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## MADRAS, INDIA

## PLENARY SESSIONS ART AND ARCHITECTURE

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#### ART, AND ARCHITECTURE

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In all major civilizations of the world art has been one of the primary media through which the creative urge and genius of the people have been succinctly expressed. The term art is so comprehensive in its connotation that it includes in its fold different fields of human enterprise. But in our consideration here its meaning is restricted to the fields of architecture, sculpture and painting, the three main channels through which both the artistic mastery and profound philosophical truths of ancient India have been expressed. The Tamil country, has been throughout the successive historical periods, the meeting ground of many an artistic motif, design and norm so much so that in her sculptural and architectural contributions the harmonious blending of diverse regional idioms are manifestly evident. It is not possible to recount in entirety the history of the development of Taniil art from its evolutionary beginnings to its consummation and final exhaustion within the limited time at our disposal; what is attempted here is only a panoramic survey of the salient features of Tamil art. It is necessary here to point out that the name Tamilnad in our discussion does not mean the modern State of Madras but refers to the areas under the cultural hegemony of Tamil-the area roughly corresponding to large parts outside it, and adjoining it.

Before sketching in outline the evolution of architecture it is necessary to acquaint ourselves with the major types of extant structures. These basic shapes are fivefold, viz., square (*caturaśra*), rectangular (*ayataśra*), elliptical (*vrittayata*), circular (*vritta*) and octagonal (*aştaśra*). Generally speaking the plan of the temple was conditioned by the nature of the consecrated deity. The shrine of the reclining Ranganatha, for example, can only be rectangular. The basic shapes are amply reflected in the super structure of the *vimāna*. Though square and rectangular shrines are frequently met with, circular and octagonal shapes are very rare. However these forms are represented in the *sikhara* of the *vimāna*. The apsidal form, a derivative from Buddhist architecture, was popular up to the 10th century in the Tondaimandalam after which it declined in usage.

Mention should also be made here of the temples which have more than one shrine in the vertical order. This is to be found in a handful of Vaisnava temples as those at Kāncipuram. Uttiramērūr. Madurai, Tirukkōştiyūr etc. Three shrines, one above the other, are found in these and are intended for the seated, standing and reclining forms of Visnu.

Unlike other parts of India the architectural history of the Tamil country starts only with the beginning of the seventh century A.D., the monuments built before that period having perished. In early Tamil literature we hear of such structures as  $k \delta \eta i l$ ,  $m \bar{a} dam$ , nagaram, palli,  $p \bar{a} li$ , etc., which are apparently references to temples or religions edifices. Presumably they were built of impermanent materials which have succumbed to the ravages of time.

The earliest extant monuments in the Tamil country are the rock-cut caves scooped out under the Pallavas, and following them by the Pandyas, Muttaraiyars, and Atiyas. In his inscription in the cave of Laksitāvatana at Mandagappattu. South Arcot district Mahēndravarman I (610-630 A.D.) declares that he caused the construction of the temple for Siva, Vișnu and Brahmā without the use of conventional building materials like brick. timber, metal and mortar ; and the tenor of the language has been taken to indicate that the king was introducing a new mode of architecture by scooping out the cave. Many other cave temples are definitely attributable to Mahēndravarman on the authority of his inscriptions in them. These include the excavations at Pallāvaram, Mahendravādi, Māmandūr, Tiruchirāpalli, Siyamangalam and Dalavānūr. The Vasantēśvaram at Vallam was also excavated in Mahendravaraman's reign by a feudatory of his. Besides these caves of definite authorship, those at Kuranganilmuttam, Vilappäkkam, Aragandanallür and the Rudravāliśvara cave at Māmandur are stylistically attributable to the period of Mahendravarman. These caves of Mahendra are simple in plan and consist of a mandapa with one or a few shrines. The sculptural decoration of the caves is inconspicuous. The pillars in them are equidistant and have square sections both on base and top with the portion in between chamfered octagonally. In the square section are seen delicate carvings of lotus medallions. The pillars and pilasters carry on top massive corbels with beams.

This 'Mahēndra style' was continued by his son and successor Māmalla, the famous Narasimhavarman I, who, however, introduced certain variations in some of his caves. In these the entablature is almost completely finished unlike in those of the Mahēndra variety. Besides kūdu arches in the cornice, it carries sālas, karnakūtas and alpanāsikas. The pillars in Māmalla's caves are not only taller but also slender than those of his father. The strutting figure of a lion or vyālu as the base of the pillar is a notable feature. Again in Māmalla's caves one can also find large bas-reliefs on walls in striking contrast to their plain nature in all but one of Mahēndra's caves. The Konērimaņdapam, Varāhamaņdapam, Mahiṣāmardanimaṇdapam, Trimūrti cave, Ādivarāha cave, Rāmānujamaṇdapam, etc.—all at Mahābalipuram—are typical examples of the Māmalla types of rock architecture.

The Pandvas, who were ruling in the extreme south of the Tamil country, appear to have soon adopted the rock-cut technique and developed certain interesting variations in their excavations. It is possible that the cave at Pillaiyārpatti is one of the earliest Pāndya attempts in the rock medium as evidenced by the archaic palæography of the inscription in Vatteluttu characters in it. The Siva cave shrine at Malaiyadikurichi is assignable on the basis of an inscription to the second half of the seventh century and the Narasimha cave at Anamalai and the Subrahmanya save at Tirupparankunranı are on the same ground datable respectively to 770 to 773 A.D. At Tiruttangal. Pirānmalai, Kudumiyāmalai and Sittannavāsal are to be found other caves of the Pandyas. Though 'similar with Pallava caves in plan and design the Pandya examples differ from them in their adoption of certain Cālūkyan features such as the introduction of the rock-cut linga and Nandi and sculptural representations of Ganesa and Saptas mätrkas. The pillars are large and remniscent of those of the Mahendra variety with corbels generally with a plain level. In this movement of scooping out live rocks for divine abodes minor dynasties like the Atiyas and Muttaraiyars also participated, though stylistically, their excavations are much akin to those of their political masters. The cave at Nāmakkal is evidently an Atiya enterprise while Muttaraiya hand may be seen at Tiruvellarai, Nārttāmalai, Kunnāndārkõil etc.

Under Narasimhavarman I Pallava, rock-architecture took a new turn. Besides cutting into rocks for caves, attempts were made to cut-out monoliths out of rocks. The rudiments of this practice are to be found in the carved-out stupas in the caves of Western India and the vimāna-form in the Tawa cave at Udavagiri but it was at Mahābalipuram under the Pallavas that it found a full and eloquent expression. Architecturally they depict the external aspects of contemporary brick and timber structures. There are as many as nine monoliths at Mahābalipuram of which the five, named after the Pandavas and Draupadi, are a wellknown assemblage of continguous excavations, the other examples are the Ganesa ratha, Valavankuttai ratha and the two Pidari rathas. As they represent varying architectural designs they are of primary importance for any study of the plan and different zones and the details of the vimānas. The Dharmarājaratha is three-storeyed with a square vimāna and an octagonal dome. Though the Arjunaratha is similar to this it is two-storeved. The Bhimaratha has a wagon-top roof and is single-storeved unlike the Ganesa ratha, another example of wagon-top roof, which is double-storeved. The Draupadiratha is hut-shaped and is square in plan and its roof is domical. The Sahādevaratha represents the apsidal form with its back resembling that of an elephant, a feature high lighted by the carving of a huge elephant by the side of the monolith. The only non-Pallava monolith in the Tamil country is Kalugumalai which was cut-out under the Pandyas. This has been cut out, like the Rästraküta monoliths in the Deccan, by entrenching all round and not by free cutting of standing rocks as in the Pallava domain.

Though the rock medium appear to have continued for some more time it was soon replaced by structural temples. This movement, as available evidences indicate, appear to have first started under Narasimhavarman I's grand-son Paramēśvaravarman (669-691 A.D.) though it is not unlikely that the practice was still older. A few pillars in the typical Mahēndra style, one of them with an inscription of Mahēndravarman I, found in the Ekāmranātha temple at Kāňcipuram seem to suggest that even at the beginning of the seventh century structural mandapas were built. The presence of Pallava pillars at Sivanvāyil, Kūram, Vāyalūr, Tiruppõrūr etc. is enough to confirm this.

The Vidyavinita Pallaveśvaragriha at Kūram built by Paramesvaravarman I is an early structural edifice. The provision of a series of vertical and horizontal slabs instead of a full *bhitti* is an interesting and early feature in this temple. While this is a small temple and reflects the modest nature of the enterprise, the temples of the next reign are large in size, elaborate in plan and rich in architectural and sculptural decorations. With the accession of Narasimhavarman II Rājasimha the history of Pallava architecture enters upon a new and eventful phase. While the temples of Kailāsanātha at Kāñcipuram, Tālagiriśvara at Panamalai and the Shore temple at Mahābalipuram are indisputably assignable to his reign on epigraphical grounds, a large number of other smaller temples are also stylistically akin to them. The temples of Vaikuntanātha, Mukteśvara and Mūtangeśvara at Kāñcipuram are said to be slightly later and belong to the reign of Nandivarman Pallavamalla.

The Kailāsanātha is four-storeyed and is an example of sāndharaprāsāda containing two walls providing an ambulatory. The storeys are decorated with architectural designs like kūtas, kostas and paājaras. The pillars in structural temples are with rampant lions generally and with elephants, nāgas and bhūtas at times. Niches are to be seen in both the rock-cut and structural temples and have a makaratoraņa decoration on their top, the makaras in them having floriated tails overflowing on the sides. The corbels are generally curved in profile with the taranga (wave moulding) ornament and a median band. The gopuras are absent in these early temples. In the Kailāsanātha at Kāñci and the Shore Temple at Mahābalipuram there are faint but unmistakable suggestions of gopuradhvāras which were to evolve into towers. Another feature of these early structural temples is the almost prodigal sculptural embellishment of the exterior walls. The carvings are invariably those of deities, a few of which appear to be fresh inceptions from the  $C\bar{a}|\bar{u}kyan$  area.

The Colas who supplanted the Pallavas about the middle of the ninth century as a political force continued the latter's artistic activities. For about five centuries a large part of the Tamil country besides peripheral regions in contiguous areas in Āndhra, Karnātaka and Kerala were under their sway which they studded with hundreds of temples. On the basis of certain accepted nótions regarding the evolution of temple architecture and on the authority of numerous inscriptions it is now fairly possible to determine the dates of most of the Cola monuments. Though the periodisation of South Indian art-history is even now a subject of debate it is conceded by most scholars that the Cola temples are broadly divisible into three groups : the first group belonging to the period from the accession of Vijayālaya to the accession of Rajaraja I (i.e., 850-985 A.D.); the second group assignable to the period from the accession of Rajaraja I to the accession of Kulöttunga I (985-1070 A.D.); and the third group comprising the period from the accession of Kulöttunga I to the decline and fall of the Cola empire under Rajaraja III and Rajendra III (1070-1270 A.D.).

The temples of the first group are many which in stylistic characteristics break away from the structural temples of the Pallavas. In the Pallava temples the lowermost tier of the vimana is extended to the vestibule in front of the shrine while this is not found in early Cola temples, the only exception being the Vijayālayacoliśvaram at Nārttāmalai, which according to recent researches is not a Cola but a Muttaraiya edifice. The torus moulding in the basement which is chamfered in Pallava temples continues to be so in the Cola period for sometime but soon gets a rounded shape. The cornice in Cola temples is no longer a projecting tier as it is in Pallava monuments but gets a flexed shape. The old lion and vyāla motifs in pillars are also dispensed with though they linger for sometime in a few temples. Further the corbels in pillars get an angular profile and are bevelled resulting in a triangular tenon-like projection. The absence of extravagant sculptural decoration on the exterior of the shrine walls is another distinguishing feature.

Though typical early Cola examples are numerous special mention must be made of those at Kilaivur, Śrinivasanallur, Kumbhakonam, Erumbür, Pullamangai, Puñjai and Kodumbālür. The introduction of subshrines for attendant divinities (parivara-devatas) noticed in these temples reveal the elaboration and development of the temple complex. In fact the beginnings of this practice are to be discerned even in the latter Pallava temple of Virattanesvara at Tiruttani built under Aparājita. This temple, though Pallava in name, in Cola in design and style and chronologically almost coeval with some of the Cola monuments enumerated above. The parivara shrines, usually eight in number, were meant for attendent deities like Ganeśa, Subrahmanya, Sūrya, Candra, Saptamātrkas, Jyestha, Candikeśvara and Nandi. The gopuras of this period continue to be inconspicuous. the *cimānas* dominating the temple complex. Generally speaking temples built under Äditya and Parantaka contained only three niches in the shrine walls, one on each wall, and two niches in the walls of the ardhamandapa again one on each wall. While the niches in the southern and northern walls of the ardhamandapa, carried respectively carvings of Ganesa and Durga, those of the main shrine were intended for Daksināmūrti and Brahmā. The niche in the rear wall offered scope for variation the enshrined deity being either Lingodhbhava or Visnu, Harihara or Ardhanāriśvara. But even in two very early temples-those at Srinivasanallur and Kumbhakonam-the tendency to multiply the niches is found, the additional niches carrying what looks like portraits. This tendency has been developed in the temples built by Sembiyan Mahādevi, mother of Uttamacola at such places as Tirukkōdikkāval, Sembiyan Mahādevi, Ānāngūr, Āduturai, Tirunaraiyür, Kuttālam, etc., where the additional niches carry such iconographic types as Natarāja, Bhiksātana and Ardhanāri besides Agastya.

These early Cōļa architectural traditions are carried to those of the later Cōļa period by the temples built under the illustrious Rājarāja and his son Rājēndra. Many are the extant examples assignable to this middle phase, the most famous among them being the Brihadiśvara temples at Tanjore and Gangaikondacōļapuram. Other temples of this period are those at Tiruvadi, Mēlpādi, Tiruvalanjuļi, Tirumalavādi, Tiruvaranguļam, Dādapuram, etc. In most of these temples the basement is ornamented with pilasters which carry a cornice. The walls have a greater number of niches and a semi-circular arch (*tiruvācci*) the centre of which is identical with that of the  $k\bar{u}d\bar{u}$  which appears beneath the architrave and over the niche. The introduction of the *kumbhapañjara* in between the niches is another feature.

The Tanjore temple is undoubtedly the grandest achievement of the age. It was more a monument of triumph than a strict example of temple architecture. It is in this temple that one notices for the first time two *göpurus* oriented in the same direction. They are architecturally coeval with the main *vimāna* and are referred to in inscriptions as  $R\bar{a}jar\bar{a}jan$  *tiruvāšal* and *Kevaļāntakan tiruvāšal*. In spite of the massive size of the *göpurus* the *vimāna*, rising majestically to a height of 190 feet, continues to dominate and it is only in the subsequent period that a change in the gradation of magnitude takes place.

The multiplication of *parivāra* shrines and the introduction of a separate shrine for the goddess are the two significant changes in the temple complex effected during this period. Even in the Tanjore temple the Devi shrine is not contemporaneous with the main cella but was built later. The earliest Devi shrine which appears to be definitely chronologically coeval with the main shrine is the one at Gangaikondacōlapuram. The Devi shrines, known as *Tirukkāmakköţiams*, were thus largely a feature from the reign of Rājēndra.

In the temples representing the final phase of Cola architecture a discernible maturity of style is evident. Notable examples of them are to be found at Däräsuram, Tribhuvanam. Chidambaram and Jambukeśvaram. Of the stylistic improvements made in these temples mention must be made of the torus moulding in the basement which is rounded and has a smooth surface, though in a few cases it is ornamented with vertical grooves or ribs. The makaratöranas become tall with narrow reverse curves on each side : the kumbhapañijaras are also developed and carry on top over the abacus the superstructure of a pañjara. The phalaka in the pillars are thinner than those of earlier periods and the padma below it which is inverted and smooth in early temples have now petals. The pillars in the mandapas have attached pilasters on their sides, known as Aniyottikäl.

Perhaps the most distinguishing feature of the temples of the late Cola phase is the increased height of the  $g\bar{o}puras$ . The five storeyed  $g\bar{o}puras$  at Tiruvenkādo, Uyyakondān-Tirumalai, Tiruccengāțţāngudi and Kumbhakōnam must belong to this phase. Besides the  $g\bar{o}pura$ pillared mandapas were also built with in the temple complex some of which were shaped in the form of a chariót by the addition of wheels and horses solid elephants.

Generally speaking the characteristics of the early and late Cola temples are shared by Pandya monuments of the respective periods, though minor variations are present in them. The next stage of development is, however, seen only in the temples built under the Vijavanagar rulers. The Vijavanagar kings not only built many new edifices, but made many additions to the already existing temples. Such additions are to be found in many places the most noteworthy among them being Kancipuram, Tiruvannamalai, Chidambaram, Kumbhakonam, Madurai, Śrirangam, Vellore, etc. The mandapas become large and conspicuous adjuncts during this period due to the multiplication and elaboration of religious rituals and ceremonial Kalyāṇamaṇḍapa, Sopānamaņdapa, Davanaobservances. The mandapa, Snāpanamandapa, Alankāramandapa, etc., are the usual mandapas in addition to the ardha, mukha and mahā mandapas of earlier times. Some of these mandapas are, however, not entirely unknown under the late Colas. A few of them were built outside the temple circuit but not much away from it. These mandapas are essentially pillared halls, open or closed, and contain either a shrine or a raised platform over a huge tortoise either in the centre or behind. They are also notable for their pillars which are rich in sculptural work and to which are attached riders on horse or lion or yāli. The fluted type of simple pillars becomes rare and huge and monolithic ones are often seen. They have ornamental brackets forming their capitals below each of which is a pendent. This pendent has been in many examples elaborated into a 'volute which terminates as an inverted lotus bud '.

The niches in the walls are not surmounted by *toranas* as in Pallava and Cōļa temples but have a simple  $pa\bar{n}jara$  design over them. And what is more the niches are empty, without any image in them. Their old functional character has been lost and they remain a simple ornamental design on the exterior of the wall.

The increase in the height of the  $g\bar{o}puras$  and in the number of  $pr\bar{a}k\bar{a}ras$  is yet another feature. The  $g\bar{o}puras$  are generally sevenstoreyed and are large and tall, especially in the Pandya region. The most typical  $g\bar{o}puras$  of this period are tobe found at Kañcipuram, Srírangam, Chidambaram and Tiruvaṇṇāmalai. These are rich with architectural designs like  $\hat{s}\bar{a}las$ ,  $karpak\bar{u}_{lis}$  and  $alpan\bar{a}sikas$  rather than sculptural decoration.

The Vijayanagar mode of architecture was continued by the Nāyak rulers of Madurai. In the temples renovated or rebuilt by them as the ones at Madurai, Rāmeśvaram and Tirunelveli the corbels in the pillars show at their ends a plantain-flower like motif. The *gōpuras* continue to be slender and tall, the typical example being the Vatapatrasāyi gōpura at Srivilliputtūr which is eleven-storeyed. The corridors in these temples, unlike those of earlier periods, are provided with ceilings which are at times painted.

#### SCULPTURE

The art of sculpture like that of architecture has a continuous history in the Tamil country and during the course of its development it has, even within the limited geographical area of Tamilnad, shown more than one regional trait. As the advent of stone for purposes of art does not seem to antedate the beginning of the seventh century, t is likely that in the early centuries images were made of wood or stucco. In a few of the South Indian Temples the main deity in the sanctum sanctorum even today is made either in wood or in stucco and this probably is only a survival of the old practice. Due to their impermanent nature such images have not survived as a result of which it is not possible to trace the sculptural history of the region from the period of the Sangam classics in the light of extant examples.

It is in the early rock-cut caves of the Pallavas that one encounters for the first time earliest extant specimens of Tamilian stone carving. But even here, with the only exception of the Lalitānkura Pallaveśvaragriha at Tiruchirāppaļļi, the other rock-hewn caves of Mahēndravarman I are devoid of much plastic decoration. Sculptures in these caves mostly consist of a pair of *dvārapālas* guarding the entrances and almost invariably leaning on their clubs; and a glance of their types in different caves would indicate the successful attempts made by the Pallava craftsmen in perfecting physiognomy. When compared with the simplicity and paucity of sculptures in the Mahēndra type of caves, the carving of many figures in the caves and monoliths of Narasimhavarman I and Parameśvaravarman I is striking.

Stylistically Pallava carvings are characterised by a naturalism in pose and an attenuated physiognomy. In fact the human figure is the pivot of Pallava sculptural art. In it the development of lines into cóntours and the manner in which the cóntours merge with the lines can be seen. By ignoring smaller anatomical details the Pallava craftsman have idealised and generalised human anatomy. A taller and somewhat oval-shaped face, double chin and flat nose are the major traits. Ornamental decorations and costumes are kept to the minimum. In a large number of specimens the yajitopavita is carried over the right arm though this is not a much dependable feature for purposes of dating. When the images represent deities they are endowed with their weapons and attributes which are either held by them naturally in hands or placed immediately above them.

The different iconographic types met with among the Pallava images indicate the prevalence of syncretistic trends during the period. The deities shown include Harihara, Ardhanāri, Trimūrti-Ekapada, Subrahmanya as Brahma-Sasta, etc., not to mention the different forms of Śiva and Viṣṇu. It is somewhat strange that Gaņeśa makes his debut only in the structural temple of Rājasimha at Kāñcipuram, his images at Vallam and Mahābalipuram being probably only later additions. His cult, along with that of the Saptamātrkas appears to be a Cāļūkyan derivative.

When the Pallavas were engaged in such a prolific sculptural activity in the Tondaimandalam and in the regions immediately to the south of it the Pāndyas in the extreme south were busy making their own contributions. Stylistically and in decorative details, in conception and in execution, the Pāndya carvings are not much different from the Pallava reliefs and appear to be just another edition of the Pallava art though in the realm of iconography it seems to strike a slightly different note. The provision of a *mqdanga* instead of a *cinā* for Vinādhara Daksināmūrti in the monolithic excavation at Kaļugumalai and the decoration of Vișnu with *caunavira* an ornament usually associated with goddess and minor gods only- at Kunnakkudi are instances in point.

With the revival of the Cola empire under Vijayälaya and the building of numerous structural temples throughout the Tamil country, we enter upon a new era of sculptural activity. In some of the earliest Cola and Pändya temples sculptural decoration is restricted and the value of plain space on walls is appreciated. But this was only a passing phase and the tendency to decorate niches and other parts of the shrine with radiant carvings asserted itself soon.

Sculpture under the Cōlas is relieved of its architectonic context and it may even be said that it is "subsidiary to architecture". The style may be characterised as "fluent" thanks to the continuous experience in the art of stone cutting from about 600 A.D. The striking attenuation of the Pallava period is replaced now by very subtle rhythmic quality and what is more Cōla sculptures are pleasingly delicate in outline. A flat upper torso, protuberance on the knees and a soft and supple form are some of the notable physiognomical characteristics shared by a large number of Cōla specimens.

The humanism and freedom of pose are the two significant features that elevate  $C\bar{o}|a$  carvings to the status of great art. They are endowed with naturalistic and elaborate treatment of decorative details. While these details are suggested in Pallava images by soft lines which often merge in the modelling they are in **bold** and emphatic lines in the carvings of the period of  $C\bar{o}|as$ . Mention should be made here of details like *kaţisūtra*, *hāra*, *kanţi*, etc., which are recognisably more pronounced in early  $C\bar{o}|a$  images. Again it is sculptures of this period that of *skandamālu* (shoulder tassel) appears for the first time.

It is rather difficult to speak of the general characteristics of late Cola soulptures as they display interesting variations in style and decorative details. More than one school of late Cola sculpture appear to have persisted, one preserving the classical traditions of the early period and the rest attempting to conventionalise in varying degrees in anticipation of grotesque stylisation that is to characterise the feature. The tendency to elaborate and "improve", a feature noticed in architecture, is extended to the decorative details of the images.

The composition is generally large and subordinate figures are seen within the niche unlike the early Cõla examples where they flank the derakōşta. Prabhā- arch is noticed behind the head of the principal figures in many of the upper tier sculptures in temples. Generally the images are in bold relief though round ones are not wanting. Figures are shown frontally and profiles are rare. Some of the specimens of the period are poor in depth of conception and formal and weak in their presentation of themes. The torso becomes thick and squatty, unlike the elegant and natural shape of it in early Cõla sculptures. The under garment is invariably brought down below the knees and it encumbers the effect of the modelling of the limbs.

The decline and fall of the  $C\bar{o}|a$  empire had inevitable impact on the art of the Tamil country as it amounted to the withdrawal of a powerful patronising agency. However, the rise of the Vijayanagar rulers farther north and their eventual supremacy over Tamilnad were welcome phenomena with the resultant encouragement to various arts. The sculptural art of the Vijayanagar period commands one's attention not so much for its aesthetic qualities as for its prodigious output and the diverse themes it chose to represent. The sculptures are formal and rigid and lack the naturalness and softness of earlier periods. The post is stiff and face becomes expressionless. The nose becomes pointed and the cheeks are vertically grooved. The elaboration of draperies, ornaments and other decorative devices, started during the late  $C\bar{o}|a$  period, is continued now with greater vigour. *Tilak*, the mark on the forehead, not found in early periods, makes its debut in Vijayanagar carvings.

Thematically a very significant introduction of the period is the Ganga-Yamuna motif. This relates to two female figures in bold relief on both sides of the entrance under the *gopura* of the temple, one of the representing the river goddess Ganga and the other Yamuna, both on their *vāhanas*. From the mouth of the *vāhana* rises a thick plant, comes round the figure and rises above with involute circles in which are sculptural reliefs of the ten incarnations of Vişnu. This practice of representing the river goddesses at the entrances was in vogue in North India from the Gupta period onwards but was introduced in the south only under the Vijavaragara rulers.

This account will not be complete with out atleast a brief sketch of the art of bronze casting for which the Tamil country was famous. Metal images have been cast throughout the centuries under the patronage of different dynastics in the north, south, cast and west but nowhere does it seem to have registered such an acme of development as it did under the Cōļas. A few Agamic texts and the contemporary practice among the *sthapatis* indicate two modes of casting icons—the hallow and the solid methods. The figure of a female, identified as Mother Goddess and discovered at Ādichanallūr is the oldest extant metal icon in the Tamil country. It is small in size and has been taken to be at least 3,000 years old. A few Buddhist metal icons discovered at Amarāvati and Kāverippūmpațiņam and Buddhapad in āndhradeša and assignable to the early centuries of the Christian era reveal that the metallic art was already flourishing in South India.

These traditions of the early poriod in the realm of art were continued by the Pallavas who held hegemony over parts of the southern Andhradesa and the whole of the Tondaimandalam and even the region upto the Kāvēri in the south. A few scholars tend to believe that the art of brönze casting was either unknown to the Pallavas or at least had not attained great heights under them and that for all practical purposes the history of the art of bronzes in Tamilnad begins with the Colas. Now it is difficult to wholly accept this as we know for certain that this art was flourishing under the Sātavāhanas and Ikshväkus and hence the Pallavas might also have been aware of it. Considering the fact that under the early Cola: the output of metal icons was prodigious in quantity and unparalled in quality it is difficult to assume that this art had developed to that extent within a short time after its introduction in the Tamil country. Of particular interest in this connection is an inscription of a certain Abhimāna Siddhi (who seems to be either a contemporary of or a ruler anterior to Dantivarman Pallavamalla) in the Vaikunthapperumāl temple at Kānchipuram making reference to the gift of one thousand *pon* (gold) obviously for the making of a golden plate for offering *bali* and also for a *podimam*. The *pudimam* here could only mean an image made out of the gifted gold and hence a metal icon. Apart from some of the Pallava characteristics revealed by a few bronzes this inscription would show that metal art was not unknown to the Pallavas. A Tripurantaka in a private collection now in Ahmedabad, a Vishapaharana from Kilappudanur in the Tanjore district, a Națarāja from Nallur in the same district are a few of the cions with obvious Pallava features and noted for graceful and simple modelling. A Maitreya from Melaiyur and a Visnu in the Trivandrum Museum may also be included in this list.

A large number of specimens belong to the period of transition from the Pallava to the  $C\bar{o}|a$  period and the first two or three decades of the Chola period. This is the period which witnessed the highest water mark in the art of bronze casting and in the light of recent and penetrating studies it is possible to discern different phases in sequence in the development of the art.

The Visnu from Tiruchcherai, Chandikeśvara from Tiruvenkādu, Kirata and Arjuna from Tiruvetkalam are the most representative of the flowering phase of the early Cōļa period. In modelling treatment they offer valuable links between earlier images and the clearly datable icons of the subsequent period. The *skandhamala* (shoulder tassel) which is not generally noticed in images of the Pallava period is invariably seen in Cola bronzes. Similar and interesting changes are found in many ornaments and decorative devices including armlets, *udarabandha*, necklace, *katisutra*, loops and tassels, etc. The shape of the *yajňopavita* i.e., its running over the right arm is continued in few images but it ceases to be a dependable stylistic feature in the Cōļa period.

Stylistic characteristics, useful as they are for any chronological classification of images, are not always useful and at times even prove to be deceptive on account of the persistence of certain modes for quite a long time. It is in this connection that a few inscriptions prove to be useful affording exact dates in which the icons were cast and endowed and thereby enabling one to study the features of dated bronzes and compare them with images with identical features to arrive at their probable dates. Quite a number of well known and masterly examples of the Cōļa bronzes have now been dated with as much accuracy as possible.

Numerous are the inscriptions making mention of the dedication of bronze images to temples under successive rulers but unfortunately not all of them have survived. Special mention must be made of the references to a host of deities in metal in the Tanjore inscriptions of Rajaraja of which none with possibly the single exception of a Tripurantaka is still extant. It is difficult to exaggerate the importance of a few dated bronzes as they indicate art forms and norms of the periods of their making and show how stylistic features are not always wholly trustworthy. Of the many superlative icons in the Umāmaheśvara temple at Konerirajapuram. Tanjore District, a Vrshabhavahana Tripurantaka and Ganapati are datable between 959 A.D. and 977 A.D. on the authority of an inscription in the same temple. The reference to gifts to an image of Kuttaperumal and his consort in the Vriddhagiriśvara temple at Vriddhachalam by Sembiyan Mahādēvi in an inscription in that temple reveals that the now extant images of Natarāja and consort there were made in or before 981 A.D.

Of the many bronzes uncarthed at Tiruvenkädu in the Tanjore district a Vrshablavähana was dedicated in 1011 A.D. and his consort in 1012 A.D. and the characteristics of these succinctly illustrate the bronze style during the last years of Rājarāja I. An inscription of the same ruler dated in his 28th year refers gifts to an image of Ādavallār (Națarāja) which may be a reference to either of the two figures of the god in the temple; obviously this was dedicated in 1013 A.D. Another epigraph speaks of the dedication of Bhikshatana in the 30th year of Rājādhirāja I corresponding to 1048 A.D. while yet another inscription reveals that an Ardhanārjávara was endowed in or before 1047 A.D. That other undated Tiruvenkādu bronzes like the Bhairava and Kalyāņasundara should also belong to about the same period is apparent. All these icons admirably reflect the heavy and stolid forms of contemporary stone sculpture. Generally speaking the bronze icons reflect the form and style of contemporary sculpture in stone. This is true also of iconography and decorative details. The Națarāja image which is rare in Pallava times (found only in the Siyamangalam cave, Dharmaraja ratha at Mahabalipuram, Kailasanatha, Muktisvara and Matangesvara temples at Kanchipuram) is frequently represented in the Cōļa period. It is in the beginning of the early Chola period that the Ānandatānḍava mode of flance gets crystalized and is shown alike in stone and metal. In the representation of this and other themes and in general execution and details minor albeit interesting variations are found between the specimens wrought in the metropolitan art centres in the Chōļamaṇḍa lam and the products in the other peripheral regions like the Pāṇḍya and Kongu countries. The reversed posture of Națarāja in the Pāṇḍya realm, known as mārukāl tandavam, is particularly interesting.

The metal art was zealously patronised during the later Chōja and Vijayanagar periods as well; but examples of these periods, like contemporary stone carvings, are devoid of life. They are much conventionalised and the dynamic and rhythmic movement characteristic of early examples is now replaced by mathematical shematism.