāra of three śāla coming directly over the aṅkaṇa, between the columns below, and corresponding to the kūdu arches of kapōṭa. Connecting these is the wagon roof coping or roof, and two lateral openings of alpanāsika, narrow vertical openings surmounted by the typical kūdu shaped arches. The hārāntara which is recessed comes directly over the corbels between the śāla. Śāla also have alpanāsika in the front; and over the ridge of the śikhara are two stūpi placed between the two shovel headed finials of their mukhapatṭi. The hārāntara have a single kalaśa between the finials of the alpanāsika. The śāla and hārāntara form a rhythmic pattern besides connecting each other. The extension of hāra members usually seen over the prastāra along the edges of the roof of maṇḍapa is seen in Vijayālaya Cōḷiśvara of the Muttaraiyaṛ (fig.41) and some Cālukyan examples.

There is another vallabhi with bhūtagaṇa and haṁsa. Besides this there is a embossed scroll work in the koṇapatṭa following the patent of wooden prototypes.

The Trimūrti cave (fig.16) has a similar valabhi but with an additional frieze of smaller lions at the ends of the frieze. Here the projecting kapōṭa shows two central kūdu and one on each side of the entrance pilasters, while the recessed sections show one each framing the entrances on either sides. The koṇapaṭṭa is embossed. The vyālāvari above has projecting makara heads in the corners, above which are a hāra of two karna kūta one at either extremity corresponding to the corner of the vimāna and a central śāla, over the main entrance. All these are connected by the necklet hārāntara. The karnakūta have a single stūpi and the śāla two. The shovel faced finial mukhapaṭṭi and kūdu are all present. The Pañcapāṇḍava and Trimūrti caves thus introduced for the first time the kūta in the hāra. The unique feature of the Pañcapāṇḍava, however is the vyāla with a rider atop the pillar capitals taken from the Cālukyan examples. The other feature, of the excavation plan of the shrine surrounded by a double pillared cloister is assigned for such reason in the reign of Paramēśvara I.

The most finished Ramānuja maṇḍapa shows for the first time a bhūtāvari in lieu of the popular haṁsamāla. They carry a continuous rope like garland falling in loops. The seventh gana has an elephant suggesting

Gaṇeśa leader of gaṇa , and this could be the earliest representation of Gaṇeśa as a minor Pallava deity. The tenth gaṇa could be Nandi, because of a full face. The koduṅgai imitates the wooden ribbing supporting the kapōṭa. This feature again appears for the first time in Pallava cave temples but found in earlier Cālukyan cave temples. Below the kūdu arches are jalaka or trellis work in the oblong space, which are like vātāyana . In place of the regular shovel shape finials, only sockets are seen for insertion of separate pieces. Even ridges of śāla and hārāntara cloisters have holes to receive stūpi .

The component parts like the hāra, śāla and kūta had made an advance in Narasiṃhavarman I's time. However, the first example of the ekatala type of vimāna is first seen in the Rāmānuja cave and Arjuna's penance in the Māmallapuram reliefs fully evolved with the śadvarga. Taking this relief and the superstructure of the ratha we observe from the haṃsa or bhūtamāla above the poṭṭika, the kapōṭa with alpanāsi with kinnāri heads in the gādha cavity, and vallī maṇḍala in corners. The hāra has karnakūta and series of śāla connected and separated by the hārāntara. The number of śāla depended on the width of the prastāra and naturally the vimāna. There are gr̥hapindi walls on upper tala which also

have niches with figures. The upper tala repeats the hāra with karnakūta and bhadraśāla, this is now in diminishing succession. Last of all is the grīva with vēdi, has props imitating wood in the cardinal points. The śīkhara that cap the grīva are usually Viṣṇucchanda or Brahmachanda. The kūdu or nāsi and the mahānāsi are shovel shaped. The edges of the śīkhara and the finials etc. are all ornamented.

The Arjuna ratha (fig.19) thus is a dvitala vimāna with the palagai supporting vyāla, which appear to bear the roof weight. They are present in the salilāntara sections. A prastāra with discrete bhūtamāla a kapōṭa with nētranāsi and kinnāri heads are prominent. There are four karnakūta and a śāla linked by the hārāntara. The recesses here have nētranāsi with kinnāri heads. The haṁsamāla shows them in the typical Pallava convention - breast wise below the kapōṭa of gr̥hapindi. The hāra above has one pañjārakōshta in the recesses. The grīva is octagonal Viṣṇucchanda. The bosses are ornamented and the soffit of śīkhara carries a haṁsa māla below it.

The Dharmarāja (fig.20,37) is tritala with anarpita hāra in each tala. The tala here are functional and square

while grīva and śīkhara are Viṣṇucchanda. This is thus called the Viṣṇucchanda Miśraka vimāna. The lower tala have an ālinda that separates them from the tala harmyā. Besides the regular hāra features, the west side prastāra introduces the pañjāra for the first time. This is also seen in the second tala of Nakula Sahadēva ratha. A note worthy feature is the telescoping of adjacent members on the corner of the hāra over the western mukhamaṇḍapa. This gives a perspective appearance. There are praṇāla with monkeys and bhūta on the kapōṭa between the nāsi above the first tala. All karna have bifacial kōshta niches. The projecting and recessed kōshta have icons which appear misty and semidivine. The important aspect of this ratha is the play of projection and recession, focussing and telescoping. The diminishing tala show the balance already achieved in the South Indian vimāna, and is referred as "one of the architectural achievements of the Pallava period. The rhythm of its receding tala has never been excelled, nor has the marvellous śīkhara which gracefully tops it. Its strong timber look combined with the high finesse of its stone carving, its perfect proportions and shapeliness of each component - generates a sense of architectural transcendence that goes well beyond its formal origins"(33). The feature that catches up is the pañjāra - which is

also seen in the Nakula Sahadēva ratha and in the hāra strings of the vimaṇa. Its presence indicates the late Māmalla style moving into and completed during Paramēśvara I phase. This ratha is a ekatala cāpa, dviyāsra or gajaprsthā vimāna. The Gaṇēśa ratha which is dvitala shows us miniature models of tall column like vimāna in the end arches. These become the precursors of the vṛttasphūṭita element later. The other interesting feature in this ratha also called the Atyantakāma Pallavēśvaram is the row of nine stūpi and the lalāṭa nāsi on the śāla ends carrying on ornate mukhapatṭi.

The Northern Piḍāri ratha shows us another element, which is an architectural resolution. It shows a smaller gr̥hapīndi leaving barely any room for the hāra; and also eliminates it. This elimination of hāra at gr̥va level becomes a fixed feature in the subsequent temples.

And thus we become familiar with the components of architecture. Variations in proportion, size and placement played a considerable role. The first phase structural temples show that śāla are generally longer and the space between them lesser. The hāra for the anarpita temple is altogether dropped. In the uppermost tala are found the bhūtanāyaka or vṛsa figures in the prati

corners. Grīva dēvata or vimāna dēvata appear for the first time at cardinal points in larger temples. The grīva for the octagonal śikhara became prismatic as in the Alaivai-k-kōyil and minor shrines in the Kāñci Kailāsa group. In such cases the grīva dēvata were omitted.

The stūpi too tended towards elongation. They lacked finesse. In a nutshell "in this period there is both innovation and elaboration, but also a little decadence in terms of finish and finesse. Some of the clarity of shapes and perfection in their articulation found in the earlier phase is lost. While the temples reflect in their elaboration, the settled nature of the Pallava court, they lost the purity of expression found in the earlier phase"(34).

A chapter devoted to the origins and concepts of architecture necessitated a survey through the 'Pallava'. The heritage is not Pallava, the vehicle though is. It cannot be denied that the earliest examples and almost complete evolution occurred in this period of history. Understanding them as completely as possible, makes it easier for us to draw upon and withdraw from those aspects we shall take up in the following chapter. We don't begin by groping in the total dark. We work

backwards and look for both facts, innovations, changes and how they affect the emergence of a specific style or idiom.

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