

TAMIL NADU : ARCHAEOLOGICAL PERSPECTIVES

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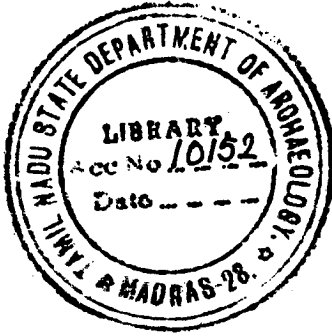
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FOREWORD

Tamil Nadu has to its credit the continuous written history for nearly 2500 years. Many scholars have worked ceaselessly in codifying that long history by a proper study of various source materials. Nevertheless there are still several missing links that remain to be bridged. Filling up those links and writing a complete history of Tamils is a continuous process. The Tamil Nadu Government has constituted an expert committee to bring out Tamil Nadu History. So far the committee has brought out the volumes from Prehistoric Period to Later Pandiya Period.

The Tamilnadu State Department of Archaeology is pursuing that work without let or hindrance. The Department has conducted excavations in several historical sites like Kaverippoompattinam, Karur, Azhagankulam, Madurai, Gangaikondacholapuram, Palayarai, Thiruthangal, Senthamangalam, and Padaiveedu and unearthed many historical source materials. Moreover the Department has been bringing out district wise inscription volumes in a phased manner.

The Department has involved people participation in archaeological research and also brought to light many historical evidences through individual scholar's efforts. As a part of its work department has been conducting periodical state level seminars, to pave the way for inter-disciplinary exchange of latest findings by involving scholars wellversed in the various disciplines of archaeology.

The Seminar being held during October 20 - 22, 1999 is one such important milestone. The research papers of this volume are the handy work of not only scholars of this department but of scholars from various Universities, Colleges, and Educational institutions. It is a singularly unique feature in that the papers are compiled and released as a volume on the day of the Seminar. It is doubly greatifying the note that the volumes are separately released in both Tamil and English.

The Papers have been classified under palaeography, archaeology, epigraphy, religion and general topics. By a perusal of the articles we got a fairly good account of history, culture and eminence of the ancient Tamils in various disciplines. Based on the recent historical findings they are sure to be great help to the researchers, students and the general public alike.

The Tamilnadu Government has been rendering yeoman service to the progress of the causes of archaeology by creating a separate ministry for Tamil development and culture. The Govt. has been bestowing special interest in the continuation of research and bringing out the upto date findings in the world of archaeology. It is my sincere desire that the people of Tamil Nadu should encourage such scholarly pursuits and be benefited to the greater extent. My hearty congradulations to Thiru. K. Damodaran, the Director of Archaeology for his indefatigable industry in bringing out these volumes in a fitting manner.

(M. Tamilk Kudimakan)

PREFACE

For the past thirty years Department of Archaeology is engaged in the collection of original source materials for writing the authenticated history of Tamil Nadu. A number of volumes of source materials have been published so far by this department. State level and district level seminars have been organised periodically to have an exchange of views and impart the knowledge of scholars outside the department.

This book is the collection of research papers which are going to be presented in the Seminar on "Tamil Nadu Archaeology" to be held on 20, 21 and 22nd October 1999. After the 79 research papers received, 59 are published in a separate volume in Tamil. This volume comprises 20 scholarly papers in English. These papers cover various branches of history like archaeology, art, architecture, religion, museums, conservation and preservation, social history and so on. All these papers are based on the new findings of the scholars who are engaged in this field of study constantly. This book, I hope will kindle the interest among the young researchers and students of history in future.

Our beloved Chief Minister Manbumiku Dr. Kalaingar, who himself is a scholar has evinced keen interest in the field of archaeology and the development of our department. The Minister for Tamil Development and Culture and Hindu Religious Charitable Endowment Board Manbumiku M. Tamilk Kudimakan also gives inspiration and support in the developmental programmes of our department.

I am very much indebted to the Government of Tamil Nadu and our Honourable Chief Minister and the Honourable Department Minister for their kind gesture for the immediate financial sanction for conducting this seminar and publication of these volumes.

I am very grateful to our department secretary Thiru. S.Ramakrishnan, I.A.S., for giving encouragement in all our endeavours. Scholars from various educational institutions and our departmental officers have sent their papers in the stipulated time. I convey my thanks for their kind co-operation in this venture.

In preparing this volume our department officers Mr. A. Abdul Majeed, Mr. S. Hariharan, Dr. S. Rajagopal, Mr. P. Rajendran, Mr. C. Santhalingam and Mr. C. Chandravanam have worked hard in bringing out these volumes in time. I congratulate them and thank for their sincerity and interest they have shown in the departmental activities. I have to convey my sincere thanks to the authorities of Royapettah Printing and Stationery Co-operative Society, Chennai - 14. and Prompt Creatives for their help in bringing out this book very neatly in short time.

Date : 15.10.1999
Chennai.

K.DAMODARAN,
Director.

ARCHAEOLOGY OF TAMIL NADU EARLY HISTORIC PERIOD

Dr. K.RAJAN, Thanjavur

Introduction

The literary and archaeological evidences of recent years place the beginning of the early historic period of Tamil Nadu to well before 3rd c.BC. The social parameters that found in the Sangam literature and the contemporary archaeological data reflect the well established state. The earliest stratum of Tamil Literature is assigned to a literary academy known as *Cankam* (Sangam)¹ Behind the constant debate, there is a general agreement among the scholars on the date of the literature. They prefer to place them on the early part of the Christian era based on the internal evidences such as linguistic style, prosodic nature, historical clues in the texts and colophons and external evidence like archaeological and Greek-Roman textual evidences² However there is an internal stratification that exists within the text slightly pushes the date back to 3rd c.BC and these dates were supported with the recent archaeological evidences. For instance, the literature mentions the early form of the megalithic cairn circles as *paral uyar pattukkai* (cist entombed with heap of cairns) and later form as *nedunilai nadukal* (tall erected mono-lithic slab - menhir). The early phase of the texts coincides with the terminal phase of the megalithic culture. Till seventies scholars used the literature to draw the political history of Tamil Nadu and viewed the social, economic, political, cultural aspects as mutually exclusive categories and

not as a single entity. Greater part of their energy was spent on the Dravidian-Aryan issue³ This approach led them to view the society as static without responding to the contemporary development. There was hardly any correlation with archaeological findings. Only in the last 25 years scholars like R.Champakalakshmi, Rajan Gurukkal, Sivathamby, Sudrashan Seneviratne viewed the society as dynamic and ponder the gradual transformation by integrating data coming from different disciplines. They treated the text with a view to understand the socio-economic process that took place in different ecological zones namely *tinaṅ* (*tinai* literally means a situation either behavioural or physiographic). The social process that took place in different ecological zones also has not been adequately explained due to the lack of field studies. For instance, all the scholars had an unanimous view that fertile region (marutam) played a major role in the development of a particular society but ignored the pointed advances made in the complete pastoral and dry zones (*mullai* and *pala*) like Kongu region where the geological wealth like iron ore and semiprecious stones contributed enormously in upliftment of the society.

The state formation in Tamil Nadu is also seen mostly in the back drop of the Sangam literature which had some inherent weakness due to the historical position of the literature. For instance the literature fails to acknowledge the existence of the coins in Tamil Nadu though they are found in plenty both foreign like Greek and Roman origin and the coins issued by the Pandya and Chera kings. Literature never mentions at any point of time that there was a script and that was engraved on different media like potteries, coins, and rings. Therefore, any study based on the Sangam literature alone can not give real picture. Integration of various forms of data that are scattered alone can help to some extent. The analysis of the archaeological, epigraphical,

numismatic data so far stand in isolation. For better understanding of the political and cultural level of the ancient Tamilaham, integration of these data is most essential.

Megalithic Culture

The most important factor that hindered in placing the early historic period in a well chronological frame is of the megalithic monuments. The long survival of these monuments for about thousand years in Tamil Nadu between the 1000 BC and 100 BC restricted the scholars including the author to place this culture in specific cultural context. Bringing the monuments of non-megalithic in nature like urn and sarcophagus burials found without any lithic appendage into the megalithic fold further aggravated the problem. The urn burials found south of Vaigai river valley particularly in the coastal plains as one observed at Adichchananllur are mostly devoid of megalithic influence but still these were unscrupulously placed in the megalithic horizon as they were burials. Therefore it is time to see the data in its geographical and chronological back ground. These monuments were passed through the megalithic to early historic times. Secondly these were practiced in the capital cities, trade centres, port towns, etc., in the advanced stage both in content and quality. For instance at Kodumanal, the megalithic cist yielded potsherds with Tamil-Brahmi script along with the antiquities of other regions⁵ Even the Sulur grave yielded punch marked coin struck at Eran⁶ The excavation at Kodumanal (1998) yielded a copper ring with letter K probably a Greek letter from a transepted cist burial⁷. It is noteworthy to recall the bronze seal with two line script collected from a burial at Anaikottai in Jaffna Peninsula.⁸ These all denote continuity of the custom of erecting megalithic monuments in early historical period. At the same moment some contemporary monuments with same superficial identity in isolated regions were rudimentary in nature. Majority of the reports just identifies the burial complex only on the surface

observation. These lead the scholars to mix up, though unintentional, the data of the earlier with the later one. It is very difficult to give any concrete chronological frame to the monuments on the basis of superficial observations. The intrusion area and the terminal area had wide chronological implications though they look alike on the surface. There is an enormous difference in the surface observation of a burial and the excavated one. The classification of the burial based on surface observation has its own limitations. The lack of first hand information on the geographical position of the burial hinders enormously to draw a clear picture about the megaliths.

It seems initially around 1000 BC megalithic people were basically cattle raisers and probably with a rudimentary agriculture, a spill over of neolithic. They migrated quite often in search of pasture land. The limited availability of the habitation-cum-burial sites can be understood in this background. Even the available settlements are small in nature when compared with their burials. During this time it seems they did not have any categorical territorial affiliation. In the second stage (500 BC) they moved on to the fullfledged agriculture which forced them to have permanent settlements. Once they became settled, clan based society emerged, exploitation of minerals and ores culminated, industrial activities intensified, specialized craftsmanship developed, script developed or the earlier one got modified, trade routes were formed in the potential agricultural and mineral zones, various religions took a shape and literature proliferated. This multi-faced growth led to the formation of state.

Ancient Political Units

Tamilakam (Tamil language speaking area) as portrayed in the Tamil literary source is extended from Venkatam hills (modern Tirupati hills) in the north to Cape Comorin in the south and Bay of Bengal on the east to Arabian Sea in the west (*Tolakappiyam Payiram* 1-3). This

does not correspond with present day Tamil Nadu but includes Kerala. The Asokan 2nd rock edict and the availability of Tamil-Brahmi inscriptions in the above specified areas support this expression. The region under study evolved as cultural unit with certain dominant linguistic, literary and cultural tradition which is predominantly non-vedic and non-Sanskrit in origin and remained distinctive irrespective of its long standing historical contact. Different clan/lineage groups emerged and continued their presence felt with varied degree of political supremacy in a particular area namely *nadu* in the course of nearly eight hundred years between 5th cBC and 3rd cAD. The territories of Chera, Chola, Pandiya were referred as to *Kuta nadu*, *Cola nadu* and *Pandiya nadu*. Like *janapadas*, this geographical unit covering different ecological zones with varied subsistence pattern is served as a foothold of a particular clan⁹ Among these clans, few attained prominence due to their control over a land having considerable economic zones. With the result *Muventar* occupies the political hierarchy at the top with other chieftains like *velir*, *mannar* and *urkilar* following them.

Tamil-Brahmi Script

One of the most important evidences that stands today is the Tamil-brahmi script. Unlike Asokan-Brahmi, these scripts were found on stone, potsherd, seal and coin or ring made of gold, silver and copper there by showing its wide application. They were found uniformly through out Tamil Nadu and secular in nature. The earlier studies were basically confined to cave inscriptions and it is presumed, of course, based on the content of the inscription that the usage of Tamil-brahmi script is confined to Jains and not by others. It is noteworthy that till today not even a single Buddhist cave inscription is found in Tamil Nadu which is contrary to the others regions. Nearly 300 inscribed potsherds unearthed in sixteen archaeological sites prove that the Tamil-brahmi scripts were used by the different strata of the society both in rural and urban area.

The Sangam literature calls the land north of Tamil country as *moli peyar teyam* (other language speaking area) (*Akananuru* 31;27;295). The inscriptions found in Andhra and Karnataka State are in Prakrit but not in Telugu or Kannada. However the linguistic study clearly suggests that the language used by the common man was Telugu and Kannada¹⁰ This phenomenon continued till 6th c.AD. It would have been in the interest of the ruling elite to protect their privileges by perpetuating their hegemony of Prakrit in order to exclude the common people from sharing power¹¹. The same method was also adopted by the Pallavas in Tamil country. They used Sanskrit language and Pallava grantha scripts in their official orders. Whereas the native language and script of the Tamils were in Tamil and Vatteluttu script (a script derived from Tamil- Brahmi) as indicated by the contemporary hero stones and other non-Pallava inscriptions. Unlike in the adjoining regions, the non-dominance of Prakrit in Tamil country conclusively denotes the strength of the Tamil. The main reason for this contrast development between these two regions appears to be the political independence of the Tamil country. Such level of literacy would not have been attained without well established state. The occurrence of Tamil-Brahmi inscriptions at Puhalur (Chera) and Mangulam (Pandya)¹² and the portrait coins with king's name like Peruvaluti, Kolli-porai, Makotai and Kuttuvan Kotai¹³ clearly connote the well ensconced state in Tamil country.

The Tamil-Brahmi script noticed in cave inscriptions, on coins, rings and on pottery throughout the Tamil country is secular in nature. This evidence is unique and special in the sense that the Asokan inscriptions were found throughout the country but they were all executed on king's order and Buddhism in character. The inscribed potsherds found at lower most level at Vallam, Alagankulam, Uraiyur, Karur, Kodumanal, etc., shows that this script was known to them as early as 3rd c. BC. In all probability

the common man should have learnt this script well before this date as all the available forms are in well developed stage both palaeographically and grammatically.

Numismatic evidences

One of the most important evidences of recent years is of coins. They basically come under three categories namely local, foreign and non-Tamil kings' issues. These were made of gold, silver, lead and copper. The Makkotai, Kuttuvankotai, Kolliporai coins of Chera kings and Peruvaluthi coins of Pandya clearly indicate Tamil kings issued coins¹⁴ Gold coins, mostly in hoards, so far unearthed were confined to Romans. The absence of gold coins of Tamil kings suggests that the Roman gold coins would have had material value rather than currency value. Though we get number of coin hoards in Tamil Nadu but none yielded a coin belongs to the Tamil king or we do not get till date any hoards yielding exclusively Tamil kings.

Of these local issues, square coins chronologically stand earlier. The local punch marked coins with out any script but symbols like fish, bow and arrow as insignia of the Pandyas and Cheras respectively stands first in the chronology. Later, those square coins with Tamil-Brahmi script like Peruvaluthi clearly stand as testimony that the Tamil kings started issuing the coins as early as 3rd c. BC. The square shape with out a bust of a king and the script suggests that these were minted before the arrival of Romans. The coins with bust of the king and with the 1st c.AD Tamil-Brahmi script like Chera king Makkotai and their shift from square to round may be the influence of Roman coins. The recent discovery of Makkotai coin counter struck on Gaius and Lucius type of Augustus coin (2 BC to AD 4) is of further proof¹⁵ The coins were found either in capital cities and trade centres or in the trade routes¹⁶ The spatial distribu-tion, typology and frequency

throw much light on the amount of external trade and maritime contact, the Tamil country had with the other regions. This clearly suggests that there would have been a well established state prior to 3rd c.BC itself.

Trade

Trade played an important role in the territorial expansion during the early historic period. For instance, Cheras made a territorial advance into the Kongu country (Coimbatore region of Tamil Nadu) from present Kerala State to keep the control of the economic products like semi-precious stone yielding zone of Kangayam, iron ores yielding zone of Chennimalai and spices yielding zone of Kollimalai which fetch considerable amount to the treasury¹⁷ It seems that making the Karur-Vanji as their second capital on the Amaravathi bank is primarily in the interest of trade only. As stated earlier the availability of PMC; Roman antiquities like coins, terracotta figurines and gold ornaments¹⁸; semi-precious stones imported from other parts of India, occurrence of names with Prakrit affinity; a Sangam Age square Chola copper coin and a small oblong piece of touch stone with Tamil-Brahmi reading *Perumpatan kal* from an ancient port city of Khun Luk Pat on the Klong Thom river in the west coast of Southern Thailand¹⁹ Tamil-Brahmi script bearing potsherds yielding Tamil merchants names like *kanan*, *catan* and *korrapuman* found on the Red Sea coast particularly at Quseir al-Qadim²⁰ and the Papyrus written in a Greek on Musiri (Chera port on the west coast)- Alexandria Trade Contract;²¹ Dravidian words like *tuki*, *oryza* and *zingiber* found in old testaments;²² names of a Sri Lanka origin as noted above unquestionably suggest that Tamils had a wide spread contact with the rest of the world.

The habitation mounds found in economic zones like iron ore area, semi-precious stone yielding zones, pearl fishery, cotton manufacture centres, spice yielding area, etc., are of a proof that there

was a well established trade network. Tamil-Brahmi cave inscriptions and coin hoards found along the trade routes also are another proof. The reference to trade centres, emporiums and ports in Sangam literature is further strengthen this view.

Technology

Invention, dissemination and application of technology played an important role in the state. Terminology, archaeological objects, the level of technology and its spread are one of the key factors in understanding the cultural contact that exists between two regions. Sangam literature, Foreign accounts and scientific analysis of the objects inconclusively suggest the level of scientific advancement made in the early historic period. On the basis of recent evidences, a quick study is made on the technology involved in navigation, metallurgy, gem stone, textile and pearl fishing.

Navigation

The references in Sangam literature and in Foreign accounts speak of the voluminous maritime trade activity took place in the celebrated ports like Tondi and Musiri on the west coast and Korkai, Alagankulam, Kaveripattinam and Arikamedu on the east coast. The innumerable references and the analysis of the bricks attest the fact that people had the knowledge on oceanography, boat building and port installations like wharf and light house²³ The early occurrence of *ampi* , probably derived from *ambu* which means water, was a devoid of mast and sail used both river (Ainkurunuru 98:1-2) and sea (Narrinai 354:5-7). *Punai* or *Katta-maram* is an another life boat (*Kalithokai* 134:24-25) taken with big ships (*Perumpanararruppadaï* 2.11:30-35). This was basically built of logs/ flanks/ bamboos tied together (*Akananuru* 186:8). *Timil* another type of boat used mainly for fishing and pearl fishing (*Narrinai* 111:5-9; *Akananuru* 350:10-15). The boat *kodun-timil* and *tintimil* (*Narrinai* 175:1-3; *Akananuru* 240:5-7) named after its sturdiness needs

specialized sailors called *timilar*. The ship used for international trade is invariably called as *kalam* and *navay* for the indigenous and foreign respectively (*Narrinai* 295:5-6). It has many sails and masts hoisted with flag (*Purananuru* 30:10-11; *Akananuru* 152:6-8); Maduraikanchi 74-83) and moved from one pattinam (port) to another pattinam (*Paripadal* 10:38-40). One of the reworkable recent evidence is of a ship collected from the fifth seasons (1997) of the excavation at Alagankulam, a Pandya port, on the mouth of the river Vaigai. The ship was engraved as a graffiti on the shoulder portion of a rouletted ware. L. Casson of New York University who examined this graffiti identified as one of the largest type of Greco-Roman three mastered ships used in the trans-ocean voyage²⁴ One must recall here the Vienna Museum papyrus, a trade contract executed between a Musiri and Alexandria trader, specify the volume of the goods carried to Alexandria in a single ship²⁵ This record is in Greek. It implies that the Tamil trader also must be knowing the Greek. The references like *Yavanar iyarriya vinaiman pavai* (the beautiful lamp made by Yavanas), *Yavanappavai*, *Yavanarothima vilakku* (Yanana lamp), *Vankan Yavanar* (war like Yavanas), *Yavanarirukkai* and set and *Yavanattatchar* (the word tatchchar stands for architect /carpenter/ stone workers during Sangam period) found in literature further supports this phenomenon. This was strengthened with identification of extensive port infrastructures like wharf, light house and ware house. The previous and present excavations at Kaveripattinam yielded brick wharf²⁶ The above data clearly suggest that by 3rd BC the transoceanic trade played an important role in the development state in Tamil Nadu.

Pearl Fishing

The recent ethno-archaeological study made on the traditional diving practice by N.Athiyaman in Mannar Gulf helps to understand the viability of the pearl fishing that existed in the pre- Christian.

era. Even today the people of Mannar gulf go for diving with out any breathing aids to the depth of six fathoms and they use to stay on the sea floor for about 54 seconds²⁷ This study proved beyond doubt that the references found in the literature are not mere an exaggeration. The earliest account of pearl and chank fishery in Tamil Nadu is by Megasthenes²⁸ Though the method of diving is not adequately recorded, many of the Sangam literature like *Kalitho-gai*(131:22) and *Akananuru*(150:10-11) talk of the fishing community paratavar who involved in the pearl fishing. The Periplus Erythrean Sea mentions that condemned criminals were used at the Pandya port Korkai in Mannar Gulf²⁹ The total area of Mannar Gulf is under the control of Pandyas even before 3rd c BC as suggested by the Korkai excavation findings. This clearly implies that the state is formed and took interest in the goods like pearl and chank which brought lot of foreign wealth to his country.

Gem Stone Cutting

India's tradition in gem stones is elaborated in the *Arthasastra*, *Ratnasastra*, *Visnudharmothara*, *Brahmsamhita*, *Yukitikalpataru* and in Sangam literature. The availability of semi-precious stones since Harappan times attests this reference. Greek introduced intaglios and cameos in India. Two intaglios (a garnet and a carnelian) representing a grazing horse from Vellalur and a woman and a cameo representing fish from Karur are fine examples. The recent study carried out on the traditional bead making industry at Kangayam by the author in the back drop of the Kodumanal excavation proved the continuity of this industry³⁰ Gem stone industry of the Kongu region (Chera country) played a crucial role in the trade contact with the Mediterranean. Beads of sapphire, beryl, agate, carnelian, amethyst, lapis lazuli, jasper, garnet, soap stone, quartz, onyx, cat eye, etc., found in different manufacturing stages finished, semi-finished, polished, unpolished, drilled and undrilled condition in the excavation at Kodumanal stand as

testimony to their production³¹. The Sangam literature *Patirrupattu*(67:1;74:5) referred this site as *Kodumanam*, famous for gems. Beryl, in particular, was highly valued than gold. These finished beads were sent down to Tondi and Musiri via Palaghat gap on the Kerala coast for final shipment to Roman world.

Metallurgy

Another important industry that fetches good amount of wealth to the treasury is of iron and steel industry. The traditional crucible steel has been produced out of high carbon alloys in India before 4-3rd c.BC. This is well reflected in the Classical Mediterranean accounts³² Pliny's Natural History identifies the Chera country as the source of iron to Roman world³³ This traditional method was in vague till 17th century in Tamil Nadu³⁴. The recent scientific studies carried out in an iron producing site at Guttur in Dharmapuri district by Sasikaran³⁵ and in a steel producing site at Melsiruvalur in Tiruvannamalai district by Sharada Srinivasan³⁶ clearly proved that high quality iron and steel were produced in Tamil Nadu well before 4th c BC.

Textile Industry

In archaeological context, impression of woven fibre generally found at the base of the pot stands as mute evidence of the existence of textile industry. Evidence found at Mohenjodaro, Nevasa, Chandoli, Lothal, Alamgirpur, Noh, Rang Mahal, Kaundinyapura and Kodumanal alludes the presence of this industry in different technological level. The terracotta spindle whorls and woven cotton pieces found at Kodumanal³⁷ and dying vat at Uraiyr³⁸ and Arikamedu³⁹ further strengthen their survival in early historic times.

Sum-up

The above recent findings indicate that the early historic period of Tamil Nadu has not been probed well due to the varied nature of

the data. It is generally believed that the history of Tamil Nadu starts with 3rd c.BC. But the mass of evidences in different forms, say archaeological, epigraphical and numismatic unearthed in support of literature and foreign accounts forced to think and revise the idea on the nature of state in Tamil Nadu. As the Asokan inscriptions suggest that the states in Tamil Nadu are well known to the Mauryan in 3rd c.BC and the foundation would have laid down for the emergence of the state level at least in the 5th c.BC.

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A CITY IN TRANSITION : EARLY MEDIEVAL KANCHIPURAM

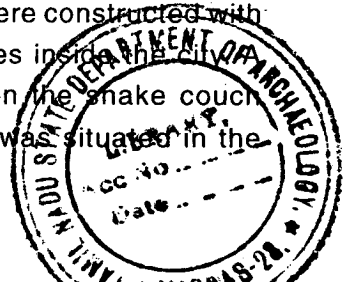
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The emergence of cities in the Tamil country could be traced to the early historical period. Cities like Uraiyur and Madurai developed into capital cities of Sangam kingdoms. Ports like Arikamedu, Pukar and Korkai became centers of maritime trade. The Sangam literature, excavations and inscriptions provide some reliable data for the study of the origin and growth of cities. Some of the Sangam period cities survived for a very long time as important centers, though information with regard to their existence and development are very meager. However this meager information was studied by some historians to understand and explain the origin of cities and their development. In her work, *Trade, Ideology and Urbanization*, R.Champakalakshmi, utilising the literary and archaeological materials, traced the growth of ancient settlements including some cities in the Tamil country. T.K.Venkatasubrahmanyam's "Growth of Urban Centers in Early Tamilakam" deals with the patterns of growth of the urban settlements during the Sangam period. However, one aspect of the growth of cities in ancient Tamil country, namely, the topography, extent of cities and their expansion were not seriously studied. I have addressed this aspect taking Kanchipuram as the study area.

The city of Kanchipuram (headquarters of Kanchipuram District), located on the northern bank of the Vegavati river has a hoary antiquity. Its existence could be traced to the Sangam

period. It was the capital of Tondaiman Ilantiraiyan, a Tiraiyar Chieftain of the Sangam Age, who ruled the northern Tamil country. Later it was the capital of the Pallavas (A.D. 350-900). The Cholas (A.D. 850-1238), who conquered the Pallava region, made Kanchipuram an important political and economic centre. During the Pandya and Vijayanagar periods it retained its political and economic importance. Hieun Tsang, the Chinese pilgrim referred to the stupas erected by the Mauryan king Asoka. It was an important center for Buddhism and Manimekalai, the Buddhist nun of the post Sangam period visited the city. Its association with the Nayanmars and Alvars are well known and deities in Kanchipuram were praised in their hymns. During the long years of its existence, the city has shown a remarkable progress in the development of trade and commercial activities. It was a center of textile production and metal working during the Pallava and Chola periods. Through the process of growth, the city incorporated the neighbouring areas and enlarged its size to accomodate the growing diverse population.

The ancient topography of Kanchipuram is known from the *Perumbanarruppadai*¹, a work of the Sangam period (1-2 nd centuries A.D.). It was mentioned as an important city of the king, Kachchiyon, who is identified with Tondaiman Ilantiraiyan, a contemporary of the Chola king Karikala. However there is no direct mention of the name of the city in the work. It appears in the name of the king as the first segment. A short description of the city is found in the work². It mentions that, the city was well laid out in the form of a lotus flower and was surrounded by a high rampart and a deep moat which was surrounded by a forest of trees. The roads in the city are described as full of potholes due to the frequent running of chariots. The buildings in the city were constructed with burnt bricks. There were markets and temples inside the city. A temple with the image of reclining Vishnu on the snake couch (*pambanai palli amarnton* i.e, Anantasayi), was situated in the



neighbourhood and probably at the confluence of a river (not named) and one had to pass through the temple to approach the city. The post-sangam work *Manimekala*⁸, (5 cent. A.D.) also provides some topographical features of Kanchipuram. A chaitya, worshipped by Manimekalai, the Buddhist monk, is referred to in the work. She stayed in a grove named Dharmadavana located on the southwest of Kanchipuram.

With this meager description it is rather difficult to precisely demarcate the limits of the ancient city and identify quarters of Kanchipuram. The demarcation of the outer limits on the eastern side could be made with reference to the temple of reclining Vishnu. From the description of the locality of the temple given in the *Perumbanarrupadai* we can infer that it was situated just on the outer limits of the city. The commentator, Nachchinarkkiniyar (14th century A.D.) identified the temple of Vishnu with the Yathoktakarin temple, situated in Chinna (Vishnu) Kanchipuram, to the south of a small stream, Manjanir vaykkal, which is about 1 km. north of the river Vegavathi. Earlier to Nachchinarkkiniyar, an inscription of Parantaka I4 (944 A.D.) from the Yathoktakarin temple referred to the deity as Anantanarayana paramaswami of Kachchippedu. Therefore, it is clear that the temple existed with the name Yathoktakarin at least from the 10th century A.D. If we assume that the Sangam temple of reclining Vishnu existed at the same place or near the 10th century Yathoktakarin temple, then the eastern boundary of the Sangam city could be marked somewhere near the Yathoktakarin temple. However, the limited explorations and the excavations have not yielded any evidence to the existence of an early historical habitation there. The dharmadavana, where *Manimekalai* had a short stay and other places mentioned in the *Manimekalai* also could not be identified.

Attempts to demarcate the limits of ancient Kanchipuram have been made earlier by a few scholars. M.Rajamanikkar, after analysing the Sangam literary evidence, suggested that the ancient city was situated to the east of the temples of Ekamranatha, Kachchapesvara and Ulagalanderumal and to the north of the Yathoktakin temple and Tirukkalimedu or Tondaiman tank.⁵ After going through the excavated materials, K.V.Raman has narrowed the area and suggested that the nucleus of Kanchipuram extended roughly between the Sankara Mutt on the west and Kamakshiamman temple on the east⁶.

A detailed survey of the archaeological evidence could help us to demarcate the limits of ancient Kanchipuram. Within the present city limits the Southern Circle of the Archaeological Survey of India (ASI), the Department of Ancient History and Archaeology, University of Madras (AHA) and the Department of Archaeology, Government of Tamil Nadu conducted excavations (Map : 1) over several years. The ASI⁷ and the Department of Archaeology, Government of Tamil Nadu⁸ conducted excavations at Pallavamedu, situated on the south western part of the city. The ASI excavated within the premises of the Shri Sankara Mutt in 1962⁹. The Department of Ancient History and Archaeology, conducted excavations at 18 different locations in the city between 1970 and 1976. Though the publication of the final report of excavation has been delayed, some of the materials published in the form of short reports and articles in scholarly journals are of much help and are utilised for the study¹⁰.

The excavation in the premises of the Sankara Mutt by the ASI yielded pottery and antiquities datable to the early historical period. Though the excavation was limited to a small area it brought to light some Satavahana coins, a terracotta mould of punchmarked coins and a few terracotta figurines¹¹. In the excavations conducted by the Madras University the locations adjacent to the

Kamakshiamman and Ulagalantaperumal temples (KCM-1,4,14,15,18), Chokkisvara temple (KCM-10), Kachchapesvara temple (KCM-7), Ekamranatha temple (KCM-2,3,) and Gollachatram (KCM-5,6) were obtained evidence of the earliest habitation datable to the early historical period. The trenches in these places yielded the black and red ware pottery in the lower levels.

The significance of this type of pottery with respect to the early historical period has been stressed by several authorities. The black and red ware was found in all the Megalithic burials¹² and the Early historical habitations in Tamil Nadu. It was noticed in the early levels at Arikamedu¹³, Tirukkampuliyur¹⁴, Uraiyur¹⁵, Kodumanal¹⁶ and Karur¹⁷. In all these sites the black and red ware was associated with the early historical cultures and are dated to about B.C. 300. The early levels in Kanchipuram have also been dated to the third century B.C.¹⁸ A charcoal sample collected at the lowest level (layer 18, depth 6.16 mts.) from KCM-1 has been dated to 480 B.C.. Another charcoal sample collected from the upper level (layer 13A) of Period 1 at KCM-4 (Near Kamakshiamman temple) has been dated to 195 B.C.¹⁹ Other artifacts datable to the early centuries of the Christian era were also found here. Copper coins and terracotta coin-moulds of the Satavahanas were found in the Gollachatram trenches²⁰. A grey ware pottery with the name of a Singalese Buddhist monk, *pusalakhita* written in the 1st century A.D. characters²¹ was found near the Kamakshiamman temple (KCM-1, IAR, 1969-70: 35.). It is understood that all the trenches sunk near the Kamakshiamman temple (KCM-1,4,14), Ulagalantaperumal temple (KCM-15,18), Chokkisvara temple (KCM-10), Kachchapesvara temple (KCM-7), Ekamranatha temple (KCM-2,3,) and in the Gollachatram (KCM-5,6) complex yielded artefacts of the early historical period. The area comprising the southern part of the Ekambaranatha temple (near Sankara Mutt) on the west and Muktesvara temple on the east could have formed the core area of the settlement of ancient Kanchipuram.

During the Pallava rule the city was enlarged by adding the neighbouring areas. Though the city and *ghatika* are referred to in the inscription of Kakusthavarman as having existed during the visit of his ancestor Mayurasarman, no part of the city and its location are mentioned²². The early inscriptions and the copper plates of the Pallavas also do not provide useful information to understand the expansion of the city.

The enlargement of the city could be noticed clearly from the eighth century A.D. Temples built by Mahendravarman I (600 - 630 A.D.) and Rajasimha (691 - 729 A.D.) may provide interesting information with regard to the development of the city. Probably the first attempt to enlarge the city on the west was made during the days of Mahendravarman I (600-630 A.D.). Some pillars engraved with the titles of Mahendravarman I, found inside the Ekamranatha temple²³ may suggest the remains of a structural temple built by Mahendravarman. Another attempt to enlarge the city on the west was made during the rule of Rajasimha (700-728 A.D.). The Kailasanatha temple, built by him and his son Mahendra III²⁴, on the western extremity could mark his attempt. Further attempts to develop the city were undertaken by Nandivarman Pallavamalla II (731-796), in whose period the temples of Airavatesvara, Valisvara, Muktesvara, Matangesvara, Vaikuntaperumal, Iravatanesvara, and Piravatanesvara were built²⁵ within the limits of Kanchipuram. The Airavatesvara was built almost in the center of the city. On the northwest the Valisvara temple was built. It is now situated within the Ekamranatha temple premises. The Piravatanesvara and Iravatanesvara temples were constructed in the northern part of the city. Muktesvara and Matangesvara were built in the east of the city. A little east to these temples were built the Vaikuntaperumal temple. So by the end of the 8th century all the area from the Kailasanatha on the west to the Vaikuntaperumal on the east and some area on the north were incorporated into the city (Map : 2).

Further support to the extensions of the city could be found in the hymns of the Nayanmars and Alvars. The first three Saiva Nayanmars, namely, Gnanasambandar, Tirunavukkarasar and Sundarar lived during the 6-7th centuries A.D. They refer to the following four temples as situated within the city of Kanchipuram (Kachchi / Kanchi): a) Kachchi Ekambam²⁶, b) Kachchi Merrali²⁷, c) Anekatankavatam²⁷, and d) Kachchi Nerikkaraikkadu²⁹. Kachchi Ekambam is identified with the Ekamranatha temple. Kachchi Merrali is identified with the temple of Tirumerrali in Pillaipalayam, the western suburb of the city of Kanchipuram. The temple Anekatankavatam is identified with the temple of same name near the Kailasanatha temple on the west. Kachchi Nerikkaraikkadu is situated in Tirukkalimedu, an eastern suburb of Kanchipuram³⁰. All the four temples, excepting the Ekamranatha temple are situated on the extremities of Kanchipuram. Therefore these temples could have been the western and eastern limits during the period of the Nayanmars. The fifth temple, Onakantan tali³¹ is located to the west (Panchuppet) of the Ekamranatha temple and there is no reference in the hymns to its location within the city of Kanchipuram. The area around the temple of Onakantan tali could have been integrated into Kanchipuram during the late 8th century or early Chola period since the excavation near the temple (KCM-11) suggested a late occupation of the area. Possibly, during the time of Rajendra I the temple as well as the adjoining areas were brought into the limits of Kanchipuram.

Among the Vaishnava Alvars, Poykai Alvar, Bhutattalvar and Peyalvar (6-7th centuries A.D.), Tirumalisai Alvar and Tirumangai Alvar (8th century A.D.) have referred to fourteen temples in Kanchipuram in their hymns in the *Nalayira Divyaprabhandam*. They are 1. Padakam (Pandavaperumal temple), 2. Tirunilatangaltuntam (Ekamranatha temple premises), 3. Tirukkalvanur (Kamakshiamman temple premises),

4. Pavalavannar temple, 5. Tiru Uragam (Ulagalandaperumal temple), 6. Tirukkarakam, 7. Tirukkarvanam temple, 8. Tiruniragam (Temples 6,7,8 are traditionally located in the Ulakalanta perumal temple premises), 9. Paramechchura vinnagaram (Vaikuntap perumal temple), 10. Tiruttanka (Tiruttanga vilakkolip perumal), 11. Tiruvelukkai (Singaperumal temple), 12. Ashtapuyakaram (Ashtabhuja perumal temple), 13. Tiruvehka (Yathoktakarin temple) and 14. Tiruvattiyur (Varadarajaperumal temple).

Padagam, Uragam, and Parameccura vinnagaram are situated within the limits of ancient Kanchipuram and are also mentioned in the hymns of Alvars as included in the city³². The other temples are mentioned without any locational attributes. Of these temples Tirunilatangaltuntam³³ and Tirukkalvanur³⁴ are traditionally located within the premises of Ekamranatha and Kamakshiamman temples respectively. The temples Tirukkarakam³⁵, Tirukkarvanam³⁶ and Tiruniragam³⁷ are also identified with shrines located in the premises of Ulagalanata perumal temple (Tiru uragam). Pachchaivannar and Pavalavannar temples³⁸ are identified with the temples of the same and are located to the north of Kamakshiamman temple.

Among the other temples, the three temples, namely, Tiruvelukkai³⁹ (Singaperumal temple), Ashtapuyakaram⁴⁰ (Ashtabhuja perumal temple) and Tiruvehka⁴¹ (Yathoktakarin temple), form a group and are located to the south of Kamakshiamman temple and were referred to by the Alvars (8th century A.D.) as situated within the limits of Kanchipuram⁴². Though, there is no evidence from the hymns of Alvars about the location of Tiruttanka⁴³ (Vilakkolipperumal), it could possibly be included in the above group. Therefore the area included by these temples, namely upto the Tiruvehka temple on the south-east could have been integrated into Kanchipuram, probably during the 6th-8th centuries A.D.

The archaeological evidence also supports this view. In the early levels of the trench (KCM-11) sunk on the northern extremity (i.e., Lala Thottam, opposite to the Sarva Tirtham), no artefact datable to the early 6th century was obtained. This could show that the occupation of the northern part was probably after the 6th century A.D. Similarly no black and red ware pottery or any antiquity datable to the beginning centuries of the Christian era were obtained from the trenches on the south and southeastern parts of the city (KCM-12: near Pachahiyappa's School; KCM-13: Taluk office compound; KCM-16,17: Varadharaja perumal temple, and also in Pallavamedu.). The pottery and artifacts collected from the excavation in this area belonged to the 6th to 16th centuries A.D. Therefore we can reasonably hold that the northern part around the Sarvatirtham and the southern and, southeastern parts upto the Vegavati river were settled during the Pallava rule.

The city boasts of a fort with a rampart and a moat. Though the epigraphical and literary evidence is quite clear about the existence of a fort with rampart and moat from the Sangam age there is no reliable description of the fort. The evidence from the Perumbanarrupadai has already been quoted. Nayanmars⁴⁴ also mention the existence of a fort with high rampart. The hymns of Alvars, especially those of Tirumangai Alvar⁴⁵, mention the city surrounded by a rampart. The Gadval plates⁴⁶ of Vikramaditya I mentions that the city of Kanchi had a big rampart which was unsurmountable and difficult to be breached and was surrounded by a great moat unfathomable and hard to be crossed. The excavations conducted here could not trace any evidence with regard to the fort, rampart or moat. It is generally believed that the Pallavamedu, located on the west was the site of Pallava Palace. Ruins of structures and brickbats could be noticed in that area.

On the basis of the temples of the Pallavas, epigraphs, literature and supported by archaeological evidence, we may

suggest that the size of the city gradually increased. The western extension of the city may go upto the Kailasanatha temple since it was built by Rajasimha (700-728 A.D.) and referred to as situated in Kanchipuram. The area around Merralisvara temple may form another point in the boundary on the west. On the east we can fix the temples of Vaikuntaperumal and the Nerikkaraikkadu as forming the limits. On the south east, the extension may reach drawn upto the temple of Tiruvehka since it was referred to by Tirumangai Alvar as situated within Kanchipuram. In the north, no extension beyond the Iravatanesvara and Piravatanesvara temples could be noticed, obviously that region was a low-lying area or (big tank ?) or otherwise unfit for occupation. On the south the river Vegavati formed the natural boundary to the city.

The growing importance as a political centre and development in economic activities probably led to the establishment of different quarters in the city. The inscriptions provide some names of these quarters occupied by different communities. Kachchippedu has been taken as a locality situated outside the city of Kachchi (Kanchipuram) by M. Rajamanikkanar⁴⁷. He explained the suffix *pedu* as a place name applied to an area in the neighbourhood of a city. On the other hand N. Subrahmanian, takes it as a part of the city⁴⁸. However during the Pallava and Chola periods the name Kachchippedu was applied to the whole city. In the inscriptions, both the names (i.e. Kanchi/Kachchi, Kachchippedu) were used synonymously to refer to the city. The Vaishnava Alvars mentioned that Uragam and Tiruvehka were situated in Kachchi. In the days of Uttamachola Kachchippedu was referred to as a nagara and the Uragam was included in it. Again the Kailasanatha temple situated on the western extremity was included in Kachchippedu. The Ainjandi Durga Bhattaraki temple situated in the centre of the city was included in Kachchippedu. From the above details it is clear that the city of Kachchippedu lay at least between these two temples in the early stages.

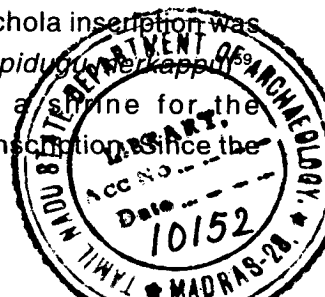
A few quarters of the Pallava period located within the limits of Kanchipuram are known. A market is referred to in an inscription of Nandivarman II⁴⁹. In 864 A.D. the market was established with the permission of the ruling king. The inhabitants of the quarter called Videlvidugu Kudiraichcheri were permitted to sell articles varying from *karpuram* (camphor) to *cheruppu* (footwear) in the market. The permission was granted on a request made by an officer, Anuttarappallavaraiyan. Another officer Kadupattigal Tamilapperaraiyan executed the orders. About the inhabitants of the *cheri* no details are available. The name Videlvidugu was a title, usually associated with the Pallava kings. Kudiraichcheri could be understood as a settlement of royal horsemen or members of the king's regiment.

A part of the city was known as Aimmanaich-cheri. The engravers of the Pattattalmangalam plates⁵⁰ (Nandivarman II, A.D. 731) and Velurpalayam plates⁵¹ (Nandivarman III, A.D. 846), namely Sridandi and Perayan respectively were from Aimmanaich-cheri in Kachchippedu. Aimmanaich-cheri may be identified with the *kammala* (smith) quarters. Kilpaicaram was another part of the city mentioned in the Bahur plates (Nripatungavarman, A.D. 869). It was a settlement of goldsmiths (*Svarnnakriitsavvru*)⁵². Some quarters of the Pallava period could be gathered from the Madras Museum plates of Uttamachola⁵³. Kambulanpadi, Atimanappadi, Kanjagappadi and Erruvalich-cheri are the four quarters occupied by the *pattusalins*. The *pattusalins* were the weaving community. Iranajayapadi, Ekavirapadi and Vamanasankarapadi are the three quarters occupied by the Sankarapadiyar. The sankarapadi community manufactured and marketed oil⁵⁴ and so the above quarters were occupied by the oil pressers and oil merchants. The other quarter mentioned in the copper plates is the Cholaniyamam. Though it looks like a name given during the Chola rule, the older name of the Pallava period seems to be *devar cheri*, evidently related to king (*devar*). The quarter was occupied during the Pallava

days by the producers of royal cloth (*rajavastra*). This quarter was inhabited earlier by a group called Tolachcheviyar *alias* Elakkaiyar, probably groups of weavers. Since the population of this group was very much reduced during the rule of Uttamachola, new inhabitants were settled in this part of the city. Virappadi was another quarter mentioned in the copper plate. The *madhyastha*, Narpattennayira Mangaladittan was a resident of this quarter. The last part of the name, Mangaladittan, indicates Brahmana association. Hence Virappadi could be identified with a Brahmana quarter. Another quarter mentioned in the copper plate is Uragam, where the famous temple of Vishnu (Ulagalanta perumal) is situated. The name Uragam could be explained as the centre of the Ur. Ologamarayap peruncheri was another quarter of the city⁵⁵.

Though the location of all these quarters are not clearly known, there is no doubt that they were situated within the limits of Kanchipuram. The copper plate clearly mentions that these quarters belonged to Kachchippedu and uses the following phrase in this connection⁵⁶ *ivvur kambulan padiyum atimana padiyum*. In another instance Uragam is mentioned as⁵⁷ *kachchippettu uragattu*, indicating that it was a part of Kachchippedu. Though there may be some difference in the meaning of *padi* and *cheri* it may be said that in this case both the suffixes refer to a part of village. Another quarter mentioned was the Ranavirappadi⁵⁸, the place of a prosperous merchant who had gifted to the temple at Uttiramerur on several occasions during the rule of Parthivendravarman. Perhaps this quarter could be identified with the Iranajayapadi of the Madras Musuem Plates of Uttamachola on the basis of similarity between the names.

Another quarter mentioned in an Uttamachola inscription was the western block called Kadumpidugu (*kadumpidugu*)⁵⁹. The temple of Terkkirunda nakkara and a shrine for the Karikalacholap-pillaiyar are mentioned in the inscription. Since the



inscription is from the Chokkisvara temple the Terkkirundanakkar temple may be identified with the Chokkisvara temple situated on the northeast of Kamakshiamman temple. Hence the western quarter of Kadumpidugu may be located around the Chokkisvara temple. The name Kadumpidugu looks like a Pallava title. The last segment of the title pidugu was a title borne by Pallava kings. Some of their titles have pidugu as their last segment⁶⁰ Hence this quarter might have been established during the Pallava days.

Notes an References

1. Uruttirankannanar composed this work. The work was in praise of the philanthropy of the patron Tondaiman Ilantiraiyan, a chieftain of Tondainadu.
2. *Perumbanarrupadai*, ll. 375-420.
3. The author of the work was Sittalaichchattan. It narrates the life story of the Buddhist nun Manimekalai, the daughter of Kovalan, a merchant and Madhavi a dancer. of Kavirippumpattinam. *Manimekalai* (U.V. Saminathaiyar ed. , 1981.) , *katai* 28 : ll .165-183.
4. *Annual Report on Epigraphy* (ARE), 1921, No. 21.
5. M.Rajamanikkanar, *Pattuppattu Araichchi*, University of Madras, Chennai, (1970), pp. 142,145.
6. K.V.Raman, "Archaeological Excavations in Kanchipuram" in *Tamil Civilization* : 5, (1987), Tamil University, Thanjavur, pp. 67-68.
7. The Southern Circle of the Archaeological Survey of India (ASI) conducted a limited excavation at Pallavamedu, situated on the northern bank of the river Vegavati in 1953-54. The earliest level was dated to the 7th century A.D. *Indian Archaeology - A Review* (IAR), 1953-54, p. 12.
8. The Department of Archaeology, Government of Tamil Nadu later conducted excavations at Pallavamedu in 1970-71. Three periods of occupation (6th - 9th century A.D.) were suggested. There was no report about the occurrence of the black and red ware at the lower levels. *IAR*. 1970- 71, p. 33.
9. *IAR*. 1962-63, p.12; R.Subrahmanyam and K.V.Raman, "Terracotta figurines and other objects from Kanchi Excavations - 1962", in the *Journal of Indian History*, vol. 19 (1967), p. 506.
10. *IAR*. 1969-70: 34-35; 1970-71: 32-33; 1971-72: 42-43; 1972-73: 30; 1974-75: 37-38; 1975-76: 39; K.V.Raman, "Archaeological Excavations in Kanchipuram" in *Tamil Civilization*, 5 (1987), Tamil University, Thanjavur, pp. 61-72; Raman, K.V. and Shanmugam. P. "Terracotta Coin Moulds from Kanchipuram", in *Studies in South Indian Coins* (SSIC), A.V.Narasimha Murthy (ed.), 1, (1991), Madras, New Era Publications, pp. 23-29; *Ibid*. 5 (1995), pp. 77-80.

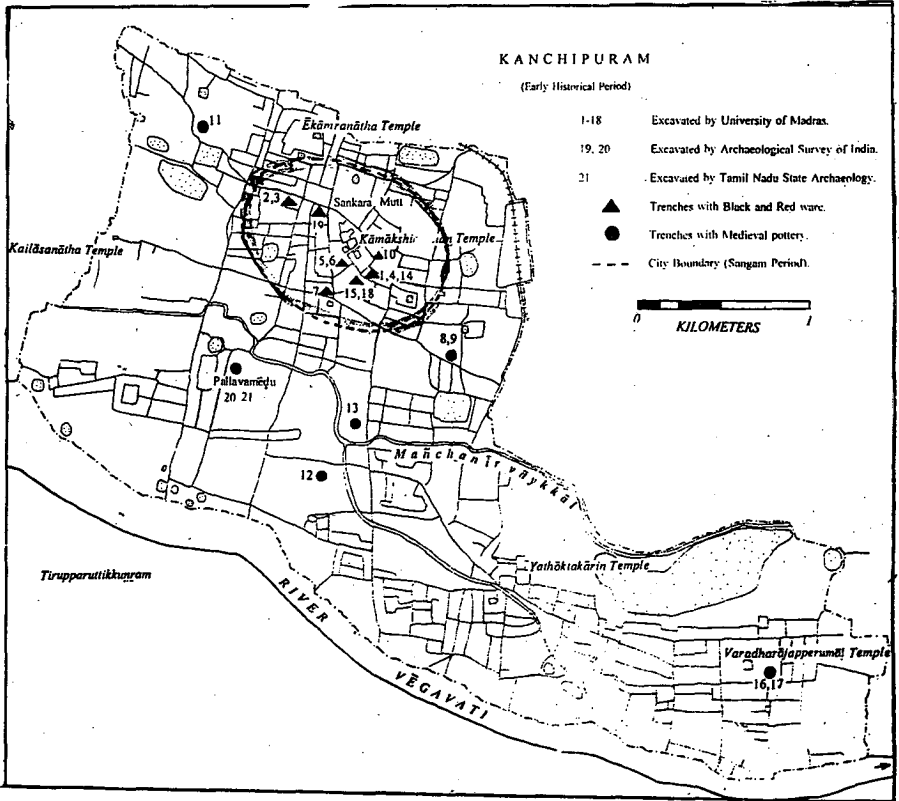
11. IAR. 1962- 63: 12; R.Subrahmanyam and K.V.Raman, "Terracotta figurines and other objects from Kanchi Excavations - 1962", in the *Journal of Indian History*, vol. 19 (1967), p. 506.
12. B.Narasimhaiah, *Neolithic and Megalithic Cultures in Tamil Nadu*, Sundeep Prakashan, Delhi. (1980), p. 184.
13. Wheeler, R.E.M., Ghosh, A. and Krishna Deva, "Arikamedu: An Indo-Roman Trading-station on the East Coast of India", *Ancient India*, vol. 2 (1946), Archaeological Survey of India, New Delhi, 17-124,
14. T.V.Mahalingam, *Report on the Excavations in the Lower Kaveri Valley (Tirukkampuliyur and Alagarai)*, Madras, University of Madras, 1970, p. 15.
15. K.V.Raman, *Excavations at Uraiyur (Tiruchirappalli) 1965-69*, University of Madras, Chennai, (1988), p. 13.
16. The Department of Epigraphy and Archaeology Tamil University, Thanjavur conducted excavations during the years 1985-1990. Full report on the excavation is awaited.
17. The Department of Archaeology, Government of Tamil Nadu conducted the excavations during the years 1973-79. A Short accounts of the excavation are found in the following publications: A.Abdul Majeed, "Excavations at Karur", *Tamil Civilization*, 1987, vol.5, Nos. 1-2.; R.Nagaswamy, *Roman Karur*, Brahad Prakashan, Madras, 1995, pp. 63-65.
18. IAR. 1969-70, p. 35.
19. IAR. 1972-73, p. 66.
20. K.V.Raman and P.Shanmugam, "Terracotta Coin Moulds from Kanchipuram", in *Studies in South Indian Coins (SSIC)*, A.V.Narasimha Murthy (ed.), 1, (1991), New Era Publications, Madras, pp. 23-29.
21. The short inscription was first read by the Department as *putalatisa*, and identified as a name of a Buddhist monk. IAR. 1969-70, p.35; However, Iravatham Mahadevan corrected the reading to *pusalakhita* (Sanskrit=*Pushyarakshita*, 'One named after the asterism of *Pushya*') and suggested the influence of old Sinhalese language. He has dated the inscription to the 1st century A.D. on palaeographical grounds. Iravatham Mahadevan, An Early Prakrit Inscription from Kanchipuram in, *Studies in South Indian History and Culture*, ed. R.Nagaswamy, 1997, pp.238-240.
22. *Eipigraphia Indica*, vol. 8, pp.24-36, vv.17,18.
23. These four pillars are now placed in the Government Museum, Chennai.
24. K.R.Srinivasan, *Temples of South India*, Publications Division, New Delhi, (1985), p. 114.
25. *Ibid.*, pp. 117-119.
26. *Muvar Devaram*, Ve. Mahadevan (ed.), Sri Kamakoti Ayvu Maiyyam, Kumbakonam, (1988), vv. 1281-1303.
27. *Ibid.*, vv. 1304-1307.
28. *Ibid.*, vv. 1309-1312.
29. *Ibid.*, vv. 1312-1314.

30. According to M.Rajamanickanar, the temple Kachchi Nerikkaraikadu could be located outside the limits of Kanchipuram. He explains that the name Kachchi Nerikkaraikkadu could mean, "Karaikadu, situated on the way to Kachchi".
31. *Muvar Devaram*, Ve. Mahadevan (ed.), Sri Kamakoti Ayvu Maiyyam, Kumbakonam, (1988), vv.1307-1309.
32. *Nalayira Divviyap Pirapantam*, Ki.Venkatasami Reddiyar (ed.), Tiruvenkatattan Tirumanram, Madras, (1987), vv.1541; 2059; 2064; 3775 ll.69; 1128- 1136.
33. *Ibid.*, v.2059.
34. *Ibid.*, v.2059.
35. *Ibid.*, v.2059.
36. *Ibid.*, v.2059
37. *Ibid.*, v.2059.
38. *Ibid.*, v.2060.
39. *Ibid.*, vv. 3815, l.128 (Tirumangai Alvar).
40. *Ibid.*, v.1127 (Tirumangai Alvar).
41. *Ibid.*, v.3447 (Peyalvar).
42. Butattalvar mentions a temple namely, Kachchi which has traditionally been identified with Varadaraja perumal temple. During this period the temple was situated in Attiyur, which was a separate village not integrated into the city of Kanchipuram.
43. *Nalayira Divviyap Pirapantam*, Ki.Venkatasami Reddiyar (ed.), Tiruvenkatattan Tirumanram, Madras, (1987), vv. 2065.
44. *Muvar Devaram*, Ve. Mahadevan (ed.), Sri Kamakoti Ayvu Maiyyam, Kumbakonam, (1988), vv. 1281,1306.
45. *Nalayira Divyappirapandam*, Ki.Venkatasami Reddiyar (ed.), Tiruvenkatattan Tirumanram, Madras, (1987), v.1129,1541,3815 - ll.128,2060,2066.
46. *Epigraphia Indica*, vol. 10, No. 22, p.105.
47. M.Rajamanickanar, *Pattuppattu Araichchi*, University of Madras, Chennai, 1970, pp. 140-142.
48. N.Subrahmanian, *Pre Pallavan Tamil Index*, University of Madras, Chennai, 1966, p.192.
49. *ARE.*, 1895, No. 12.
50. *Pallavar Ceppetukal Muppatu*, T.N.Subramaniyan (ed.), The Tamil Varalatra Kazhagam, Chennai, 1966, p. 245.
51. *SII*, 2: 98, ll.68-69.
52. *Pallavar Ceppetukal Muppatu*, T.N.Subramaniyan (ed.), The Tamil Varalatra Kazhagam, Chennai, 1966, pp.272, ll.78-79.
53. *SII.*, 3, 128.

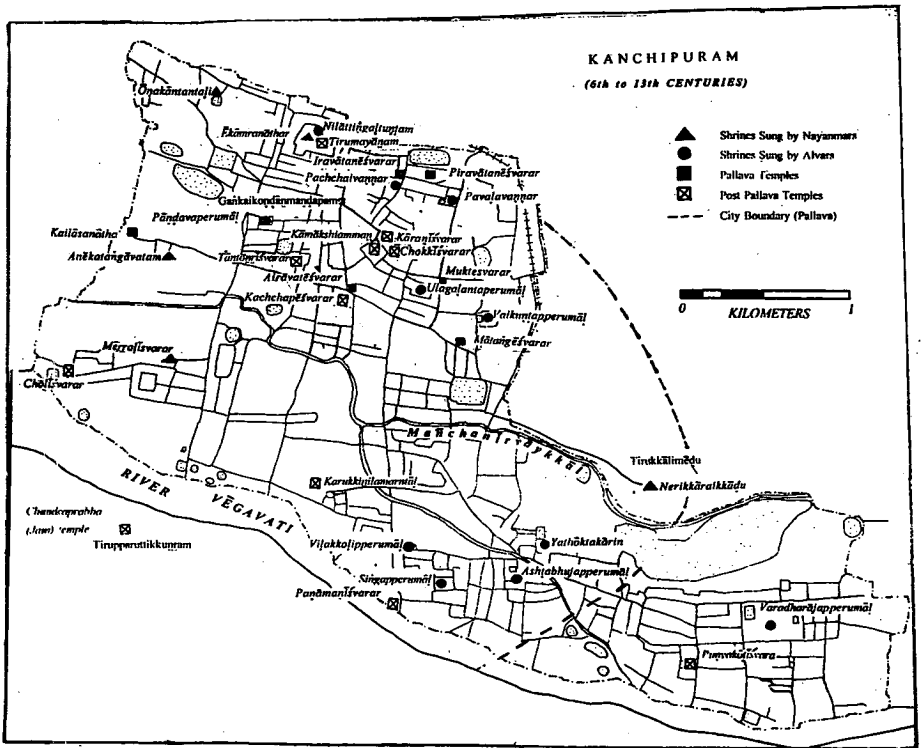
54. P.Shanmugam, "*Sankarapadiyar: Economic Activities of a Mercantile Community*", in *Proceedings of the Tamil Nadu History Congress, 1996*, vol. 2, pp.103-106.
55. *SII.*, 1, 23.
56. *SII.*, 3, 128. 1.23.
57. *Ibid.*, II.14- 15.
58. *SII.*, 3, 168,171,170,182.
59. *SII.*, 19, 365,377.
60. *SII.*, 2, 72; *EI.*, 9, p.157.



2. Map : 1. Kancheepuram - Early Historical period.



2. Map : 2. Kancheepuram - 6-13th centuries.



ANTIQUITY OF WRITING IN INDIA

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The proper writing in India has had a deep antiquity going back to the Harappan period. But the origin of the Harappa script and the decipherment remain unsolved today. There are theories claiming indigenous and foreign origin to the script. Leaving this controversial script, we shall pass on to the Vedic Age which is generally accepted as the succeeding period of the Harappans.

There are references in the Vedas to the art of writing. There are references to metres and technical terms regarding the composition of works in the *Rig Veda*, *Vajsaneyi Samhita* of the *Tajur Veda* and the *Atharvana Veda*. The *Upanishadas* refer to Aksharas (letters). Similarly the *Iranyakas* and the *Brahmanas* have certain references to the letters.

The *Ashtadhyayi* of Panini of 4th or 3rd Century B.C. contains references to terms like *Lipi* (Script), *Lipikara* (Scribe), *Yanani* (Greek Script) and *Svarita* (a mark in writing or sign). There was a custom of marking of the ears of cattle with the signs or figures of 5 and 8 and also religious symbols like Swastika during the days of Panini. The *Arthasastra* of 4th century B.C. contains detailed references to writing and writing with signs. There is a mention of students learning the alphabet and writing.

Besides the above said literature, the early Jain and Buddhist Literature carry evidences to the existence of different scripts in Ancient India. According to some early Jain works there were as

many as eighteen different scripts used in India. The Buddhist work *Mahavatsu* refers to as many as thirty varieties of scripts used in our country. According to another Buddhist work *Lalitha Vistara* there were sixtyfour scripts used in India. These works may be assigned to a period from 4th century B.C. to 2nd Century B.C.

The writing materials include wood, bamboo, leaf and gold Board. There is a word *chintati* which may stand for incision i.e. writing signs on hard materials like stone, wooden boards and earthen ware vessels and soft materials like Palm leaf (*Talapatra*)

But writing with ink was done on birch bark (*Bhurja Patra*). However, the word *Chintati* may be taken to denote the art of incision which gained momentum in the Chalcolithic and Iron - age periods as evidenced from clay seals and inscribed potsherds, graffiti bearing pot sherds and stone inscriptions.

Thus all the above said evidences suggest a great antiquity to the art of writing in India and for its indigenous evolution. This deep antiquity of writing taking it back to as early as the Vedic period could not be substantiated by specimen of writing discovered so far. However, the individual as well as the ligatured graffiti of the Late Harappan, the Chalcolithic and the Iron age could be considered as proof for the existence of some sort of writing on hard materials during these periods. But the identification or the meaning of such graffiti stand on a different plane or footing. The earliest datable written records are the Brahmi inscriptions of Asoka. The writing systems or the script of the Pre-Asokan period has to be explained in terms of the above ligatured graffiti alone, Several centuries should have lapsed for the development of the several varieties of scripts to be used in the inscriptions of the period of Asoka.

Antiquity of writing in south India :

The antiquity of writing in South India is very deep and there are also literary evidences to the existence of the same during the time of Asoka and even earlier. The script which was used in ancient South India was known as *Dravida Lipi* - Dravidian Script. South India in ancient days was called *Dravida desa* in the Prakrit and Sanskrit works of North India. The Buddhists work "*Lalitha Vistara*" calls the South Indian script as *Dravida Lipi* and the former was in Sanskrit. But the Jain work *Pannavana Sutra* which was in Prakrit mentions the same as *Damili*. The former work places the *Dravida Lipi* in the 17th order out of eighteen scripts mentioned. The Brahmi script tops the list in the abovesaid works and that suggests that the Brahmi was the most important and widely practiced script in ancient India. The term Brahmi (Bammi of Jaina literature) is mentioned for the first time in a Jaina work *Samvya Vigyana Sutra* which may be ascribed to first Century B.C.

The nomenclature of the Dravidian or *Damili* Script suggests that it was used for writing the early Dravidian Language. It may be observed that the term *Damili* indicates that it was used mostly for the Tamil language rather than other Dravidian languages for, Tamil is very old language with great antiquity. Therefore it is evident from the foregoing reference that there was a separate script for writing the Dravidian languages or it may even be said that the script has exclusively used for writing the Tamil language in the earliest known period of the history of South India or Tamil country. This *Damili* script might have been altogether a different one from the so called Brahmi script which was also in use in ancient India. This is borne out from the fact that both the Brahmi and the *Damili* or *Dravidi* script are listed separately in the above said works.

But it has recently been held that the *Damili* script is the same Brahmi script and former has been named as Tamil - Brahmi

by scholars like R. Nagaswamy, I. Mahadevan, K.G. Krishnan, K.V. Soundararajan and others. The main argument thrusts in favour of this identification is that the Tamil - Brahmi is none else than one of the varieties of the main Brahmi Script used for writing the Tamil language. The identification is based on the reading of the Brahmi inscriptions found in the natural caverns of the Jains and other saints reported from Tamil Nadu. It may be said at this juncture that the naming Brahmi Script found in the Tamil Country as Tamil Brahmi may be alright because it is in Tamil language. But there is no justification in identifying the original Tamil script as Tamil - Brahmi. No reasonable or scientific explanation can be offered for such identification. Those scholars have arrived at the sensational conclusion probably on the assumption that no specimen of any other independent script which can be shown as having been used for writing the Tamil language in the Pre-Brahmi period is traceable so far. Further, even earlier Buhler had indicated that the Brahmi inscriptions of the relic caskets recovered from Bhattiprolu in the Krishna district, Andhra Pradesh represented the Dravida type would have influenced the creation of the nomenclature of Tamil - Brahmi.

But the assumption of the non-existence of any sort of script in the Pre-Brahmi period in the Tamil country is not based on any authentic material evidence and therefore it may be taken to remain as a mere speculation only or even as a myth. But this assumption can be exploded and the mystery surmounting the script or writing of the Pre-Brahmi may be clarified. South India is now unfolded with the discovery of thousands of graffiti singly or in groups (ligatured graffiti) from various parts of South India, particularly Tamil Nadu since Independence. If these graffiti are properly identified or interpreted may throw some clues as to the prevalence of writing in the Pre-Brahmi period. The importance of the study of these graffiti in the evolution of the writing system of our country was not realised till recently. The value of the date available on this subject

has not been properly assessed. It may even be said that the study of the graffiti has been ignored till B.B. Lal has published his paper on the Indian graffiti in 1962.

The significance of the graffiti and their role in the evolution of the writing system in ancient India more particularly in Tamil Nadu in the Pre-Brahmi period or the so called Sangam Age may be appreciated if one confronts with the large volume of graffiti reported from various excavations conducted in India since 1947.

Let us now examine the references to the art of writing in the Sangam works. *Tolkappiyam* one of the oldest works refers to the written forms of certain letters and lays down the grammatical rules to be followed in actual writing in the Tamil country in the early centuries of the Christian era and these rules have guided scholars to identify and interpret the Brahmi letters of the cave inscriptions. Therefore *Tolkappiyam* proves beyond doubt that there was highly sophisticated, developed form of a script practiced in the Tamil country during the early part of the so called Sangam Age falling between 3rd Century B.C. and 2nd Century A.D. But *Tolkappiyam* may be placed slightly earlier than the other age old Sangam works. The former is placed around the beginning of the 1st Millennium B.C. by eminent Tamil scholars like Ilakkuvanar.

Another earlier Sangam work namely *Tirukkural* opens with the couplet "All the letters (of the alphabet) begin from the letter A" (Agaram). Another couplet refers to the letters as Eluttu and the numerals and En and compares them to the two eyes of man. *Silappathikaram* contains references to a variety of script namely Kanneluttu. It is described in that work that the articles of merchandise imported at the port of Kaveripoompattinam in Thanjavur district were stamped with Kanneluttu. The same work calls the royal scribe as Kanneluttar. According to Raghava Iyenger, Kanneluttu was a form of picture writing. Most probably it may

stand for superinscription i.e. visual writing. But it may also be taken to mean alphabet writing. The Kanneluttar may be compared to the royal scribe known as Thirumugameluduvor of the royal court in medieval Tamil Nadu.

Another work *Jeevaka Chintamani* refers to yet another variety of script known as Karanteluttu. It has been taken to mean some sort of secret writing. But according to *Nachchinarkiniyar*, the commentator of *Tolkappiyam*, it refers to taking copies of letters from original texts or taking down notes (or letters) as and when dictated by one who was familiar with the writing system (alphabets).

A Tamil work of 8th century A.D. known as *Divakarad Nigandu*, refers to four varieties of scripts. They are given in the order as Peyar Eluttu, Mudiveluttu, Vadiveluttu, and Thanmai Eluttu. Another work *Pingalandai* also contains references to the same four varieties of scripts but they are given in a different order as Vadiveluttu, Peyar, Thanmai, Mudiveluttu. Of these, Peyar Eluttu may be the writing of names and Mudiveluttu may be the final writing. It seems that the last mentioned script was the most evolved form of writing and well developed.

There are also various references to the nomenclature of script in some grammatical works of medieval Tamil Nadu. The old commentary on the *Yapperumkalam* refers to four varieties of scripts of writing namely Uruveluttu, Unarveluttu, Olieluttu, Thanmai Eluttu. According to the author of the work, the Uruveluttu stands for picture writing (Pictographs), Unarveluttu for the hieroglyphs or Ideographs, the Olieluttu for sound sign or syllabic symbol and the Thanmai Eluttu for alphabetic characters. The four varieties of scripts mentioned in the work represents four stages in the evolution of writing in Tamil Nadu. Though the work belongs to a later period i.e. 11th century A.D. it proves the existence of pictographs,

hieroglyphs, Ideographs or Logographs and syllabic symbols in Tamil Nadu during that period. The author of this work was very familiar with these scripts and from his description it may be inferred that all the four varieties were in use during the period. These scripts could have been in use right from the beginning. The author further stresses that a scholar should be familiar with these scripts and therefore this work stands as a monumental proof for the existence of pictographs and logographs in the ancient Tamil country and this is corroborated and confirmed by the graffiti. A late work of 17th century A.D. also explains in detail the above mentioned scripts.

In this connection one has to bear in mind that the word Eluttu in ancient Tamil not only denotes the script or letter or writing but also painting. There are numerous references in the Sangam works where the word Eluttu has been used to denote Painting. From this it is evident that the Sangam age people considered Painting also as a form of writing. This is attested by *Silappadikaram*. Further the painted letters found in association with rock paintings in places like Kilvalai and Maharaja Kadai bear testimony to the fact that Painting was also treated as a variety of writing in the ancient Tamil country. The foregoing literary references right from the Sangam age down to the 17th Century A.D. confirm the existence and practice of atleast four varieties of scripts in ancient Tamil Nadu.

The mention of Vadiveluttu and Uruveluttu undoubtedly establishes the fact that the Pictographic and Logographic writing were not unknown to the people of Tamil Nadu and offered additional evidences to justify the identification of some of the graffiti as Pictographs and Logographs. Therefore it has been now established that there are literary references to such polytonic and pictographic writings in ancient Tamil Nadu.

SOME ASPECTS OF THE SOCIAL POSITIONS OF WOMEN DURING THE CHOLA PERIOD

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The focal point of this article is to study the social status of women by analysing the female names that occurred in Chola inscriptions with the inclusion of 400 *Talicerippentukal* of Thanjavur inscriptions¹. Thus, totally 974 female names that occurred in the epigraphs were collected and they had been analysed statistically with the guidelines laid in related literature². Hole-card system was first taken-up for the analysis-purchased the computer aid for further process. For the analysis sake, the Chola period was divided into four sub-periods³. The period-wise distribution of female names explains the social trends (Table-1). The regional-wise distribution shows the importance of the environmental factors which would determine the economy of the concerned region (Table-2)⁴ The Analysis of the components of names helped us to understand the matters relating to social status, official position and other functions of women.

The Nomenclature of Names :

Though the names occurred in epigraphs by different ways, they may be classified into some specific patterns. Most of these names are of one or two components. There are names which have three or four components. No female name has five components which is characteristically a unique pattern of male names.

All these names are a crafter work with some logic. Components in them can be recognised and put into the following segmental ideas against the number signs. segmental sign and their respective numbers are as follows.

Village (1) Clan(2) Father(3) Given name (4) Suffix (title/honorific) (5)

Presently, in Tamil Nadu the married women have the custom of taking the initial letter of their husbands' names before their given names. But this was not the case during the Chola period. Chiefly, the queens has the custom of taking their husbands' names and their clan names / lineage names with the title Maha-Teviyar / Matevi e.g., Tanti-Sakti - Vitankiyar alias (4) Oloka-Maha-Teviyar (5). As far as the pattern of one component name is concerned, names are mostly the given names. They are larger in number e.g. Perral, Perratani. The pattern of two component names in epigraphs mainly have fathers' names and given names. The pattern can be classified into the segmental form of (3 & 4) - Raman Koviya (4); Sitta - Vatavan (3) Suttiya (5). Names of this pattern have some other forms - (4 & 5), (5 & 5), (5 & 5), (2 & 4), (1 & 4) and others. These show that two component pattern have different forms.

Names of three component pattern are formed of father name, given name and title (3 & 4 & 5) e.g., Kuttan (3) Vira - Narayaniya alias (4) Chola - Maha - Teviya (5). This pattern may be formed of other components also - Katu - Pattikal (2) Mettiraya (4) Tribhuvana - Maha - Teviya (5). The name in this form of (2 & 4 & 5) has clan name, given name and title. Another name in this form is of (5 & 4 & 5) - Arayyan (5) Jayankontacholiya alias (4) Pancavan - Maha - Teviya (5).

Only two names are available in four component names pattern. One is Mallishvarattu - Nampirattikal (5) Tennavan - Maha - Teviyar alias (5) Narayana (3) Nankai - Nankariyar (4). The other one is Cevaiyan (0) Pattan (3) Patai alais (4) Pantiyatarasi (5). In this form it is not know whether Cevaiyan denotes place name or clan name or title. So, (0) is assigned to this component. If the pattern of one component has more than one segment the additional one must certainly be the title. For example, in the name of below given pattern one component is certainly a title - Aiyyalan (3) Cempon - Tankay - Kuttan (4) Uttama - Choliyar (5). Some persons had more than one name in this pattern.

Christening Custom :

With the birth of children, started the christening function. In ancient times after performing worship to the family deity the concerned infant was laid across the lap of its mother while it would be christened by saying the name of the eldest member of the concerned family⁵. Nowadays, it is a system that the eldest family members or temple priest or some socially revered figures are to christern the infants⁶. Mostly they would be the name of god, political leaders and the eldest family members. Christening was in practice during the Chola period. Immediately after the birth, the infant would be adorned with the *pottu* of native earth. After 12 days that would be christened⁷.

Tolkappiyam contains the matters relating to the children but not about the christening custom. Cilappatikaram has a colourful story of christening function of the only daughter of Matavi - Kovalan. On that occasion, about one thousand lady elders belonging to dancing community had a getogether in Matavi's home wherein they in a single voice christened the Matavi - Kovalan's infant as Manimekhalai which was the name of Kovalan's clan deity. This is the first earliest available reference to this occasion in Tamil literature⁸.

Epigraphs explain that the Chola women were called after the different epithet of state deities such as Sivan, Vishnu and others; People's deities such as Pitari and others also had some influence among the society.

In Sangam literature the word Sivan is not found. But he is referred to as Mukkan - celvan⁹. Post - Sangam literature Cilappatikaram refers to Sivan as Siva - kali - Nayakan¹⁰. The generic name of the god Sivan is Nakkan¹¹ and its morpho - phonitically changed form is Nakki. Many of the female saivites bore this name. The female Vishnuites had the names such as Narayani, Narayani - Nankai - Cani, Vira - Narayani and others. Name of a puranic deity Kuperan who was known as Soma - Cani and Soma - Cani also was remembered by the women names. Another puranic deity Kaman too was respected in the same way. The names of female deities such as Parvati, Durga and Saraswati also were revered as such. But when compared to male deities, female deities appeared not to have much influence in the women - folk.

People deities despite not having the state patronage, had a wide recognition among the people. Sattan was such a popular village guard deity during the Chola period. Its other names such as Sattan, Satti and Sattap - perumanar were borne out by the Chola women. Sattan was prestigiously worshipped in Sangam age. It lost its fame and became a minor deity during the Chola times¹². Later on, it was treated as one of the mini deities.

Kali, Kalic - Cani are the names generally taken from the names of evil - spirit¹³. Picci also refers to the same. It shows that the Chola women believed in evil - spirit. Pitari, Patari and Moti also denote such spirit. Katukal means a she - dweller in forest. Her another names are Korri and Vatuki¹⁴. All these names were used to refer to the women in epigraphs. The worship of katukal, Korri, and Pitari has its origin from Sangam age and it is in practice till now.

Royal names :

Like the kings, queens also had the lineage names and titles. Uttama-Cholan (M), Uttama - Choli (F), Rajendra-Cholan (M), Rajendra - Choli (F), Cundara - Cholan (M), Cundara - Choli (F), Centan (M), Centi (F) These examples would explain that the women names are the modified form of men names. Titles are as : Aru - Moli (M), Aru - Moli - Nankayyar (F), Ravi - Kula - Manickan (M), Ravi - Kula - Manickam (F), Chola - Kula - Cuntaran (M), Chola - Kula - Cuntari (F); Jayan - Konta - Cholan (M), Jayan - Konta - Choli (F).

All the above said titles are of Rajarajan I (985 - 1014). By their feminine forms it is known that his titles are conferred not only on the men but also upon the women. A dancing girl of Peru - Utayyar - Koyil in Thanjavur had the title Raja - Raji.

Queens' Names :

Chola queens held their lineage name as given names. The following names show that they belonged to Chola lineage- Cempiyan - Ma - Teviyar, Valavan - Mateviyar, Neriyan - Mateviyar, Piraturi - Mateviyar and Chola - Ma - Teviyar. Kotai - Ma - Teviyar, Villavan - Ma - Teviyar and others also belonged to the Chola lineage. These names are self-explanatory that the Chola rulers had matrimonial alliance with the lineage which possessed the equal status. The queens only had the title Maha - Teviyar / Ma-Tevi. The custom of having royal suffix Tevi with their names had its origin since Sangam age¹⁵. Ruling queens' names were distinctive with the prefix Nampiratti from those the retired queens who had the title Utayya - Pirattiyar.

Royal Ladies :

Like the queens the other royal ladies too had nick-names and titles. The titles Alvar and Pillayar were virtually of the royal

ladies. They had also the title Nacciyar which meant the she - leader. By this name ordinary women also were known. The title Atikal meaning the god also was held by them. Later on, it was taken to refer to the honest people. Viewing this point, we can say that the name Atikal was used to denote those who were in social hierarchy atop (Table - 3).

Queens in Ruling :

Although the Chola rulers got married with many bride - grooms who were the daughters of their equal counterparts and feudal chiefs, only one of them was honoured with the right of reigning with the kings. Among his many wives Kokkilanati was the ruling queen of Parantaka I (907 - 947). Uttama - Chola's eldest wife Tribhuvana - Maha - Tevi was seated in the position of ruling queen. Of the fifteen wives, Tanti - Sakti - Vitankiyar was Rajaraja's respected queen. The above said factors would attest that among the many honoured, only one was entrusted with power of reigning.

At the time when the ruling king was to be coronated as the emperor, his eldest queen also had to undergo such ceremony. At the demise of the eldest queen, the one at the next rank would virtually come to occupy the chair. Kantaratittan's second wife took the position as such at the time of power crisis. Not only the ruling queen but also the queens in successive position got seated by the king. Seated queens with the Pallava rulers are seen from the sculptures¹⁶. The custom of queen by sitting the side king in the court came since the sangam age¹⁷. From then, the queen had the right in court to issue the orders. Epigraphical evidences say that only before the reign of Vira-rajendra (1063 - 1069) queens had the right to issue the orders¹⁸. Such orders are chiefly related to religious matters. It is said that Cempiyan - Ma - Teviyar at the request of the ordinary people donated 200 goat¹⁹. Tanti - Sakti - Vitankiyar the wife of Rajaraja I assigned kani right to a craft - man to do the

assigned work in a temple called Olaka Ma Tevishvaram²⁰. All these portray that the queens had independent function in the court to issue the orders. Further they had the executrix (Ati-kariccikai) for implementing the orders²¹.

Status of Royal Women :

Queens were treated equally with goddess. The wives of Kulottunga I (1070 - 1120) were respected after the goddess Parvati. Generally after the death, queens were treated as the goddesses. Temples were built-up in honour of them. In honour of Pancavan-Ma-Tevi a wife of Rajaraja I a temple called Pancavan - Ma - Tevishvaram was built-up in a village called Pattishvaram²². This is known as Pallippatai - Koyil. In a village called Cempiyan - Ma - Tevi a temple was built-up in honour of the queen Cempiyan - Ma - Tevi. In a temple called Oloka - Ma - Tesihvaram in order to honour the queen Oloka - Ma - Tevi and icon was set-up. Daily worship was instituted in the names of queens to the temples²³. Villages, political divisions and irrigation sources also were called after queens²⁴.

Royal women had separate palaces and the attendants called "Akapparivaram"²⁵. These attendants are epigraphically referred to in another form as Pentatti.

Generally, the Chola women lived at the direction of men-folk. It is known by the fact that almost all the female names in inscriptions occurred with their close blood relatives, not independently (Table 3).

Hierarchy :

Comparatively, the names of Brahman women are available more in inscriptions than that of the other section of the society.

Brahman women were a top. They are referred to in epigraphs as Brahmani. Vellatti referring to the Vellala women came to the next level. To the third layer came the attendants working in palaces, serving the kings queens and other royal members (Table - 5).

Talicceri pentukal :

The role of 400 Taliccerip - Pentukal who were working in Peru - Utayyar - Koyil is so important in temple function. They are referred to as such as they settled in the quarters around the temple. These women were recruited from the temples located in different zones of Tamil Nadu during the reign of Rajaraja I. Names of all these women have the prefix the Nakkan which is the generic epithet of the god Siva. Each of these women was allotted with one house and 100 kalam of paddy.

Devaratiyar received the earnest respect in society during the medieval history of Tamil Nadu. In epigraphs they are referred to by the different terms such as Taliccrip - Pentukal, Devatiyal, Devanar - makal, Patiyilar, Taliyilar and others. They were treated as earnestly as equal with royal ladies. The honorific title Manickam was conferred on them as in the Pallava period²⁶. Some devaratiyar who belonged to Chola lineage had in their name the "Stemp" Chola e.g. Puventiyar - Chola - Kon - Manickam. It is a known fact that the devaratiyar were the professional singers and dancers. The best exponent of them were to be honoured with the title "Talaikkoli". Many of such women were economically sound (Table - 6).

Religions & Social works :

Female names occurred epigraphically in the contexts relating mostly to the religious works. Such works were mainly done by the royal ladies and their relatives. Instead of performing yagnam, donation made to the temples became the way of supporting the religious institutions. So, the temples became the hub of the Chola economy. It was then a phenomenon that by way

of assigning precious items to the temples, prosperous would be earned. The enormous number of inscriptions speak of the donation of land, gold, and live - stock. The general trends in making donation are seen in the table seven (Table - 7). Having association with temple activities, they had social interaction. Some royal ladies had done even the irrigation works²⁷. The donation of lands to the temples by the ladies would explain that the women had land rights in Chola times. Those who were on different social status donated lands to the temple are listed (Table - 8). The royal ladies had the major role than the others in donating lands and gold for agrarian economy. Not only for the temple but also to the officials working in them were donated.

Anaylsis :

The low frequency of the names during the periods 3 & 4 as against the first two periods may be taken to represent the restricted involvement of women in society. This may be the result of strongly rooted private land holding society, proliferation of castes and sectarianism. The enormous number of female names that occurred in first two periods show that during these periods Chola women considerably enjoyed the social status. Here it is to be remembered that since 2nd period queens did not issue the order in the court. This would say the debacle of women freedom in the core of Chola power structure.

Regionally, the Kavery delta where lie Thanjavur and Tiruchirappalli regions has the highest number of names. Against this core region in the peripheral areas Sittur and Nellur Proportionately names are very few. Kongu region yields no names. North Arcot and South Arcot regions the inter - mediate zone in the treatment of Steinian view the frequency is not so high. This explains the unequal distribution of Chola power.

The high frequency of the honorific suffixes relating to the wives of the kings and feudatories say that mainly the royal women were highly honoured in the society. They had been treated equally with the god. But some queen of the early Cholas were the *devaradiyar*. The titles *Atikal* and *Alvar* which were mostly held by the people associated with religion occurred very few times. It has to be researched why the ordinary women did not have such titles.

Although having kin relationship with all other family members, women's relation with husband is thickly painted in the epigraphical descriptions. Women of only two castes (*Bhraman* & *Vallalar*) are spoken of. They were hierarchically atop. Besides, these two groups the women associate with political machineries received the social importance. It shows that women belonging to other castes could not take part duly in day - to - day social functions / course.

That the women who were taking part in Chola domestic and administrative machineries only appeared to have possessed both movable and divisible properties can be known by the fact that they were the people to donate or transact the properties to others / temples. They were atop in the society. The women in bottom of the society were totally neglected in inscriptional descriptions, as they did not own any properties. The Chola sentimentalisation of moral conscience of women is concurrent with economic and erotic subjection. As property - owning society was the patriarchal by virtue, not only the women but also the working men in the bottom of the society had no possession.

Foot Notes

1. It is already brought to our notice that out of about 9000 estampaged Chola inscriptions only 3,200 were brought in publication (Y. Subbarayalu, *The Chola State, Studies in History*, Vol. 4 No. 2, New Delhi, 1982)

2. A team of scholars in their work explained the importance of the study of personal names to understand the realm of power structure of medieval South India (Noboru Karashima (etal) *A Concordance of the Names in the Chola Inscriptions*, Madurai, 1978; Y. Subbarayalu, *Cholar Kala Kalvettukkali Al Peyar Kattum Camutayam*, Kumbhakonam, 1982). But these works excluded the 400 Taliccerippendukal and are chiefly dealing with male names (Noboru Karashima (etal) 1978, Appendix - 3 fn. 14.
3. The periodisation appeared to have been done on the conceptual basis. Period I stands for the emergence of the Chola state. Period II emphasises its expansion. III one represents the consolidation and the fourth is the process of its decline. This systematic periodisation was first introduced by Noboru Karashima and Y. Subbarayalu in the above said work in appendix - 1 & 3 fn. 6. In his criticism of the Chola state and its ideology K. Kailasapathy viewed the period from Vijayalaya (850-907) to Sundarachola (956-973) the first phase of the Chola state. He said that 2nd phase started from the ascent of Rajaraja I (985-1012). He appeared to see the Chola state on the point of evolution (K. Kailasapathy, *Pandaittamilar Valvum Valipadum*, 1992 p. 154). K.A. Nilakanta Sastri saw Rajaraja I's 30 years of rule the formation period to the Chola monarchy (*The Colas*, 1984 p. 168).
4. This table can be seen with the ideology of man - environment relationship. Thanjavur and Tiruchirappalli regions lie in Kavery Delta the wet - zone have a more number of personal names as against the other regions (semi - wet and semi - dry) where the occurrence of personal names is comparatively less. This proportion may be taken as the index to imagine the women population of the chola period taking part in Chola social affairs.
5. S. Saktivel, *Makkat Peyaraiyu*, Manivacakar Nulakam, Cidambaram, 1987 p. 7
6. *Ibid.*
7. K.K. Pillay, *Cholar Varalaru*, (TNTBS), Chennai, 1977 p. 536.
8. *Opcit*, S. Saktivel, 1987 p. 8
9. *Akananuru* No. 181.
10. *Cilappatikaram*, 661 : 3.
11. Although a good number of epithets of god Sivan is spelt in epigraphs, Nakkam is the epithet used for the largest number of times as prefix to the Talicceri - Pentukal.
12. *Cutamani Nikantu* p. 27.
13. *Ibid* p. 24.
14. *Opcit*. Cutamani Nikantu p. 427.
15. *Patirrupattu* 154 : 2; Patikam of 4, 6, 7, 8.
16. C. Minakshi, *Administration and Social Life Under the Pallavas*, Madras, 1977 p. 186.
17. *Cilappatikaram*, Urkan-katai 75-80.
18. Pu. Cuppiramaniyam, *Mey Kirttikal*, (IITS), 1983, Chennai 142.
19. *SII*, 7 No. 144.

20. *SII*, 5 No. 515.
21. *SII*, 5 No. 520.
22. *ARE* 1926 - 27, No. 271.
23. *SII*, 19 No. 311; *ARE* 1927 No. 47.
24. *SII*, 19 Nos. 381, 379; *SII* Nos. 138, 152, 143, 252. (see the list of Nadu in "*Political Geography of the Chola Country*" by Y. Subbaayalu, 1973, Madras)
25. Ma. Rajamanickanar, *Cholar Varalaru* Part 3, Chennai, 1959 p. 46.
26. Ma. Rajamanickanar, *Pallavar Varalaru*, Kalaka Veliyitu. 1944, p. 288.
27. *SII*, 5 Nos. 83, 143, 281.

TABLES

Table - I Period-wise Distribution of Female names

Sub-period - I	846 - 985	293
Sub-period - II	986 - 1070	511
Sub-period - III	1071 - 1178	64
Sub-period - IV	1179 - 1279	85
Total		953

Table - II Area-wise Distribution of Female Names

Thanjavur	657
Tiruchirappalli	133
South Arcot	73
North Arcot	54
Chenglepet	41
Chittur	12
Nellur	4
Total	974

Table - III Frequency of Honorific Suffixes

Deviyar (Kingly Wife)	65
Deviyar (Feudal Wife)	37
Nampirattiyar	34
Utayya - Pirattiyar	18
Nangai	27
Atikal	10
Alvar	3
Nacciyar	2
Pillaiyyar	1
Total	<u>197</u>

Table - IV Frequency of Family Relationship

Husband - Wife	175
Father - Daughter	28
Mother - Son	27
Mother - Daughter	26
Other Relationship	125
Total	<u>381</u>

Table - V Caste - wise & Social Based Reference

Brahman	41
Vellalar	14
Pentatti (Roya Family)	13
Pentatti (Velam)	6
Pentatti (Atimai)	3
Utayyan	3
Kutayyan	1
Kilavan	1
Arayyan	2
Total	<u>84</u>

Table - VI Honorific Prefixes & Suffixes of Devaratiyar

Nakkan	597
Devaratiyal	28
Devanar - Makal	8
Manickam	15
Araca - Kula - Pattam	6
Talaikkoli	4
Total	<u>658</u>

Table - VII Instances of Social Interaction

Land Donation	81
Donation Other than Land	331
Land Sale	16
Transaction of Boundary Lands	4
Other Social Works	331
Total	763

Table - VIII Donation of different items by the women in disinctive social status

	Land	Gold	Goat	Coins	Lamp	Paddy	Total
Royal Ladies	41	50	23	14	12	2	142
Ordinary Women	21	54	42	22	11	3	153
Royal Maids	4	5	7	3	3	1	23
Devaratiyar	7	8	3	3	1	2	24
Total							342

THE IMPERIAL STYLE IN SOUTH AND SOUTHEAST ASIA

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The goal of this paper is a framework for the comparative analysis of political economy between the ninth and fourteenth centuries, in order to highlight the contributions of archaeology and epigraphy toward historical reconstruction. My task here is to show that public culture in North India and South India and Southeast Asia shared a number of features that allow us to unite them within one conceptual whole. Although art and architecture in all three regions display a number of similarities, as a historian I shall concentrate on aspects of a mode of production and state institutions which supported temples and associated arts. This effort does not undercut the study of regional variations or specific styles and motifs, but may enhance our understanding of the relationship between political economy and culture within a wide geographical range. I hope to demonstrate the important role that sources from Tamil Nadu play in the construction of this enquiry, while simultaneously providing a conceptual vantage point that may inform our reading of those sources.

Two points should be clear at the outset. First, I am not interested in questions of colonization or borrowing or cultural hegemonism in any of the regions under discussion here. By the ninth century the period of cultural diffusion involving North India, South India, and Southeast Asia had passed, and all these regions were participating within a single commercial and political arena on an equal basis. Certainly the modes of legitimation and

administration visible in all these regions had connection with early models from North India that spread south and east in a process that continues to exercise theoreticians, but my discussion of those models after the ninth century does not attribute primacy to any particular region. To study the polities of Angkor or Pagan or the Sailendras as manifestations of an Indian cultural and political system is tantamount to describing the United States of America or Brazil in the late twentieth century as offshoots of Europe; in both cases earlier diffusionary processes have changed after four centuries into feedback loops wherein there are multifaceted linkages and radical realignments of power.

Second, the construction of an "imperial" style in this paper is an explicit critique of older models of state formation that concentrated agency within state institutions and "centralized" forms of government. By the 1950s and 1960s epigraphists and historians had expended a huge amount of effort in tracing the dynastic histories and administrative organs connected with dynasties and hero kings, to whom was attributed the primary agency in empire-building, art and architecture. I am tracing here the movement of researchers AWAY from this view of the early state and toward a more complex understanding of political mobilization in premodern contexts. The paradox of political structures under discussion here is that they utilized a common body of language and ritual, an imperial style that concentrated authority in the city and the king, while preserving most decision-making in the hands of localized rural authorities. The power of the imperial style lay, in fact, precisely in its ability to legitimize authority and mobilize resources for local lords, providing the framework for a long-term transformation of modes of production.

I am especially concerned here with three polities that were roughly contemporaneous and had similar trajectories over time.

The first example is the Chola state, which emerged in the mid-ninth century in the southernmost part of India around the Kaveri River and its delta. It achieved the peak of its power throughout the eleventh century, when it controlled most of southern India and sent armies to Sri Lanka, the Malay peninsula, Sumatra, and northeast India. Its architectural heritage survives in hundreds of temples concentrated in the modern state of Tamil Nadu but also scattered throughout southern India, and in the over 10,000 stone and copper-plate inscriptions that preserve a variety of legal transactions. The Chola-period records are particularly important because their sheer number (an average of about 25 per year) and their prosaic contents allow us to view most closely the relationships between state and economy during this period.

The second example is the Chandella state, which developed in the mid-ninth century in Jejakabhukti (modern Bundelkhand) around a capital at Khajuraho and a fortress at nearby Kalanjara. The dynasty enjoyed two peaks of power, in the early eleventh century and the early twelfth century, and survived as a regional power until the early fourteenth century, when it succumbed to Turkish armies. The scouring of the countryside in northern India during numerous iconoclastic wars has allowed the survival of few Chandella-period monuments outside the spectacular group of temples at Khajuraho, and less than 100 inscriptions survive from the Chandella kingdom (an average of about one every four years), but these are adequate to allow a comparison with other contemporary polities.

The third example is the Khmer state in Kampuchea, which appeared in the early ninth century and achieved mature form with the transfer of the capital to Angkor at the end of the ninth century. The Khmer kings reached the height of their power by the late twelfth century, when they dominated Champa (southern and central Vietnam), the Menam River basin, and the Khorat Plateau (in

Thailand). They have left behind between 1,000 and 1,200 inscriptions (an average of about two per year) and numerous stone monuments including the gigantic complexes at Angkor. Although the capital was not abandoned until the fifteenth century, the last Sanskrit inscription and the capture of Angkor by the Thai in the early fourteenth century mark the end of Khmer imperium.

The three polities described here represent the tendency during this period for powerful states to emerge on the peripheries of pre-existing political and economic centers. In India, the empires of Harsha (606-647) and the Gurjara Pratiharas (eighth century), based in Kanyakubja or Kanauj, were North Indian constructions that struggled with competitors there and with the Chalukyas of the Deccan. The Rashtrakutas, who overthrew the Chalukyas in the ninth century, were the closest approximation to emperors in India, overrunning much of North and south India in the tenth century, but even they did not extinguish opposing or subordinate dynasties. It was, in fact, the dislocations connected with Rashtrakuta aggression and their subsequent collapse that allowed the rise of the Cholas and the Chandellas as major players with about a dozen other dynasties in the pan- Indian game of empire. The center of the Chola kingdom had never served before as the base for an expansive state, instead lying like a political football between the Pallava and Pandya kingdoms. The center of the Chandella kingdom was located several hundred kilometers from the center of India, the Yamuna- Ganga Doab, and probably was still inhabited by tribal groups who were undergoing processes of state formation.

In Southeast Asia, the main centers of political power had lain east and southeast of what became the Khmer center north of the lake of Tonle Sap. The state of Funan in the lower Mekong River and the Cham state in central Vietnam, the kingdoms of Java and Srivijaya were the most important political formations that preceded the rise of the Khmer and transmitted to them the

extensive cultural legacies of India. In fact, the foundation story of the Angkor kingdom indicates that Jayavarman II (802-850) came from Java and liberated the Khmer kingdom from the Javanese Sailendra dynasty by establishing an independent cult of the "god king" (devaraja). Although Sanskritic culture had penetrated the Khmer homeland for centuries, and previous rulers had claimed universal overlordship, the period after the accession of Jayavarman II was the first time this region had formed the basis for an expansive state with the full panoply of empire.

The uniformity in the imperial style of all these polities appears in the literary materials that have survived, consisting almost entirely of inscriptions connected to religious institutions. Clearly there is an Indic template for these copies of legal transactions that typically preserved transfers of resources for the support of rituals. Their uniform format begins with a poetic preamble, or *prasasti*, which describes the positive qualities of the ruling dynasty and provides most of the extant details on military campaigns and royal ideology. Next appear the names of the participants in the legal transaction, descriptions of the property that changed hands, and perhaps names of key witnesses. Because these records exist in close proximity to, or indeed on, the temple buildings that are practically the only surviving structures from these centuries, the admittedly limited world of eleemosynary grants and temples is our window into these polities. We should regularly remind ourselves of the limitations of the sources, but we may assume along with previous scholars that the vision vouchsafed us is nonetheless a major feature--perhaps the most crucial feature -- in statecraft. The database is redolent with the imperial style connected to the political economy in these regional states.

When scholars began to work with the inscriptions in the nineteenth century, and through the first half of the twentieth century, they tended to focus on the first sections of these records in order

to gain an understanding of dynastic chronologies--a necessary first step that established chronological parameters. There was a tendency, when working with the prasastis, to treat the records as royal documents and the transactions as royal foundations--a logical assumption, since many of the longest and most interesting inscriptions are associated with large monuments funded by members of royal families. A large percentage of scholarship has therefore focused on the power of the dynasties, and portrayed them as military-bureaucratic entities that exerted lots of control over extensive state apparatuses. Similarly, scholars of Chola art, or Khmer art, often describe temple foundations as the work of the royal court or royal functionaries, and thus temple art as a corpus heavily influenced by royal dictates and executed by schools catering to tastes emanating from a central point. We should not underestimate the ability of these states to project power and authority, and certainly the giant monuments at royal capitals represent a vision from the center. There is reason to believe, therefore, that some (or, in the case of the Chandellas, most) surviving temple art is the art of the emperors, an imperial style.

Where many inscriptions survive, in the Chola and Khmer states, recent scholarship has been moving away from the centrist perspective and has been looking at these political structures from the bottom up, resulting in different concepts of how the polities worked and how we may study their art. Influential work in this area has been the rediscovery of the nadu in the Chola state--a geographic zone corresponding to local imperatives of irrigation technology and the expansion of village farming communities. The centrist vies would see the nadu as an administrative category imposed upon village economies (and that may be how kings did view it), but it now appears that the nadu existed prior to the state and in a sense outside it, responding to local developments in a mode of production and throwing up its own agrarian elites (Subbarayalu 1973, 1982). Burton Stein made the nadu the

cornerstone of his "segmentary state" in which kings exercised a mostly ritual primacy over localized agrarian elites without the assistance of ramified administrations--a perspective regularly challenged by Indian Historians during the last twenty years (Stein 1977, 1980, 1995). The Chandella State, used for some time as a token in the debate over "feudalism," provides a number of cases of "feudatories" who act independently but in a subordinate role to the kings (Misra 1977: 243-48); rather than seeing this process as the steady decline in a pre-existing structure of central authority, we may follow Kulke's work in Orissa (influenced by Stein) and see these subordinates as creatures of a localized economic system, emerging with their own power bases to negotiate official positions in a Chandella state structure (Kulke 1978a, 1982). In the case of the Khmer state, Kenneth Hall, who also worked with Chola materials, has been able to portray the growth of the polity and changes over time as the result of interactions between royal policies and the programs of intractable local elites with power bases in their localized agricultural economies (Hall 19185: 148-68). Hagesteijn's radical interpretation (1989) views the polities of mainland Southeast Asia as collections of "regional centers" dominating a multiplicity of villages, each controlled by local lords, which eventually came under the domination of "supra-regional" leaderships without extinguishing or, perhaps, even altering regional political economies. Under these circumstances, once we move away from big monumental clusters at the capital, we are encountering patronage networks that may differ from those of the kings, and thus a variety of artistic schools and styles. Padma Kaimal's recent work (1996) on so-called Chola temples is moving in this direction, looking at a range of alternative visions in structures built by locality leaders who did not rely on the kings for their resources.

The most important resource bases in these early states lay in agricultural tracts amenable to the development of irrigation

sources, which produced surpluses of cereal crops that supported agrarian elites, the state, and an array of religious institutions. The mode of production rested on the labor of a free peasantry in conjunction with bound agricultural laborers, the latter concentrated in the most productive irrigated zones. Within this mode of production inhered three types of complexity that are essential for analysis of any particular historical phenomenon: (1) Although kings played a role in the building of some large tanks or dams, the creation and maintenance of irrigation facilities was not typically the monopoly of state or agencies directed by the state. For the most part, irrigation technology was in the hands of local landed elites who at times were capable of extensive cooperation in the allocation of waters from man-made tanks and canals. (2) The capacity of land to support irrigated agriculture necessarily varied in different ecological niches within state systems spanning hundreds of kilometers. Where water was available and where labor was mobilized, either by the state or by local initiatives, networks of irrigated fields supported kinship structures, layered class hierarchies, and cultural manifestations that were quite distinct from those extant in zones where water was less available or uncontrolled. The interactions between wet and dry zones, between cultivators and pastoralists, between field and jungle were pronounced and obvious in these societies, even if they have left little trace in records concentrated mostly in wet zones. (3) Accepting the constraints or opportunities available in varied ecological niches, we must distinguish the core area of these polities, where extensive agriculture was already in existence or where it was under development during the time of these states, and several layers of more peripheral areas where the dominant mode of production was less pronounced. We may distinguish a gradient of hierarchization and control declining with distance from a capital or capitals, or more likely we may find a number of core areas, associated with their own gradients and their own

leaderships, united under the aegis of imperial dynasties. The point here is that the obvious constraints of geography and climate, and the obviously incomplete establishment of a dominant mode of production and distribution, preclude the possibility that these states exhibited a uniformity of social organization or institutional form everywhere or over time. This means that analysis of cultural forms must rest on a clear statement of their position within these continuums, rather than assuming the existence of a single pattern imposed upon the entire territory claimed by a single dynasty.

Trade introduces yet another level of complexity in the analysis of these societies. Research on India during the last twenty years has dispelled the notion that the period under consideration was a time of "natural economy" with low levels of exchange and urbanization. Now it appears that commerce was undergoing considerable expansion after the eighth century. Chattopadhyaya (1994), for example, has used the rather fragmentary inscriptional evidence from North India to demonstrate the vitality of trade networks and centers there. Prasad (1989) has performed a similar service for the study of Karnataka between the tenth and thirteenth centuries. Hall (1980) has described long-distance trading guilds interacting with local distribution agents at a level of the urban trading center (*nagaram*) within a reticulated system of commercial transactions, a model that he has applied with modifications to the contemporary Javanese and Khmer states (1985). Brahmanas from India were active in the Khmer court and elsewhere in Southeast Asia as active transmitters of Indic culture, but it is more likely that traders operating within a South/Southeast Asian commercial network were the most important force in transmitting a single cultural matrix throughout the region, as attested for example by the widespread evidence of Tamil merchants operating as far east as China. I do not think there is much doubt, although it is difficult to prove, that regional states depended on the existence of the mercantile economy and in turn stimulated it,

setting up the pieces of what became a world system after the thirteenth century (Abu-Lughod 1989). The commercial dynamism occurring within and between imperial formations allowed the transmission and accumulation of resources and precious objects for major cultural sites including temples. Wealthy merchants and merchant guilds were sometimes important constituencies within temple transactional networks, as at the Jain temples in Khajuraho, and in specific locales served as the primary source of patronage (e.g. in China (Guy 1993/94) or at Mt. Abu in Rajasthan). Even within these sites, they tended to preserve architectural and artistic styles consonant with those of imperial monuments. Why?

This brings us to the crux of this presentation, the ideological system that was driving the construction of thousands of stone temples in South and Southeast Asia during the period of regional kingdoms. Recent scholarship emanating from Europe and North America, including my own (Heitzman 1997), has stressed the incorporative or "integrative" character of these religious institutions. We have to start with a picture of legitimate authority, which means a definition of kingship as it had evolved in India and as it was adapted to state systems that had previously stood on the peripheries of the Indic world. As described in inscriptional *prasastis*, and as befitted lineages of warriors, the primary responsibility of the king was protection of the earth and destruction of enemies. Legitimate protection, in contrast to mere brigandage, was effected in the name of cosmic order (*dharma*), usually represented as the gods Vishnu or Siva or, in later Khmer monuments, manifestations of the Buddha. The leader who wished to demonstrate and validate his or her rule over the earth constructed ritual sites and installed an image of the cosmic lord, along with regular services performed by staffs of officiants and support personnel receiving resources from donated wealth--thus the "centrality" of the transactions preserved in temple inscriptions. At capitals, cities that were seats of power, there was an

accumulation of monuments as successive monarchs demonstrated their legitimacy by construction their own commemorative structures, leading to impressive collections of art and architecture at places like Khajuraho, Angkor, and Chidambaram.

There was a close and explicit linkage of the king and the deity installed in the main temple, sometimes by name, and a tendency even in India to view some monuments as funerary representations of the deceased king (Raghotham 1994). For the Khmer realm, Coedes (1968) and others have stressed the identification of the king and the god in the *devaraja*, or "god-king" cult; Kulke's detailed study (1978b) of this phenomenon from a close reading of the sources and from an Indian perspective suggests that the *devaraja* was an early manifestation of a royal palladium that was not directly related to later installations of lingams or the Buddha and identifications with the rulers who established them. It seems more likely that in Southeast Asia, as in India, the king was the highest representative of the divine will in the world, and thus partook of divinity. This position was manifested, however, and thus legitimated, precisely through the protective role that included construction of the sites themselves. The iconography at these sites deliberately absorbed aspects of pre-existing tribal deities or local manifestation of the divine, resulting in innovative iconographic syntheses of the artistic heritage within the regional state that simultaneously addressed a canonical corpus shared through the agency of brahmanas or mendicants.

The iconographies and architectures developed under the aegis of royalty, duplicated throughout the kingdom, became emblems proclaiming the universal dominion of the lords of the earth. That duplication does not necessarily mean that kings were directly responsible for the construction of these representations or, even if they were, that it signifies the extinction of alternative

channels of resource control or competition. The signature characteristic of political ideology as it developed during this period was the facility with which multiple players appropriated the strategy of legitimation and the symbols of authority at any number of power levels. What Ronald Inden (1990) has described in India as a scale of forms within an imperial formation, and what Stanley Tambiah (1976) described in Thailand as a galactic polity, accepted as normal the simultaneous existence of many candidates for the position of universal lord, each accumulating the qualities of legitimacy and each establishing religious institutions that manifested the imperial style. The prasastis of the kings simultaneously describe each as the sole source of universal sovereignty, although there is no indication that any of these dynasties defeated or even confronted each other. Military campaigns, though obviously important in expanding and maintaining arenas of resource appropriation, were not the only sphere within which sovereignty was negotiated for these polities; their contests also took place on the level of iconography and architecture at gigantic temples. In this sense, we might remain sensitive to the direction in which emperors and little kings alike were "aiming" their gods.

From the standpoint of dynastic politics, the demonstrations of power in big monuments may have appeared, as they often seem to modern scholars, the quintessence of diplomacy, but I think the internal dynamics of these regional states were more significant in the long run and that the internal ramifications of the imperial style had equally important effects on art and architecture. The rulers of these states emerged from localized contests of small-scale leaders, and consolidated their realms by presiding over confederations of lords who retained their own sources of agricultural surplus or money. Should the dynasty stumble in its diplomatic and military maneuvering with other kingdoms, there were always plenty of local candidates, with or without kinship

connections to incumbent royal families, who were capable of seizing the reins and setting themselves up with the regalia of legitimate authority. They were ready to do this because they were also patronizing religious personnel and institutions on a regular basis, either as deputed "officials" of the empire or as private citizens seeking religious merit (and regularly proclaiming it). This meant that there was a regular flow of support to artisans and architects who set up smaller but at times not inconsequential establishments throughout the kingdom--a phenomenon best appreciated in the many temples still surviving from the Chola county. Pretensions to legitimate authority entailed the appropriation or borrowing or copying of motifs already associated with the dominant political authorities, which led to the diffusion of the imperial style into many smaller sites. But in the same way that regional variations betoken inter-regional contests, the expressions of localized aspirations were also occurring on contested ground, and we may expect a variety of subtle variations within the imperial style at these monuments that signify cleavages or alliances among sub-regional elites. This perspective remains more difficult for Chandella art, but we may look for these features in the more distributed specimens of architecture that we may only guardedly call "Chola" or "Khmer."

When considering the administrative systems in these polities, it is more fruitful to move away from a viewpoint that positions all bearers of honorific titles, with or without putative relationships with the kings, as members of a hierarchized officialdom. Similarly, references to taxation or extraction of revenues from agriculture or from trade do not necessarily refer to the fiscal machinery of a unitary state. According to Higham (following Mabbet's 1978 suggestion), these were mandalas, or circles of authority, with a varying degree of allegiance or subordination to bureaucratic institutions (Higham 1989: 239-355). It is obvious that the self-described emperors of these states were

capable of controlling impressive amounts of money, labor and resources in order to maintain sumptuous courts, wage extensive wars, and construct astounding monuments time after time. It is equally obvious, in view of the regular rebellions, civil wars and defections on the geographic edges of their territories, that a substantial percentage of surplus was under the control of intermediate authorities (Hagesteijn's "regional" elites). A number of the wealthy and influential persons appearing in the epigraphic records claimed affiliation with the kings' administrations and resemble closely the early forms of officialdom we might associate with the contemporary Chinese or Angevin state apparatuses. A larger number of persons with resources to spare in donation inscriptions bear honorific titles that may at some point have originated with royal houses, but which in fact betoken a purely formal, rather than substantive, subordination to administrative discipline. Kulke's studies of the Indonesian evidence support a general trend over time toward increasing penetration of local economies by state agencies over time--a movement through local, regional and imperial phases (1993: 263-326). The subsumption within ever more imperial formulations, the continuum between ritual and bureaucratic subordination of the lords, always depended on geographic location and the constellations of factional participants.

Let us return now to the original purpose of this presentation, the situation of the South. During the five-century period under consideration here, we may view southern India as the southwestern corner of a geographical zone stretching to the Philippines with a single, dominant development paradigm. This imperial style was a model or theory that linked an agrarian mode of production along with a mercantile economy to lordly confederations headed by kings. It was a model that was replicable on a continuum of scales and across linguistic or cultural boundaries, projecting a vision of legitimate authority connected to support of monumental religious institutions and associated art forms. Implemented over a wide

area, the imperial style enabled the expansion of agriculture and the assembly of multiple states, each coordinating its own rowdy collection of lords, each proclaiming its own universal dominion, each supporting artistic forms that exhibit remarkable similarities along with fertile innovation. The imperial style offered an explanatory framework for contests between states and stood as a ritual system for cooperation or conflict involving powerful dynasties with a hierarchy of local lords emerging from the agrarian economy.

The formation under discussion here reached its end during the fourteenth century, when changes throughout Eurasia brought in new players and new rules that led eventually to an incipient world system divided into South and Southeast Asian components. In retrospect, the regional kingdoms had allowed assembly of the agrarian and mercantile modules that were later to participate within the larger system. It is obvious that southern India was an important part of the processes that allowed implementation of the imperial style with unique regional variations, and exhibited specific regional modifications of that style as it changed during the fourteenth century. I suggest that the phenomena occurring in southern India, interesting in themselves, remained embedded on contexts involving more than the South.

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CHOLA SHRINES IN THE RAMESVARAM TEMPLE COMPLEX

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Though, legends and puranic stories assign the origin of the Ramesvaram temple to a very ancient times, its recorded history commences only with the seventh century, A.D., Hymns of Appar and Sambandar give a picture of the origin and the position of the temple. If the *Setu* (Bridge) mentioned in the *Setu Bandha* of Pravarasena II (A.D. 410 - 420) means the "*Setu*" associated with Ramesvaram, then that is the earliest literary record than the Tevaram hymns. It is clear from the bhakti literature that during the Pallava - early Pandya period the temple had existed. Though it was not a big sprawling temple, it must have had an edifice as *punkuyil* (as referred to be appar) which could in all probability denote an architectural form¹. Royal assistance of various kings has been helpful to the growth of the temple. Patronised by the Cholas, Pandyas, the Vijayanagar - Nayak rulers and the Setupatis, the temple has been expanded from its trabeate nature to a big temple complex accommodating a number of shrines, sub-shrines and thirthas. There are nine main shrines in this temple. Of them, five are earlier structures exhibiting Chola features of 10th - 11th Centuries A.D., probably of Parantaka I, and Rajaraja I period. This paper aims to analyse the architectural and sculptural features of these edifices in comparison with similar features found in the Chola main land.

Architecture :

Among the existing structures of the Ramesvaram Temple complex, the earliest ones are the much neglected five majestic shrines of the Chola period. Of them, three are now situated in a garden outside the Western outerwall of the third *prakara* and the remaining two are located near the Setumadhava shrine within the outer *prakara*. The other shrines, including the present main shrine, provide less scope for an indepth study for they have been renovated at different intervals. Of the five early ones, the two shrines, called twin shrines,² situated near the Setumadhava shrine, are primeval than the other three. Made of stone from the base to the finial, these two *dhvitala Vimanas* have been rendered heavy plastering and hence obscuring the details. From the visible features the following observations have been derived. These *Vimanas* stand majestically on a raised common upapitha sharing a common *mahamandapa*. Mahamandapa must have been a later addition, probably during the Vijayanagar - Nayak period. These two shrines have been attributed to the later Pandyas by K.G. Krishnan³. But, the recent survey impels the author to push the date to the 10th Century A.D. The Mpapitha of these *Vimanas* consists of *padma upana* showing inundations of the petals, long *kanta* and *kapota* decorated with *kudu* motifs at regular intervals and scroll work at the corners. The *adhithana* contains vertical mouldings of *padmajagati*, *tripatta kumuda*, *kanta*, *patti*, wall *kanta* and *kapota* in the side portions while the central *badhra* portion which projects outward shows *padma jagati*, *vritta kumuda*, *kanta*, *kapota*, *kanta* and *vari*. The proper *adhithana* is recessed from the *upapitha*.

The projection of the Central *badhra* portion without showing the *karna* and recess segmentations is not seen in any of the existing Pandya edifices. This feature seems to be an early Chola trait, for a number of thier monuments at Tiruchchatturai⁴ (A.D. 881), Erumbur⁵ (A.D. 935), Tirunamanallur⁶ (A.D. 935), Palur⁷ (A.D.

947) Viralur⁸ (mid ninth century), Anangur⁹ (A.D. 981), Tirukkattalai¹⁰ (late ninth Century A.D.), Kilayur¹¹, Madagadippattu (A.D. 985 - 1012) and the Chandesvara shrine within the Brhadisvara temple complex at Thanjavur, spectacle this facet in their wall segmentations. In this context we may assign these twin shrines to the Chola monarchy.

Now the second question is that during which Chola monarch have these been erected? The following discussion gives a probable solution to this problem. Here, it would be proper to record that most of the examples cited above, having *badhra* projection, belong to Parantaka I's reign. Here, the walls of the twin shrines adorn *kampa or stambha panjaras*. The base and the shaft of the *kampa Panjara* are square and octagonal respectively. The *kampa panjara* motif seems to be a feature employed in the Chalukya and Rashtrakuta temples, examples of which are seen at Aihole¹². An early Kerala style Krishna temple (A.D. 800) at Tirükkulasekarapuram too has *kampa panjaras* in the wall decorations¹³. In Tamilnadu, even though this device appears earlier, its refined workmanship is found in the Parantaka I or post Parantaka stage¹⁴, which later changed into a Kumbha panjara during the reign of Rajaraja I and elaborately used as a fairly stylised *kumbha panjara* during the later Pandya¹⁵, and Vijayanagar - Nayak period. All these factors relate that the *kampa panjaras*¹⁶ has prevailed in the early Chola temples upto the reign of Rajaraja I, who introduced Kumbha panjara. Here, at Ramesvaram, the presence of *kampa panjaras*, in pristine, style, too dates the twin shrines back to Parantaka I's reign¹⁷.

The pilasters of the twin shrines have square base (*Ome*), Octagonal *tadi*, octagonal *kudam*, octagonal Padma and square large *palaka* resembling many early Chola temples at Tirunamanallur, Palur, Pullamangai, Alambakkam, etc. But in the Pandya temples one cannot see this type of pillasters. They

invariably portray only *brahmakanta* (square from *Oma* to the finial) pilasters. Here, in the twin shrines, the pilasters also carry angular or bevelled corbel, an early feature. The *kapota* (cornice) is straight profile as in many early Chola examples of pre - Rajaraja I period. The *devakostha* niche is deep as in many early Chola temples. These niches lodge images of Dakshinamurti, Lingodbhava and Brahma in the South, West and North walls respectively. Their iconological traits too show the original early features. Both the shrines are almost identical except in a few cases. While that east facing shrines *griva* and *sikhara* are octagonal, the West facing shrine shows circular ones. These shrines are altogether plaster rendered otherwise exhibiting typical early features.

The other three early temples, now situated in the garden, are named by the author as shrines, I, II and III for convenience. Had they been constructed in the main land of the Pandya Country, these would have been probably considered the most beautiful and majestic structures among the structural temples of the Pandya country. Though damaged heavily by the sea water, these shrines still exhibit the original beauty. These shrines are entirely made of stone. Two of them are *tritala Vimanas*, while the last one is *dvitala*. The *tritala Vimanas* (shrines I (Kandamadaneshvara) and II) belong to *santara* type as in the Brahadesvara temple, Thanjavur. In the entire Pandya region this type of structures do not appear. These temples seem to be royal examples as in the case of Brahadesvara temple. Though there are two *tritala*, all-stone temples, constructed during the early Chola period, i.e. before Rajaraja I at Pullamangai and Tiruvarur (Acalesvara temple) they differ from the Rameswaram shrines in the composition of pilasters, corbels and arrangement of sculptures showing the typical early Chola art.

The shape of the *adhithana* shows lotus moulding instead of a vertical *jagati* and *vritta kumuda* instead of *tripatta kumuda* (in shrine I). *Yali* frieze appears in the *adhithana* though it was earlier

used by the Pallavas in the shore temple, Mamallapuram. In yet another case in the place of *patti*, a *padma* course appears (Shrine II) forming *padmabandha adhisthana*. Shrine III shows a simple *padmabandha adhisthana* introduced by the Pallavas and continued throughout the Chola period and by the Pandyas too, Adhisthana of shrine I is similar to that of Brahadisvara temple, Thanjavur¹⁸. This shrine stands on a *upapitha*¹⁹ which comprises a *upana*, *jagati*, *kanta* and *patti*. The *Kanta* exhibits relief sculptures of opposing *yalis*. *galapada* motifs appear in the wall *kanta* as in the early Chola temples in the Chola mainland and in the Chola temples of Pandya region. While the *kanta* of the early Chola temples in their mainland are adorned mostly with epic, Puranic and dance scenes and rarely with floral and creeper designs, the Chola temples in the Pandya region are mostly decked with floral and creepers and rarely with religious and dance themes. The Shrine I under study also exhibits dance figures showing different poses.

These Shrines show figures on either side of the niche iconographically related to the image in the niche. On either side of the *grivakosthas* are seen *bhutaganas* (shrine I)²⁰ and galloping *simhas* or *yalis*. In few cases (shrine I) human figures support the roof of the *salas* as in the early Chola temples. Interestingly over the roof of the *sala* is seen a large or massive *kudu* reaching the *kapota* of the second *tala* as in the Apatsahayesvara temple at Tiruppalanam, Brahadisvara temples at Thanjavur and Gangaikondacholapuram. The *palaka* of the pilasters are large and double as in many early and middle chola temples. The corbels of the pilasters are tenon like, which type was originally introduced by Rajaraja I. *Kumbhapanjara* appears in shrine III which is considered to be one of the major innovations of Rajaraja I in his Brahadisvara temple. Pilasters of all these shrines are *brahmakanta* as in the Brahadisvara temple. The pilasters of Brahadisvara at Gangaikonda cholapuram, built by Rajendra I (A.D. 1014-44) has varieties of pilasters like *brahmakanta* on the *karans*, *vishnukanta*

on the recesses and polygonal shafts on the *bhadra* portions. The niche of the shrines are real with some depth flanked by demi or split-pilasters.

The architectural features of the above three shrines i.e. shrines I, II and III, in the absence of epigraphs, suggest that these might have been erected during the reign of Rajaraja I, Presence of warrior images in a few niches of these shrines, (shrine II) remind us of those in the Brahadisvara temple, Thanjavur. Political ascendancy of the Cholas in the Pandya Country and in ceylon during Rajaraja I's rule also favours this dating. It was during this time Rajaraja annexed the northern half of Srilanka and renamed it *Mummudicholamandalam* Which also resulted in the destruction of some Buddhist monasteries and the construction of a few brahmanical temples.

Sculpture

Squarish, calm, gentle, soft and compassionate face of the deities, simple *hara*, *keyura* and other ornaments, tenderness of the body, slim waist, the mode of dress, presence of *simha* face in the girdle, twisted loop (tassel) in front of the thighs, refined and elegant headdress, all remind us of typical and original early and middle Chola sculptures. Most of the Sculptural representations of the three shrines (I, II, and III) coincide with those of *Tripurantaka* (shrines I, II and III) and warriors, favourite themes of Rajaraja I, None of these shrines have a representation of Rajendra I's favourite *Chandesanugraha*. *Risabhantika Ardhanarisvara* image of shrine I mostly resembles the one in the Agastisvara temple at Anangur (A.D.891)²¹ and Tiruviramesvaram (A.D. 985-1000)²² and partly Ramanathan koil at Pattisvaram (early in 11th century A.D)²³. Tripurantaka in shrine III shows an umbrella over the image as in the Chola temple at Pullamangai, Dakshinamurti (in shrine I) is flanked on either side of the lateral wall by four disciples.²⁴ The

Yoga Dakshinamurti, in the twin shrines, is interestingly touching his mount *nandi*, with fingers, instead of the usual serpent hood. The panel of *Lingobhava*, in shrine I, exhibits both Brahma and Vishnu, anthropomorphically in *anjali* posture, on either side of the linga, as at Pullamangai. There are also other beautiful sculptures of *Harihara*, *Kamadahana*, *Chandrasekara*, *Vishnu*, *Subramanya* and *Durga*, all representing Chola features, in these shrines. The study of the sculptures too reveal that thematically, shrines I, II and III collectively provide most of the aspects of Siva as in the Brahadisvara temple, Thanjavur. They rarely portray Subramanya, Vishnu and Durga. There are early stray stone images of *Yoga Narasimha* and *Lakshmi Narayana*, now placed in the *Lakshmi Narayana* shrine. A stray stone figure of the Sun god, with its pristine features is seen inside the twin shrines.

Thus, a detailed study of the architectural nuances and sculptural embellishments of the twin shrines and those of shrines I, II and III reveal that they were the contributions of the Chola monarchs Parantaka I and Rajaraja I respectively.

Notes and References

1. There are references to other temple types of early period like *Karakkoil*, *Nalakkoil*, *Kokudikkoil*, *Ilankoil*, *Manikkoil* and *Alankkoil* in early *bhakti* literature (Appar *Tevaram*, *Tirumurai* 6 Padikam 285, V.5)
2. These shrines are now locally called *Papapachesvara* and *Punyadhanesvara*, facing the east and West respectively.
3. M.A. Dhaky and Meister, ed. *Encyclopaedia of Indian Temple Architecture, South India, Lower Dravidadesa*, 1983, P. 344.
4. *Ibid*, Plate. 147
5. *Ibid*, Plate. 187
6. *Ibid*, Plate. 189
7. *Ibid*, Plate. 192
8. *Ibid*, Plate. 120
9. *Ibid*, Plate. 219
10. *Ibid*, Plate. 249
11. *Ibid*, Plate. 253 and 261

12. The *anuratha* portion of the wall in the Chalukya and Rashtrakuta tradition shows *stambha panjaras*. eg. Aihole (K.V. Soundararajan, *Indian Temple Styles; The Chalukya-Rashtrakuta Traditions*, P.42
13. M.A. Dhaky, op.cit., plate. 318
14. K.V. Soundararajan, *Tamil Temple Architecture and Art*, in MARG (Splendours of Tamilnadu), p. 63
15. A later Pandya temple, Padalisvara, at Vakaikulam near Aruppukkottai adorns a stylized *kumbhapanjara*.
16. Generally *kampa panjaras* seem to have been employed as a decorative feature to fill up little space provided in the recess or between pilasters, for more space is needed to place full *panjara* with two pilasters.
17. Parantaka I's association with Ramesvaram is evident from the Velancheri Copper Plates which mention his *tulabhara* ceremony at Ramesvaram.
18. The adhisthana mouldings mostly resemble B 4.b. of Barrett's division of early Chola podiums and thus are comparable with the Manavalesvara temple at Tiruvilakkudi (Thanjavur district), Vishnu temple at Olagapuram (South Arcot) and Brahadisvara at Thanjavur. But it exactly tallies with the Vishnu temple at Olagapuram, probably of Rajaraja I's period, which lacks the minor cymarecta separating *kumuda* from *jagati*.
19. High *upapithas* were introduced during the period of Rajaraja I probably to increase the height of the Vimana. Here shrine I stands on a *manchabandha* (*adhisthana* type) *upapitha*. The upapitha is proportionate to the height of the building as it is at Thanjavur.
20. This feature is seen in the early Chola temple at Pullamangai. (J.C. Harle, *The Early Chola Temple at Pullamangai*, *Oriental Art*, Vol.4, No.3, 1958, P.96)
21. M.A. Dhaky, Op. cit., plate. 220
22. C. Sivaramamurthi, "*Geographical and Chronological factors In Indian Iconography*", in *ANCIENT INDIA*, No.6. plate. XXb.
22. Refined examples of this type are found in the Brahmapurisvara temple at Pullamangai, Naitunaisvara temple at Punjai, etc. (M.A. Dhaky, op.cit., plates, 218, 219, 220 and 225.

PUDUR NEW LIGHT ON MONOLITHIC TEMPLE IN TAMILNADU

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The monolithic art of the Pallavas, the most revolutionary architectural designing in the whole spectrum of Indian art was experimented only for a few decades. Like the way, except the unique and solitary example at Kalugumalai, no other attempt of monolithic temple is so far traced out either by the Pandyas or by the minor chieftains. Monolithic models were virtually given up by the Pallavas slightly after the first quarter of the eighth century. After that practically no attempt was made by any of their successors to continue the monolithic art tradition, perhaps, as it was a laborious and time consuming process. But the recent discovery of a monolithic temple in Vellore District not only unveiled the hitherto unknown chapter on the post Pallava monolithic art in Tondaimandalam; but also revealed the continuation of the tradition of creating the petrified versions of contemporary brick and timber architecture in Tamil Nadu.

This monolithic temple is reported from a small village known as Pudur in Gudiyattam taluk. It lies 4 kms east of Karigiri, the notable leprosy health centre and about 21 kms south-east of Vellore, head quarters of the district. Close to the village on its western side is a huge hill known as Asaramalai, a granitic outcrop with huge rounded blocks precariously perched one over the other in an awe-inspiring manner. The village Pudur is a pilgrimage centre quite well known in the surrounding area because of the temple of subramanya situated on the top of the Asaramalai. The boulder in

which the monolithic temple carved is lying on the eastern fringe of the hill. The maximum height of this free standing granite boulder would be about 3.65m and its width is 4.57m. Alike the Pallava monolithic versions at Mamallapuram, this is also started carving from the top of the boulder. A square measuring 3.70m x 3.70m was prepared on the top of the boulder after chiselling the undulated outer surface and started excavating in as well as out from that level. It is quite strange from the earlier monolithic efforts available in Tamil Nadu. There, one sees, the entire *Vimana*¹ consisting of the *sikhara*, *griva*, *prastara*, *pada* and *adhithana* is cut out, from the living rock top to bottom. At Pudur, the excavation was started only from the wall (*pada*) level and downwards. Of course, *uttira* and also perhaps a narrow *vajana* are carved above the wall proper. The reason for the beginning of excavation right from the wall level and downwards by eliminating the superstructural elements is quite intriguing. The non-availability of sufficient rock material on the top of the boulder, selected for carving this monolithic temple, may perhaps forced to restrict the ambitious desire of the architect for an out and out monolithic temple to only upto the wall level in monolithic. The superstructure might be either in stone, very well matching to the monolithic wall and *adhithana* below or in stucco and brick, if the temple would have been completed in all respect. Curiously enough, the sanctum cell here is prepared not after quarrying the rock-mass through the entrance or *dvara* of it as it was the common method adopted in all the monolithic temples in India, but by scooping out the rock right from the top of the sanctum cell without leaving any provision for ceiling on it. A monolithic slab was perhaps originally intended to cover the ceiling of the sanctum after the completion of the detail carving of the sculptures and smooth finishing the walls of the sanctum. The superstructure was probably proposed to be constructed, on the top of this monolithic slab. The sanctum cell is in square measuring 2.20m x 2.20m and is scooped out upto the depth varying from 1.10m to

1.30m from the top. The thickness of the side walls of the sanctum is 75cms. A small rectangular porch-like *mukhamandapa* is provided on the frontal or northern side of the monolithic temple and it measures 1.20m x 0.45m. The front wall of the *mukhamandapa* or porch is comparatively thin than the walls of the sanctum and measures only 30 cms. The length of the *mukhamandapa* (45cms) and its wall thickness (30cms) altogether comes to the same thickness of the walls of the sanctum (i.e., 75cms) and thus makes on outer plan that the temple is of almost in square. The *mukhamandapa* extension on the northern side is tracable only on the inner plan of the temple. Attempt was made to carve the bas-relief of divine figures, perhaps the presiding deity/deities of this temple on the hind wall i.e., southern wall of the sanctum. There are two figures, both are unfinished and only the embossed outline of the figures are visible at present. The figure on the left side seems to be a male deity and wears what appear to be a *kirita-makuta*. This may also be taken as a long *jata-makuta* usually worn by Siva. The right side figure, perhaps, devi, also shown wearing a long *makuta* may be identified as *jata-makuta*. Both the sculptures are roughly carved upto the neck portion and after that some how left uncarved. Scroll or spiral shaped designs along with perhaps flowers and leaves are depicted on the top of the figures. The figures are intended to be shaped in standing posture, as it is obvious that the bas-reliefs carved just 20cms below the present top level of the wall i.e., the ceiling level of the sanctum, so as to accommodate the whole figure within the height to be available. Since the bas-reliefs are unfinished and the available portions are roughly worked without any tangible clue for their identify, it is difficult to make out anything from them. If the male figure is identified as Vishnu, by considering the *makuta* as *kirita-makura*, then the association of perhaps a female figure on his right side with *jata-makuta* is difficult to explain. Lakshmi usually wears *karanta-makuta*, where as parvati wears *jata-makuta*. Taking

the right figure as paravati, if the left figure is identified as her consort i.e., siva by half-mindly considering the hair dress as jata-makuta, than also it is not tally with the usual pattern of Siva-Paravati depiction. Paravati is always shown on the left side of siva, except in the Kalyana-Sundaramurthi scene, where she is depicted standing on right side of Siva before marriage. As the figures are intended to be fashioned in standing posture and the female figure is also depicted on the right side of the male one, this panel may be identified as Kalyana-Sundaramurthi, at the present state of evidence available.

Above the wall on the outside runs a *uttira* with a narrow *vajana* course on it. Only on the north and west sides these moulding are somewhat finished, whereas on the othersides the rough outline of these coarses are carved out of the mass. Attempt was made to carve pilasters on all the four outer corners of the sanctum, but would be completed only the corbel and upto the top portion of the shaft. The pilasters have plain shaft with cross-corbels on the top. Each of the four arms of corbel is of the plain type with a bevelled ends. Interestingly, the rock above the corbels, where instead of being cut the *uttira* and a narrow *vajana* in match with the features found on the walls, square sockets are made after cutting the rock mass. The reasons for cutting sockets on the corbels is intriguing. The socket provision was perhaps made on all the four corners above corbels, in order to accommodate the four leg like addition at the bottom of the monolithic slab to be paved on the top of the sanctum. These leg-like additions may keep the monolithic slab, in proper place without any jerking or movement. The outside of them might have been finished with *uttira* and *vajana* mouldings as match with details on the walls. The sockets may also would have intended to use as a footing for the masonry structure to be constructed on the top of the sanctum. Trimming of the outer rock mass of the boulder for fashioning the walls was started below the *uttira*, but abandoned there itself for

reasons unknown. The wedge holes found at various levels of the boulder clearly indicate the process of reduction of the unwanted rockmass to obtain convenient core for working. The entrance of the sanctum on the northern face is excavated only to a certain height (i.e., 60 cms) and not completed. The width of the entrance is 76cms.

Compared with the other monolithic temples in Tamilnadu, the monolithic at Pudur is a type in itself, though it shares many features with others. In Tamil Nadu, almost all the cave temples and the monoliths are carved out of very hard rocks such as granite, gneiss, charnockite, etc. The choice of the hard rock was primarily because of the absence of softer rock cliffs in this area. The promoters of cave temples in Tamil Nadu were also perhaps thought that the local hard rocks were more durable and an altogether new material not tackled by their predecessors or the contemporary rulers of other part of India. The easily quarriable trap-formations were deliberately chosen by the authors of the earlier rock-cut architecture in Western India for making the numerous Buddhist *chaityas* and *viharas* at Ajanta, Aurangabad, Karle, Bhaja, Nasik and other places. The cave temples and the monoliths at Elephanta and Ellora including the Kailasa are also carved out of trap rock. The first fullfledged Brahmanical rock cut temple in India at Udayagiri, Dist. Vidisha, Madhya Pradesh achieved during the Gupta period is also scooped out of soft sandstone. The western chalukyas choosed the much softer and more tractable sandstone and deccan trap in the excavation of their cave-temples at Aihole, Badami, Jogesvari, Elephant, Aurangabad, Bhokardan, Mandapesvar and other places. Like wise, the Eastern Chalukyas used khondalite and schist rocks for making their cave-temple at Mohalrajapuram, Vijayawada, Penamaka, Undavalli and Bhairavakonda and the Kadamba-Mauryas used laterites for their cave temple at Aravalam. The only other example in hard rock apart from the achievements in Tamil Nadu, in the whole range of rock

architecture in India are the seven Ajivaka caves in the Barabar and Nagarjuni hills near Gaya and one more at Sitamarhi near Rajagriha, all dating between the time of Maurya Asoka and his grandson Dasartha. Here, one sees, for the first time in India, that the huge boulder-like masses of hard quartzose gneiss are quarried with infinite labour and finished with an enamel-like polish. Quarrying and carving such a hard rock started and ended here within the same century, and the usage of hard stone for excavating cave-temples, monoliths, etc., was revived only after about a thousand years by the Pallavas and the Pandyas in Tamil Nadu.

Since the rock material chosen for the monoliths is of hard nature, the technique of cutting out of the exterior and cutting in of the interior aspects also differ from what was followed earlier and contemporarily in respect of similar work and cave temples in the soft rocks of the Deccan, Western India, Central India and Northern India. The various stages of finish of the cave temples and monoliths furnishes very good clues for the study of different techniques adopted in scooping, chiselling and finishing the rock surface. Initially, the unwanted rockmass of the chosen boulder or whole-backed rock was trimmed or sectioned by removing large blocks all around to obtain a convenient core for working. The process is called as *aravadittal* by the Tamil Stone masons, even today. This was done by jumping with hammer and chisel, a line of wedge-shaped holes at short intervals. A number of flat edged iron wedges of the same thickness were inserted into these holes and driven them, in by simultaneously. Striking them with heavy hammers, the resultant pressure and concussion of the enclosed air splitting of large chunks of the materials. The wedge marks found on the sides of the unfinished monolithic temple at Pudur and also the wedge line at the edge of the working platform at the base of the Northern Pidari Ratha, Mamallapuram, are the best examples indicating the method of cleaving of excess rock material in mass by the above process.

The carving work in all the cases of the monolithic fane proceeded from the apex down to the base. In this mode of carving the *vimana* forms out first out of rocks. In the unfinished monolithic ratha in front of the Mahisamardini cave temple, Mamallapuram, only the rough shape of a Sala *sikhara* of a *vimana* has emerged out from the parent rock and further cutting down abandoned. K.R.Srinivasan rightly compare this process with the sirodaya mode of emergence of the infant.² At the time of infant's first presentation from out of the mother's womb, head foremost and body and limbs following, would be the manner of emergence of the monolithic *vimana* from out of the womb of the parent rock, the *sikhara* (*sira*) first and the *angas* and *anukayas* succeeding.

Having obtained the desired surface of suitable dimensions the actual quarrying was made by the blocking method. There is a pictorial representation from Bharhut assigned to late second century B.C. which clearly gives an insight into the primary 'blocking' or digging technique adopted in North India. The workers shown using long pointed tools and chisels to take out chunks of stone. To reach the upper part of the hill which is being hewn they used not the ladder, but by steeping on metallic nails or chisels, fixed into the rock at different heights. This method was adopted perhaps only in the soft stones belts, as the sculpture is also found in one of such area (i.e., sandstone area). The process of blocking the hard stone during the Pallava time is noticed in many places at Mamallapuram.³ Large squares were prepared by cutting deep grooves on all the four sides, so that the squares themselves project out as reliefs. The projecting material of these squares was then subsequently chiselled off by deft side strokes of the chisel, centripetally from the grooves all round. This process being repeated as much as necessary.

Evidence also come to our rescue to show how the workmen while going down with the work of cutting out the parts of the *vimana*

in levels one below the other, progressively in stages, used the uncut rock below the finished level on the sides of the main core as a convenient platform to stand or sit on, for shaping and finishing the till then exposed parts. This process of reduction in stages of the platform, after the finishing of the parts in reach from the respective levels, was repeated till the bottom was reached. Apparently the wooden scaffolding or more likely earthen ramps were raised upto the desired height by the side of the rock or boulder, that would have to be cut away in stages, if sufficient parent rock was not available at its sides. At Pudur, the latter method was perhaps adopted as there is no parent rock available on sides.

The monolithic model at Pudur in the case of the Southern Pidari ratha. The monolithic model at Pudur is not having any superstructure at present. Perhaps, it was intended to provide masonry superstructure over the sanctum after the carving completed in all respects.

There is no much clue about the author and date of the monolithic temple. But the characteristic features of the workmanship and the rough sculptures indicates that it was scooped out during the Vijayanagara period or little earlier. It is significant to note that majority of the monolithic temples in Tamil Nadu are royal programmes. The selection of such a small boulder for the temple and the attempt of making partly masonry and partly monolithic to minimize the expenditure and labouriousness perhaps indicate that it was not the handiwork of a powerful monarch but by lay-patrons or petty chieftain of that area. Nowdoubt, the patron, who boldly revived the almost extinct tradition of the monolithic art in Tamil Nadu might be an another Vichitrachitta next to Mahendravarman I, the most innovative monarch, who inaugurated the out and out rock art tradition in the Tamil soil.

Foot Notes

1. *Vimana* is wrongly taken to refer only to the superstructure of the central shrine, but it really denotes the entire structure from *upana* to

stupi. K.G. Krishnan, *Studies in South Indian History and Epigraphy*, Madras, 1981, PP. 1-2; K.R. Srinivasan, *Cave Temples of the Pallavas*, New Delhi, 1964, p.189.

2. K.R. Srinivasan, *The Dharmaraja Ratha and Its Sculptures Mahabalipuram*, New Delhi, 1975.
3. The rock opposite Ramanuja mandapa, the rock below light house, and on the side of the unfinished ratha opposite to Mahisamardini cave-temple and Bhima ratha, etc.

ANAIYUR AS GLEANED FROM INSCRIPTIONS

P.JAYAKUMAR, Thanjavur

Introduction

The village Anaiyur, a place of historical significance in the Pandya country, situated at 9° 58' of the North latitude and 78° 02' of the East longitude with an area of about 2 hectares, was a flourishing village once. Now due to vicissitude of nature and circumstances it occupies an insignificant place as a hamlet of Kattakkaruppan-patti, a mere revenue village in Usilampatti taluk of Madurai district. This village has a glorious past beginning with the Megalithic period down to the Nayaks of Madurai with different names in different periods which has been the subject of study.

Source

Besides the literary evidence *Thiruvilaiydpuranam* of 13th century A.D., the main source for the study of this village is epigraphs found in the temple of Airavateswarar. Out of twenty four lithic records available in the temple, twenty three of them were published in the *Annual Report on Indian Epigraphy* for the year 1960-61 and 1962-63¹. The other inscription belongs to the Mahabali Vanatirayar, a feudatory of the Pandyas. An important copper plate record of the king Thirumalai Nayak which is brought to light by the Epigraphists of the Department of Archaeology, Government of Tamil Nadu and a few data collected by the author during the field study have been the main source for this study.

Thirukkurumullur

The earliest epigraph which belongs to Cholantalaikonda Virapandya (957 A.D) refers to this village as Thirukkurumullur, which perhaps might be known in the same name even during the regime of Imperial Pandyas, probably before the reign of Cholantalaikonda Virapandya.² Thirukkurumullur can be divided as *Thiru+kuru+mul+ur*, of which, *Thiru* is a common prefix to many villages in Tamil Nadu in those days denoting the sense of holiness, the suffix *ur* denotes the settlement. The rest, *kurumul* means (*kuru* = short, *mul*=thorn) short plant of thorns which even today, form the main feature of the region.³ This view is corroborated with *Thiruvilaiyadalpuranam* which describes this place, as a region covered with full of thorns (*mutputarkadu*). The region, though was full of *kurumul*, it is known not for it but for the prefix *Thiru* attached to it, signifying it as a holy place.

This same name seems to be retained even during the Chola supremacy in the Pandya country as the inscriptions of Rajaraja I, Rajendra I and Jatavarman Sundara Chola Pandya refer to this village as Thirukkurumullur and the temple deity as Thirukkurumullur Devar.⁴ During the period of the Chola rule in Pandimandalam, this village Thirukkurumullur was included in the Tenkallaganadu of Madhurantaka Valanadu, a subdivision of Rajarajapandinadu.⁵

Thirukkivilur

Interestingly, in the days of Jatavarman Sundara Chola Pandya (1023 A.D), Thirukkurumullur was known by the new name as Thirukkurumullur alias Thirukkivilur. However, we could not spell out the reason for the creation of the addition, Thirukkivilur, as it is mentioned only in one inscription.⁶ Because of the existence of a holy temple dedicated to Siva this place could have been referred to as Thirukkivilur out of reverence. It could be identified from a record of Cholantalaikonda Virapandya which specifies the glory

and greatness of the presiding deity, Lord Siva, who according to it, enabled the Pandya king to recapture the throne from the Cholas by the grace of this God (*irajiyattait tantarulina nayanar thirukkurumullur devar*). From this it is quite clear that this place in those days was held in high esteem by the Pandyas as well as their contemporary counter parts elsewhere offered worship at this shrine for one reason or the other as epigraphs vouchsafe.

After the decline of the Chola rule in this region, the Pandya Jatavarman Srivallabha reestablished the Pandya rule in 1122 A.D. and the village continued with the old name Thirukkurumullur.⁷ There was also no change in the political administrative divisions during this period as this was in the Tenkallaganadu of Madhurantaka Valanadu, a subdivision of Pandimandalam.⁸

Anaiyur

The name Thirukkurumullur seems to have continued till the 14th century A.D. as an undated inscription paleographically belongs to the Vijayanagara period refers to this place for the first time as Anaiyur.⁹ Probably after that time it continued to be known as Anaiyur, as it is today. For the change of name, a clue we find in a mythological story narrated in the *Thiruvilaiyadalpuranam* according to which, the Lord Indira's celestial white elephant Airavata had turned into black colour by the curse of the saint Durvasa for trampling underfoot the garland given by him to Indira.¹⁰ To recover its white colour and original status, the elephant came to this place to take bath in the golden lily tank of the temple at Anaiyur, with which it seems the elephant obtained its original colour and status later. The tradition further states that the elephant even after its relief from the curse, stayed in this village for some time, and as a result of such celestial presence, the village was named after it as Anaiyur (the village of the elephant). The temple also earned the name Airavateswarar, since, the Airavata, the elephant of Indira was relieved of its curse here.¹¹ This might be

the part of the process of Sanskritisation of the Tamil Country during the medieval period when Brahmanical style of life was held in high esteem and was accepted by the lower order in order to claim their super status.

During the time of the Nayaks, this village continued with the same name as Anaiyur. This could be gleaned from a copper plate inscription of Thirumalai Nayak (A.D. 1623-1659) discovered at Uttappanayakkanur, located 12 kms away from Usilampatti.¹² Further, from this inscription it is known that during the Nayak rule in the Madurai region, the village Anaiyur was the Head-quarters of the taluk and also the king Thirumalai Nayak frequently visited this place to supervise the administrative arrangements made in this region.

Kottaiyur

The village was also known by another name Kottaiyur but there is no reference in the inscriptions. Owing to its strategic position it was fortified during the Nayak period it is called as Kottaiyur.¹³ Some vestiges of this fort made up of bricks in and around this village below seven feet from the surface level could be cited as an evidence such a view point prevalent. As a supportive evidence, brick wall is also seen in the western section of a well dug for irrigation purpose, very near to the temple of Airavateswarar. However, curiously despite the presence of such vestiges, Kottaiyur has lost its identity with the fort. After the rule of the Nayaks Anaiyur, has been the principal village of this region, as it has played a decisive role in the freedom struggle.

Conclusion

Like Anaiyur, a number of interior villages of Tamil Nadu deserve to be studied in proper historical perspective. The scholars, particularly the students of history and epigraphy should come

forward to take such village study without hesitation to unearth the decisive role they played in the past. No doubt, such a study will help us to add to the existing knowledge of South Indian History.

Foot notes

1. The author owes a debt of gratitude to the Director of Epigraphy, Mysore of Archaeological Survey of India, for enabling to get the transcripts for the above said inscriptions.
2. *ARE*, 336: 1961-62.
3. *Tamil Lexicon*, vol. II, p.722 and vol. VI, p.3287.
4. *ARE*, 501,503 and 505 : 1962-63.
5. *Ibid.*
6. *ARE*, 506 : 1962-63.
7. *ARE*, 498 : 1962-63.
8. *Ibid.*
9. *ARE*, 350: 1961-62.
10. Baliga, B.S., *Gazetteer of Madurai District*, 1960, p428.
11. Venkatasamy Nattar, N.M. *Thiruvilaiyadal Puranam*, Saivasidhanta works publishing society, Tirunelveli, 1956, p.276.
12. Jayakumar, P. *Anaiyur Through the Ages* (unpublished M.Phil., Thesis), University of Madras, Madras 1984, Appendix 2.
13. The data have been recorded through interview from the local people during the field trip.

JAINISM IN TAMIL COUNTRY - A HISTORICAL APPRAISAL

DR. A. EKAMBARANATHAN, CHENNAI.

Jainism had a long but chequered history over a period of two thousand years in the southern part of peninsular India. It played a dominant role in the cultural milieu of the Tamils and had left indelible marks on the thought and life of the people. Jaina vestiges in the form of monuments, sculptures, paintings, inscriptions, manuscripts, literature etc., are found throughout the length and breadth of our country. They throw welcome light on the socio, economic and religious life of the Jaina community.

Spread of Jainism to the south :

Historians agree in common that by the close of the 4th century B.C, King Chandraguptha Maurya and a band of Jaina monks under the leadership of Bhadrabahu, anticipating a severe famine in their country, migrated to Sravanabelgola in Karnataka wherefrom they spread religious principles to the laity. Subsequently, after the demise of Chandraguptha and Bhadrabahu, their disciples moved further south to propagate Jainism in the Tamil country, and very likely, this could have happened in the 3rd century¹. Evidence testifying to the southward movement of the monks and the spread of Jainism from Karnataka to the far south, though absent, the early Brahmi records assignable to the 2nd century B.C. found in Madurai, Tirunelveli, Pudukkottai and Ramnad districts would certainly indicate the introduction of Jainism much earlier than the 2nd century B.C.

Early Jaina Vestiges :

The earliest extant religious vestiges in the Tamil Country are the natural caverns which once served as the abode of the Jaina monks widely found in most of the districts of our state. Such abodes of the wind-clad ascetics numbering to more than one hundred have been brought to light so far. These caves were made suitable for habitation by cutting stone beds in them. The beds were chiselled smooth with one side raised a little to serve as pillows. Epigraphic records in Brahmi characters paleographically assigned to a period from 2nd century B.C. to 3rd or 4th century A.D., mentioning either the names of resident monks or the donors, are incised on them. The over-hanging rock was cut in the form of a drip-ledge so as to prevent rain water flowing into the cave shelters. It is worthy of note that these 'holy abodes' were mostly located near springs of water which catered to the basic needs of the ascetics.

Royal Patronage :

The ancient Tamil country was ruled by the Cheras, Cholas and Pandyas who are cherished in most of the Sangam classics. Some of the Chera and Pandya Kings and a few minor chieftains seem to have extended their patronage to Jainism. The Irumporai kings were of a collateral branch of the Cheras, who are eulogised in *Patirrupattu*. Some of them find place in the Brahmi inscriptions from Pugalur near Trichi. It is recorded that Ilamkadunko who was the grandson of king Atanselirumporai and the son of Perunkadungo, when anointed as the heir-apparent (Yuvaraja) caused to be made an abode to the revered monk Senkayapan of Yarrur².

The Pandyas of the Sangam age had been very liberal in their religious outlook and Jainism flourished very well during their rule as is evident from a cluster of hill-resorts around Madurai.

Kadalanvauti, an officer of the Pandya king Nedunjeliyan had dedicated a monastery at Mangulam to the reputed ascetic Kaninanta. It was for the some monk, Nedunjeliyan's brother-in-law Chatikan and nephew Ilamchatikan caused to be made stone beds³. Though the king had not made any specific gift or endowment, the members of the ruling family had been liberal in contributing to the growth of Jaina monastic establishments.

Atiyaman Nedumananji, the celebrated minor chieftain of Tagadur region, is said to have dedicated a palli to the the Sramanas at Jambai in South Arcot district⁴. This Atiyaman is praised in the Sangam works as a hero of many battles, a patron of poets and an ardent devotee of Lord Siva. But the fact that he caused to be made an abode to the Jaina monks shows his religious tolerance and reverence to the heretical sect.

Kaniman, a local chieftain hitherto unknown to the early history of Tamil country, comes to light from a Jaina Brahmi record noticed as Mamandur in North Arcot district. He seems to have held sway over a small principality around Mamandur in the 3rd or 4th century A.D. This chieftain was instrumental in dedicating a cave to Jaina monks, and at his instance, the stone mason Chalavan cut the drip-ledge on the upper part of the cave⁵.

Public Support :

When Jainism gained wide popularity in the Tamil country, lay followers started endowing the monastic organisations. Moreover, the members of mercantile groups also played a dominant role in the development of such institutions. The early Brahmi records are replete with names of Sravakas who made provisions for the cutting of stone beds, lattice works, canopies, fronds etc., The monasteries at Anaimalai, Arittapaati, Kilavalavu and Vikramangalam, for instance, were provided with stone beds by house-holders like eriaritan, Attuvay, Arattakayipan, Natan, Atananvoliyan, Ilavan, Kuviran and Senkuviran⁶.

The keen interest evinced by the merchant community is also evident from many records. Atan- a goldsmith, Viyakan - a salt merchant, Ilachandan - an iron monger, Ilava Atan - a cloth merchant of Venpalli and Tevan Sattan a lapidarist had contributed by making stone beds in the monastic establishments at Alagarmalai and Arachchalur⁷.

The members of the merchant guild of Vellarai (Tiruvellarai near Trichy) also patronised the Palli at Mangulam by providing stone beds. Besides, the son of the leader of the same merchant guild had caused to be given a lattice work in the same monastery⁸.

Early Jaina Centres :

With the rapid spread of Jainism, there arose several settlements of the Jaina community in different parts of the Tamil Country. Though all those ancient centres are not known to us, some of them are referred to in epigraphs. Madurai, Vellarai, Tondi, Petalai, Tidiyil, Elaiyur, Venpalli, Nagapperur, Patinur, Nelveli, Nalliyur, Karur, Yarrur, Pakanur, and Kunrattur⁹ had been important centres with a sizable Jaina population, which lent support to the various monastic organisations. Among the aforesaid centres, Madurai, Karur, Pakanur, Tondi, Vellarai, Nagapperur (Nagamalai), Yarrur (Arrur) and Tiduyil (Tidiyan) retain their old names even to the present day. The others remain unidentified as their names had undergone change in course of time. It may be said in passing that archaeological spade work in these ancient settlements may throw fresh light on the material culture of the early Jains.

The foregoing account reveals that Jainism gained considerable support from the ruling class and the public in early historical times. The Kalabhras who came to power subsequently also extended patronage to the heretical sects. The Jaina adherents contributed to the welfare of society by providing food, shelter and medical aid to the poor and needy. People in the lower rungs of

society were admitted in Jainism and were imparted religious education. These socio-religious activities gave a fillip to Jainism. But in the 7th century A.D. it has to face stiff opposition from the advocates of brahmanical religion.

The Bhakthi Movement and Neo Jainism :

In the religious history of the Tamil country, the 7th century A.D. represents the revival of brahmanical religion on the one hand and the decline of the heretical sects on the other. The bhakthi movement spearheaded by the Nayanmars and Alvars coupled with the temple building activities of the Pallavas and early Pandyas made a steady growth to Saivism and Vaisnavism. The bhakthi saints in their attempts at popularising brahmanical religion undertook pilgrimage tours to important temples, sang in praise of the presiding deities with their soul-stirring hymns, performed miracles, roused the religious feelings of the common man, admitted all sections of the society into their folds and at the same time condemned vehemently the customs and practices of the adherents of heretical religions¹⁰. Thus the sectarian seeds sown in the fertile Tamil soil started germinating in different parts of the land. Soon it assumed alarming proportion leading to religious animosity and rancour. Kings like Mahendra Pallava I and Kunpandya (Ninrasir Nedumaran) who then pursued Jainism, were either converted or reconverted to Saivism. Religious disputes to assert the superiority of Saivism over Jainism took place at Madurai. The Tevaram and Periyapuram hymns allude even to the persecution of the Jains in places like Madurai, Tiruvarur, Tiruvottur, Palaiyarai etc.¹¹

The Saiva and Vaisnava rock-cut and structural temples of the Pallavas and early Pandyas became pivotal centres having elegant sculptural forms of gods and goddesses. Regular *Pujas*, and other ceremonial rituals were performed periodically in temples. All these temple-oriented activities fulfilled the aspirations of the common and attracted more people into the fold of brahmanism.

Thus, the bhaktimovement and the temple building activities led to the decline of Jainism. But soon it recovered from adverstiiities and came to possess a fresh lease of life by adjusting itself to the circumstancesa nd accomodating some elements from Brahmanism.

In this process of assimilation neo-Jainism admitted ritualistic and anthropomorphic worship of the Tirthankaras and their attendant deities. Sometimes prominence was attached to the workship of Yakshis like glamour in the wake of bhaktimovement began to throb with religious activities and come to possess darsanabimbas of Tirthankaras and Yakshis to which regular ritualistic worship had been performed. People began to make a number of endowments in the form of land, sheep, paddy, gold etc. for the upkeep of these monastic establishments. Temple building activities in urban and semi-urban centres were on the increase in the Pallava and Pandya domians. Jaina cave temples at Anaimalai, Arittapatti, Karungalakkui, Kilakuyilkudi, Kilavalavu, Kuppalanattam, Pechchipallam, Kongarpuliyankulam, Muttuppatti, Aivarmalai, Chitaral and Kalugumalai in the Pandya region and structural temples at Tirupparuttikunram, Permandur, Arahallur, Karanthai and Kilsattamangalam in Tondaimandalam are the best examples baring testimony to this new development.

The establishment of Vidyapithas (Mathas) at Tiruppatirippuliyur, Thirupparuttikkunram and Virasangha at Tirunarungondai and the concerted efforts of renowned monks like Vajranandi, Ajjanandi and others accelerated the growth of religion¹². Neo-Jainism thus became much more colourful and stronger than before catering to the needs of the common man and the spiritual aspirations of the elite. Hence, it could easily counter balance the growth of Brahmanical religion.

Proliferation under the Cholas

The Cholas who attained political sovereignty after the eclipse of the Pallava and early Pandya powers., were devout followers of

Saivism. But their staunch adherence to Saivism had not resulted in the negligence of Jainism at all. Infact, a gradual ascendancy of the Jaina religion and the proliferation of it's temple could be seen during their rule.

The Chola period also witnesses the occupation of natural caverns by recluses of the Jaina order. Such abodes are met with in places like Anantamangalam, Atchippakkam, Tirumalai, Valatti, Pudukkalani, Tondur, Cholapandipuram etc. Most of them were embellished with exquisite sculptures of the Tirthankaras and their attendant deities. Provisions were made for the worship of these images and lighting of lamps in front of them. Liberal endowments were made by the Jaina community for the sustenance of the monks and for the maintenance of the monastic establishments.

Independent structural temples were also built in many parts of the Chola empire. Among them, the temples at Chittampur, Tirunarungondai, Tirumalai, Perumandur, Salukki, Saravananpedu, Ponnur etc., deserve special mention. Moreover, some of the already existing temples were either renovated or enlarged during the rule of the Cholas. The economy of these temples became strong due to the large number of land grants and other gifts munificently endowed by some monarchs, their feudataries and members of the Jaina community.

Among the Chola queens, Kundavai remains unparalleled in the religious history of our land. Though an ardent devotee of Lord Siva, she had been generous in endowing Hindu and Jaina institutions alike. She is credited with building of two Jaina temples, one at Dadapuram and the other at Tirumalai¹³. The former Kundavai Jinalaya, notwithstanding the ravages of time, disappeared completely, while the other exists in a good state of preservation at the foot of the Tirumalai hill. The same queen was instrumental in digging a lake-Kundavaipereri at Tirunarungondai¹⁴.

Temples named after Chola Kings :

Some Jaina temples in medieval time were named after the chola monarchs. Eventhough most of them do not exist now, their names and endowments made in favour of them are recorded in epigraphs of other temples. The Jaina temple at Pallichchandal which came into existance in the 10th century A.D. was known as Gandaradityapperumpalli, named so after Gandaraditya Chola¹⁵. The Kunthunatha temple at Karantai, after it's complete renovation duing the time of Virarajendra bore the name Virarajendrappalli¹⁶.

The Thanjavur area also had a number of temples bearing the names of the Chola Kings. Such Pallis existed in places like Pallankoil, Avarani and Kuhur. The Pallankoil temple, built in the 10th century A.D., was known as Sundaracholapperumpalli¹⁷. The one at Kuhur bore the name KulottungaCholaperumpalli, named after Kulottunga I¹⁸. Besides, temples such as Gangarulappalli, Sedikkulamanikkapperumpalli and Chittiralekhaipperumpalli are known to have existed at Maruttuvakkudi and Avarani respectiely¹⁹.

It is not definitely known whether these temples were constructed at the instance of the Chola monarchs or merely named so in honour of them. But one thing is certain that the Chola rulers had been generous towards the Jaina sect, otherwise, these temples would not have been named after them.

Political & Religious setback :

South India came under the sway of the Vijayanagar dynasty between the 14th and 16th centuries A.D. The Vijayanagar kings in their attempts at preserving Hindu culture from the onslaught of Islam constantly crossed swords with the Muslim Sultans. Side by side, they had also to subjugate thier revolting feudatories. Adequate measurers could not be taken to stall the declining trade

and commerce. All these incourse of time led to political instability and economic disorder, causing great hardships to people. Even under these circumstances, extensive patronage was given to others. This situation worsened still under the Nayak agents of the Vijayanagar Emperors, and thereby a declining trend set in as far as Jainism was concerned.

Jaina Resurrection in Tondaimandalam:

Soon Jainism had its resurrection in the northern parts of the Tamil country due to the concerted efforts of the leaders of the Jaina sect and the awakening of the community. As Jainism gradually lost importance in the southern parts of the Tamil country since the 11th century A.D. its followers migrated at different periods to the northern parts and settled in villages which already had sizable Jaina population. This northward movement of the Jains reached its culmination in 16th century A.D. It was about the same time Virasenacharya established the Jinakanchimatha at Chittamur and did yeomen service to the followers of Jainism. He could mobilise the entire Jaina community under one roof and revitalise religious activities in Tondaimandalam²⁰. The successive pontiffs of the Chittamur continued the legacy of Virasenaacharya and promoted construction of temples in Jaina habitation centres and propagated the gospel of the Tirthankaras every nook and corner. As a result every Jaina Village began to Pulsuate with life and vigour. Periodical conduct of ritualistic worship and celebration of festivals on a grand scale were given much importance. Thus, people from all walks of life were drawn easily towards temple and were involved in religious activities. Chittamur became the hub of socio-religious activities and its matha exercised considerable influence over all the temples and the Jaina population. Still it happens to be a continuing tradition that the Jinakanchimatha symbolises religious integrity and social solidarity.

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RENAISSANCE OF JAINISM AFTER SAMPANDHA IN PANDYA REGION

C.SANTHALINGAM, MADURAI.

According to tradition, it is believed that Jainism spread from North India to South India by the migration of Jaina followers under the leadership of Saint Bhadrabahu who settled at Sravana Belagola. The subsequent movement to the Tamil area is believed to have been led by one Vishvakacharya. The team headed by Vishvakacharya might have reached deep South i.e. upto Madurai through Kongu region. Madurai served as a great Jain centre even from the 3C.B.C. Many number of natural rock caverns are found in which Jain saints and ascetics stayed and served the people. Mangulam, Anaimalai, Arittapatti, Alagmalai, Keelavalavu, Thiruvathavur, Varichiyur, Karungalakkudi, Thirupparankundram, Muthupatti, Kongarpuliyankulam, Mettupatti, Vikramangalam etc. were the main centres of Jainism before Christian era. We find early rock beds and Tamil-Brahmi inscriptions dated from 3C BC. to 3C AD. All the above mentioned places lie about 8kms. to 30 kms. distance around Madurai.

It was at Madurai that the Dravida Sangha of the Jains was founded by one Vajranandi in circa. 470¹. The Pulankurichi inscription dated 5 CAD also refers to a Jainapalli (Thapathapalli) at Madurai Ulaviyaththan Perunkulam². Sangam Literature Mathurai Kanchi, and the post Sangam epic Silappathikaram also refer to the existence of Jainism at Madurai. It was patronised by both Kings and merchants and the Jain saints not only preached their religion but also mingled with the life of the rural masses as their preceptors and physicians.

Although it was a foreign religion to Tamils, Jainism gained momentum both at the royal and rural levels. Such a well-established religion had to face a great set back because of the rise of bakthi movement. During the early 7c AD, Gnanasambanda, the first among the Devaram Trio travelled widely and caused the set back of Jainism. It is stated that thousands of Jaina followers were persecuted (*Kaluverram*) in and around Madurai. But ample evidence for such misdeeds are not to be found anywhere except some literary references.

Jainism did not loose its deep roots because of these unmerciful persecution or other royal discriminations. Again it emerged as a considerable force among the people and played a crucial role in the cultural and religious life of the people of this Pandya region. We have number of evidences inscriptions, sculptures and bas-reliefs which prove the rejuvenation of Jainism during 8-9c AD. Achchanandhi, a well known Jaina ascetic struggled hard to reorganise Jains in the same centres where it flourished in the early centuries and finally succeeded. New Jania Pallis were established in this period and Jainism won over the faith and confidence of the masses. Samanamalai, Kalugumalai, Kurandi Thirukkattampalli, Uthamapalayam, Aivarmalai, Anai malai, Arittapatti, Avicheri Perumpalli are some of the centres where Jainism was re-established.

Samanamalai-Madevipperumpalli

Eight important hills are mentioned as important, Jain centres in a later poem. Thirupparankundram, Uruvagam, Papparam, Palli, Arungunram, Anthai, Yanai, Irungundram are those eight hills named. Among them Thirupparankunram, Anaimalai and Irungunram (Alagarmalai) are alone identified and others that remain unidentified for recent years. Now Samanamalai, a hill that lies 8 Kms. west of Madurai city is identified as Uruvagam one among the eight hills by the discovery of an inscription dated to 9c AD.

This hill is named as Samanamalai by the local people, the name itself explains the association with Jains and the village near the hill is called as Kuyilkudi. At the centre of the hill there is a natural cavern in which Jaina monks lived two thousand years ago. Two Brahmi inscriptions have been found in this cavern. Musiri, Nagapperur and Vindaiyur are the three place names mentioned in these two inscriptions. Among them Musiri may be identified with the famous Chera port, Nagaperur with the present Nagamalai and Vindaiyur may be identified with Vandiyur, a small hamlet that lies 5 kms east to Madurai City. Kodan Elamakan, Saiyalan are the two personal names mentioned in these inscriptions. By the side of the cave a stone sculpture of Mahavira is found which belongs to 9c AD.

At the eastern end of the hill, we find Jaina vestiges which are more important. The place where there is a galaxy of Jaina sculptures, and a natural fountain which forms a perennial water source is called now-a-days as pechchi pallam. The sculptures found here represent Mahavira, Parsvanatha, Gomatesvara and other attendants Yaksha and Yakshi. Below these sculptures inscriptions are found which are in vatteluthu characters and dated to 9c AD. These inscriptions reveal the names of the people who caused to carve out these sculptures. Gunamathi, the mother of Achchananthi carved out a sculpture. Three inscriptions reveal that this Jain School was administered by one Gunasena Deva. Achchan Sribalan and Araiyan Kavithi Thanganambi, two students of Gunasena Deva arranged to carve two images³.

How the school was constructed on the top of the hard rock remains an interesting question. Some holes are found in the rock by the sides of the stone sculptures into which wooden poles might have been inserted. On the plinth level also some holes have been dug out and poles were planted. By connecting the poles, a temporary thatched shed might have been made which serve as a shelter. Such holes can be seen even today near the sculptures.

Apart from this Pechchipallam, just twenty metres above there can be seen a stone base of a ruined temple. At this base an important 9c AD. Vatteiluthu inscription was discovered in recent years by the officials of State Dept. of Archaeology. This valuable discovery helped to release one more knot in the identification of eight hills around Madurai. This epigraph gives the name of the hill as ThiruUruvagam, one among the eight hills, the identify of which remained a mystrey. This inscription belongs to the 29th regnal year of the Pandya King Paranthaka Viranarayana (860-905 A.D.). His queen's name was Vanavanmadevi. The Jain school established in this place had been named after this queen and called as Madevi Perumpalli. The epigraph further reveals that two veli measure of land was donated for the upkeep of this palli, which lies under the irrigatory area of Madakkulam, an ancient water source of Madurai. One more village Pulingunrur is mentioned in the inscription whcih may be identified with Kongar Puliyankulam very near to Madurai Kamaraj University buildings, where also was an ancient jain cave with Tamil-Brahmi inscriptions.

Jain scholars from Saravana Belagole Mulasanga had come and stayed at this school for years. Six of them ended their lives here by fasting unto death (*sallekanai*), the names of them were given in a Kannāda inscription dated 12c AD found engraved on the top of the hill. Thus this school has served as a residential school for more than 300 years⁴.

Settipodavu, another natural cavern lies on the Southern part of the hill is also having Jaina images, inscriptions dated back to 9c AD. Mahavira and other two Theerthankara figures are carved out here with great care and elegance. The huge figure Mahavira looks like a local chettiyar (usual money lender) hence the name of the place is called Chetti podavu by the local people. Podavu denotes the wide opening of the rock shelter.

Two bas-relief sculptures denote the Yakshis Siddhayika and Padmavathi. Siddhayika is shown as fighting with a demon who was riding on an elephant. The Yakshi is seated on a lion and waging a relentless war. This Panel remembers the famous Mahabalipuram Mahisasura Mardhani panel.

The inscriptions engraved in vatteluthu dated to 9 cAD give valuable information regarding the Jaina monastery and the ascetics. The names of the preceptors and students who caused to cut the images are mentioned in these inscriptions. Most of these people have come from Kurandi Thirukkattampalli in Venbunadu another famous monastery during those days. Gunasenadevar is said to be the incharge of this school. This village Kuyilkudi is mentioned in these inscriptions as Uyirkudi alias Amirthaparakramanallur. The teachers are mentioned as Padarar, Periyadikal etc. but the students are mentioned as Sattan and Manakkan.

Thus this school was established during 9th cAD and patronised by the royal and noble class, had close contacts with Mulasangam and Dirandi Thirukkattampalli, and lost its importance during 13 cAD just like other jain-centres.

Kurandi - Thirukkattampalli :

Kurandi Thirukkattampalli, a famous palli mentioned in number of early inscriptions found in the Pandya region. A small village in the Madurai - Aruppukottai route just 20km. from Madurai is still named as Kurandi. (near Aviyur). No doubt this is the same village, in which the Jain School Thirukkattampalli was established during 9th CAD. Today no traces of this palli is found in this remote hamlet but the inscribed stones of this palli are found at Pallimadam⁵ near Thiruchulial. From these inscription it is known that this Kurandi lies in the subdivision of Venbunadu, and the Palli is named as Thirukkattampalli. An individual belonged to Karunilakkudinadu has donated 100 sheep for supplying ghee to this palli. Other two

individuals donated 50 and 75 sheep for the perpetual lamps burnt in this Palli.

This Tirukkattampalli had mutual contact with other famous Pallis like Madevipperumpalli (Samanmalai) and Kalugumalai palli. Gunasena deva, the Saint incharge of Madevipperumpalli situated at Samanamalai hailed from Kurandi Thirukkattampalli. Jain teachers and students had visited Kalugumalai jain palli and in memory of their visit they had chiselled out Thirthankara figures in that hill. Five inscriptions from Kalugumalai give their names. Iyakkanandi, Sirupadarar, Kavithikavithi, Kanakananthi and Purnachandran were the five persons who caused to carve out jain figures⁶. Among these five persons Kanakananthi was the student of Theerthapadarar and Purnachandra was the student of Kanakananthi. thus atleast three generations had continuous contact with Kalugumalai jain Palli.

Such a well known jain centre Thriukkattampalli lost its importance almost during 13 cAD. The temple was ruined and the stones were carried away to Pallimadam and utilised to construct a Sivatemple. Hence the inscribed stones are discovered and published as Pallimadam inscriptions.

Kalugumalai:

It is a well known jain centre and the biggest one in Tamilnadu. It is situated near Kovilpatti, at a 21 Km distance on the main road to Sankarankoil. This place is called as Thirunechchuram and the hill where jain palli is situated is named as Thirumalai and Araimalai in inscriptions. This place once served as an abode of jain monks but the natural caverns and beds have been converted recently into Ayyanar temple. Evidences to prove the existance of Jainism at Kalugumalai during the early christian era are not known so far. The present Jaina monuments and inscription belong to 8-9 cAD when jainism was at its zenith at Kalugumalai.

On the rock of this Kalugumalai, Cultures of Thirthankaras are carved out in three successive rows. Almost all are in same size except one or two. In the first row 25 figures, in the second row 18 and in the third row also 18 figures are carved. Besides these special importance is given to the figures like Araimalai Alwar, Adhinathar, Neminathar, Mahavirar, Parsvanathar Padmavathi Yakshi and Ambika Yakshi and they are all well chisled with usual parapernalia. Some more Thirthankara figures also are found carved scattered by the jain followers who visited this Palli.

More than 100 iscriptions are engraved here all of them are in Vatteluthu dated back to 9th cAD⁷. From these inscriptions we understand the remarkable role of this Palli in the development of Jainism. Almost this was the biggest centre in Tamilnadu and jain ascetics and followers came over and stayed here from all other centres in Tamil nadu, Kottar, Thirucharanathumalai, (Sitharal), Kurandi Thirukkampalli, Naikur, Thirunarunkondai (south Arcot Dt.) Milalur, Pereyirkudi, etc. are the important centres from where number of Jaina followers visited this Pallis and carved out the Thirthankara images in memory of their visit or as a religious rite.

Number of Jaina teachers and students stayed here and Jaina Siddhantha (Philosophy) was taught in this Palli. Lands were donated for their feeding (Aharadhana) during the reign of Maranjadaiyan⁸. Ladies also attended this School as teachers and students. They were named as Kurathi and Manakki respectively. Lands and cattle were donoted for the upkeep of this Palli and this was protected by separate security forces, they were called as Thirumalai virar and Parantaka virar, They might have been appointed by the King. Thus a greatest Palli of this Kalugumalai existed atleast two hundred years continuously. Like other jain centres the fate of this Palli also ended.

Thirucharanathu Malai :

It is also a notable Jaina centre in Vilavankodu Taluk in Kanyakumari district. Here it is called as Bhagavathi temple. The image of Padmavathi Yakshi is called as Bhagavathi. Like Kalugumalai here also a galaxy of Jain Thiruthankara figures are carved out in overhanging rock. Below these figures the names of the individuals who caused to carve out the images are engraved. 15 Kalanju of gold was donated by one lady desciple of this palli during 28th regnal year of the king Varaguna⁹. Jaina followers from other centres like Thirunārunganrai (S.Arcot Dt.) Thirunedumparai visited this place and carved out votive images. Like other centres here also the Jaina monk Achchananthi got carved out one figure. The status of this centre after 10 cAD was uncared for like other places.

Nalur Avicheripalli ;

In recent years a Jaina Thiruthankara figure was discovered at Pandalkudi, a small town in the route of Aruppukkottai to Tuticorine¹⁰. Quite interestingly this image is found with a Vatteuthu inscription of Chola monarch Raja raja. This inscription records that this stone image was erected by one PukaI Sadaiyan., for the merit of his forefathers. The other important point is this image was given to the Palli called Nalur Avicheripalli which comes under Venbu Nadu. This Palli may be a small temple in which this Thirthanakara figure was consecrated those days. The village Nalur is not traceable now. But the same Nalur residents had visited Kalugumalai¹¹ and Ayvarmalai¹² So it is clear that Nalur Avicheripalli existed from 8th cAD to Rajaraja. This Palli had also close contact with its counter parts at Kalugumalai and Ayvarmalai.

Kulathur Palli :

An inscription found in a Vishnu temple at Kulathur near Aruppukkottai reveals the existence of a Jain Palli at Kulathur.

The Palli is mentioned as Virpori Vira perumpalli¹³. and the Village Kulatur is now called as Thoppalakariai on Arupukottai-Sayalkudi high way. This inscription belongs to the 20th regnal year of Emmandalamum konda kulasekara (13 cAD). Two Jain Thirthankara sculptures are also found on the bund of a tank in this village which are the remaining evidence for the old temple.

The name Virporivirar denotes the security guards who travelled along with the merchants in their trade route. They might have been the followers of Jainism and when they stayed at this kulatur they might have built this temple. This proves that even upto 13 cAD Jainism enjoyed support from the rural masses.

Thirukkunagiri

Uthamapalayam is a small town situated near Chinnamanur, Here on a rock a small Palli has been established and some Thirthankara figures are carved out. Seven inscriptions are engraved all of them in Vatteluthu characters and dated to 9 cAD. One such inscription mentions the name of the deity of this Palli as Thirukunagiri Deva¹⁴. For the welfare of the temple eleven Kasu was donated by one Anantha Vira Adigal. The other inscriptions are laible inscriptions which state the persons who caused to carve out the Votary images. An inscription denotes Kurandi Thirukkattampalli, Another one mentions the name Arittanemi Periyar who was the student of Astoupavasi Kanakavira. Achchananthi is also referred to in an inscriptions.

Ayiraimalai :

This place is now called Ayvar Malai situated in Palani Taluk. Here also some thirthankara images are carved out and below them the names who established them are engraved. Among them Achchanandhi, Indirasenan, Mallisena of virasanga and Avvanandhikurathiyar (lady) are notable personalities.

Other Jain centres :

Besides the above mentioned Pallis many number of small monuments and reliefs also reveal the deep rooted influence of Jainism, Kovilangulam, a place near Aruppukkotai is an important Jainpalli during the Kulothunga chola I period. Anumanthakudi, Ilaiyangudi the other places in Ramnad Dt. where still Jain temples and sculptures are found.

Recently a Jaina Thirthankara image was discovered at Vadipatti near Madurai by the Archeological officers of the State Dept. of Archaeology¹⁶. This stone image bears an inscription reads as "Malaikulam irangal nikkiya Srivarthamana devar." Malaikulathu Varthamanar is mentioned in Kalugumalai inscription also¹⁷. Malaikulam may be a village near Vadipatti which once formed part of Pakanur Kurram. The monk Vardhamanar mentioned in this inscription had set right the problems faced by the people during 9cAD.)

Role of Achchananathi in the Rivival of Jainism :

Achchananathi, a jain monk is mentioned in various inscriptions dated to 9 CAD. It is clear that he was the causer to carve votive images of Thirthankaras at places like Anaimalai, Arittapatti, Karungala Kudi, Saman malai (mother) Ayvarmalai, Uthamapalayam and Thiruchcharanthumalai. From these evidences we can surmise that this monk Achchananathi had played a remarkable role in the revival of Jainism particularly in Pandiya region. He paid much attention on ancient centres of Jainism where Brahmi inscriptions and jain beds were found and re-organised the jaina Sanga in such places, Not only he installed bas-relief sculptures of Thirthankaras, he won over the confidence of the common folk and the royal officials who might be the followers of Vedic religion. The Anaimalai monument was protected by Puravuvvari Thinai Kalathar (revenue officials) and the Shabha of

Narashinga mangalam (The brahmins) The Arittapatti image was protected by the Ural of Pathirikuddi. Thus he had visited almost all jain centres in Pandya country and struggled hard to revive jainism after the set back due to Thirugnansampanda's expedition and the subsequent effects. But it remains as a mystery such a great monk Achchanandhi does not figure any where at Kalugumalai Palli, the greatest in Tamilnadu.

Foot Notes :

1. A. Ghosh, Editor, *Jaina Art and Architecture* vol. I.P. 94 Bharatiya Jnanpith, New Delhi. 1974
2. தெரல்லியல் கருத்தரங்கு பக். 164, தமிழ்நாடு அரசு தொல்பொருள் ஆய்வுத்துறை, சென்னை - 1983.
3. மயிலை சீனிவேங்கடசாமி சமணமும் தமிழும்
4. C. Santhalingam, Yesterdays School-Todays monument *Indian Express*
5. *SII* XIV 32 and 34
6. *SII* V 318, 325, 332, 345 and 359
7. *SII* V 307-406
8. *Ibid*, 405 and 406
9. T.A. Gopinatha Rao, *Baudha and Jaina Vestiges in Travancore*. Travancore Archaeological series Vol. II & III p125-126
10. Dr. V. Vedachalam, Nalur Avicheripalli, *Varalarrukkalakam* P.21 Mano Publishers. Thanjavur 1998
11. *SII* V 404
12. *SII* XIV 111
13. Dr. V. Vedachalam, Alarrunattukulathur, *Avanam* vol. 5 P. 54. 1997
14. *SII* XIV 128
15. *Ibid* No. 120-127
16. *Avanam* Vol. 7. 1996
17. *SII* Vol. V. 314

JYESTHA CULT - AN OVER VIEW

DR. P.D. BALAJI, Chennai.

The Worship of Jyestha seems to have been popular in Tamil Country as evinced by its sculptural representations in the Pandya cave architecture in the Southern Tamilnadu and in the Pallava architecture in the northern Tamilnadu. In Pandyan caves, carving of the image of Jyestha along with Ganesa, sometimes with Sapthamatrikas is a common feature¹. At Tiruparankundram an inscription² in the Subramanya cave refers to the excavation of a shrine for Jyestha, near the one dedicated to Durga in the year 773 AD by Sattan Ganapati the minister of Pandyan Maran Sadaiyan. This shows as a final stage in the iconographic development she was recognised as a cult to an extent of excavating a cave shrine exclusively for her worship. From this it could be conjectured that Jyestha was known in Pandyan region at 8th century AD.

However, in the northern part of Tamilnadu (ie) in Tondaimandalam, she is appearing for the 1st time at Kailasanathar temple at Kanchi (730 AD) built by Rajasimha.³ On the plinth of mainshrine of this temple, Jyestha images are carved. Images of Ganesa and Jyestha are not accommodated in the niches, rather they are carved in insignificant places. From this it could be inferred, Ganesa and Jyestha did not attain the status of cult by the time when the Kailasanathar temple was constructed. It was probably around this period she was also depicted on the Trimurthy stone plaques found in places like Munnur and Madhurantakam.⁴

Further it is also quite interesting to observe that in the caves of Pallavas, Ganesa and Jyestha are conspicuous by their absence. K.V. Soundararajan⁵ observes "From the themes of the iconography again we seems to note that the saptamatrika, Jyestha and Ganesa became a reasonably common feature of most of the Pandya cave temples. These are not to be noted in the northern Tamilnadu under the Pallavas before the 1st quarter of the 8th cent. AD." The Vasanteswarar Temple (cave no:1) at Vallam, though was excavated during the reign of Pallava Mahendravarman I (590 - 629 AD) by a feudatory called Skandasena⁶ the beautiful images of Ganesa and Jyestha on the facade flanking the doorway, are seems to be later additions, probably after 8th cent AD.

As far as the literary references are concerned. *Bodhayana's - Grihya Sutra*⁷ contains chapter on the worship of Jyestha and *Vishnudharmottaram*⁸ mentions eight kinds of Jyestha images. Similarly Sendan Divakaram⁹ the earliest *Nigandu* of 10th cent. AD mentions eight names of Jyestha as follows: *Mugadi, Thauvai, Kalati, Mudevi, Kakkai-K-Kodiyal, Kaludaivahani, Settai and Kedalanangu. Nandi-K-Kalambakam* a Tamil Literature composed in 9th cent. AD says that Jyestha was the goddess of evil and propitiated for warding off evil. The work further says that she was the elder sister of Lakshmi.

"Seyya kamala-t-tiruvukku munpiranda taiyal uravu tavirttome"
Nandi-K-Kalambakam verse 112.

Likewise, in early days Ganesha was also considered as a evil spirit and to get rid off his onslaught he was said to have been propitiated¹⁰. Probably these may be the reasons for the depiction of Ganesa and Jyestha on the facade, sometimes flanking the doorway as at Vallam cave. Further an analysis of the iconographic features reveals that both were depicted in obscure features such as prominent belly or slanting abdomen, elephant face, crow as

banner, nandi faced son etc. This shows that these two images were purposely depicted on the facade of the caves for a specific purpose namely to ward off evil spirits and bless the devotees with fortunes.

Subsequent to this, probably due to her popularity, in the scheme of astaparivara devatta shrines of early chola, she was accommodated in one of the eight shrines¹¹ along with Ganesa, Subramanya, Chandran, Suryan, Chandesa, Bairava and Saptamatrikas. The inscriptions at Tirupparaytturai¹² (Trichy 898 AD) and Erumbur¹³ (South Arcot 935 AD) enumerate the astaparivara scheme, that included a shrine for Jyestha. The epigraph¹⁴ of Erumbur dated in the 27th regnal year of Rajendra I (1039 AD) called Jyestha as *Kettai-K-Kilatti*. From this it is gleaned that even by 11th cent. AD this cult seems to be prevalent and popular.

Though from the literature we get different names for Jyestha their iconographic features are unknown. She was uniformly depicted with subtle differences in the available specimens. She was always depicted with two hands. Unlike the later ones, most of the early specimens from rock-cut caves and Kailasanthar Temple at Kanchi, are singularly depicted without her son or daughter. The hands are sometimes in *dola-hasta* and sometimes holding a flower bud. All the specimens are awkwardly shown with a projecting and slanting abdomen. Therefore she is uneasily seated. In the later (probably 9-10th cent. AD) specimens which once accommodated in the astaparivaradevata scheme of early chola times, she is flanked by nandi faced son on one side and a good looking girl on the other side-both are in seated posture mostly, and sometimes in standing posture. Besides, a crow banner to her right and a broomstick to left were depicted. In this period she was rarely represented in singular. Uniformly in all, the upper garment was absent.

After the inclusion in the astaparivaradevatra scheme, Ganesa¹⁵ as a cult acquired a permanent place i.e., southern niche in all the South Indian Temple architecture, whereas Jyestha failed. Her importance was gradually degraded and her worship was totally relegated to background by 11th cent. AD. This is amply evinced in the pasurams of Tondaradi Podi Alwar¹⁶ (850 AD) discouraging the devotees against worshipping Jyestha when goddess Lakshmi is there.

Nattinan deyavam engum; nalladu or arul tannale

Kattinan tiruvarangam uypavarkku uyyum vannam

Kettire nambi mirkal gerudavahananum nirka-c

Cettai tan madi yakattu-c-celvam parttu irukkinrire

-Divyaprabandam, 880

These verses endorse that there was some sort of aversion towards the worship of Jyestha. This sort of discontent probably relegated her from temple worship by 11th cent. AD. All the stone images accommodated in the temples were removed and thrown out of the temple precincts. These specimens lying outside the temple complex remind every one of her glorious days. However the factors led to oust her from the temple, are obscure and shrouded in mystery for want of tangible evidence.

Foot Notes

- 1) K.V. Soundararajan "Early pandya Art", South Indian Studies (Dr T.V. Mahalingam commemoration volume) ed. by H.M. Nayak, p.637.
- 2) *Annual Report on Epigraphy*, 1908, No.37; South Indian Inscriptions Vol. XIV No,3
- 3) C.Sivaramamurthi, *The Art of India*, p.508
- 4) P.D. Balaji, "Anur Trimurthy Stone Plaque", *Avanam* No, 8, pp. 158-162.
- 5) K.V. Soundararajan, *op.cit*
- 6) C. Sivaramamurthi, *The Art of India*, p.527.
- 7) T.A. Gopinatha Rao, *Elements of Hindu Iconography*, Vol. I, pp. 391-93

- 8) Ibid., pp.391-93
- 9) Vaiyapuri Pillai, *History of Tamil Language and Literature*, pp. 164-165
- 10) R.G. Bhandarkar, *Vaisnavism Saivism and Minor Religious System*, p. 223
- 11) K.R. Srinivasan, "*Religion as gleaned by early monuments*", The Madras University Journal (section A) XXXII No. 1, p.157.
- 12) *South Indian Inscriptions*, Vol III., no. 560
- 13) *Annual Report on Epigraphy*, 1919, no.318
- 14) *Ibid.*
- 15) *Tevaram* (Sambandar), 1266, 1st Tirumurai, 117th Padikam, verse 8, lines 1-4.
- 16) *Divya Prabandam* (Tondaradippodi), 880.

NAGA CULT AND FERTILITY SYMBOLISM

DR. T. CHANDRAKUMAR, Thanjavur

The worship of snakes particularly the cobra (cobra capello) was popular throughout the Indian Subcontinent.

Cultic Symbolism

The serpent -worship must have originated possibly out of the dreadful nature of the creature for which offerings have been made. It has already been noted that they possess demonic powers and hence it is stated in the Vedas that Indra had slain them. The snake was conceived as a symbol of physician in the ancient world (Sivaramamurti 1983:38). They were viewed as benevolent and worshipped along with gods and trees. In Tamil Nadu the cult is popular and widespread in the rural surroundings. Statuettes of serpents or snake-stones are found installed in the central location of almost in all the villages under a pipal or margosa tree and a ceremony called "marriage of the pipal-tree" is performed. The connection of the Nagas and the tree evidently implies the tree and serpent worship (Sastri 1916:250) which again complements the belief of procreative power. (Fig. 1 Madurai Minakshi-Sundaesvara temple, Madurai) In this connection, *Sivapurana* ('Vidyasvara samhita' ch.II.sl.20-21) mentions the trees as the stationary phallus whereas the animals mobile phallus. Secondly, several ancient societies including the archaic inhabitants of India viewed serpents as phallic symbol and this phallic notion of serpents had the direct bearing upon the concept of fecundity. Images of sexual organs of man and woman were consecrated and

worshipped in the ancient societies all over the world (Westropp 1970:26-27) and the phallus is entwined or encircled by snakes and this serpentine and phallic character and function are interlinked. As per the popular belief much resemblance is sought out in the function of both since they enlarge and erect when roused and the erection of serpents seems to imply a phallic analogy (Westropp 1970:60) and both generate life, prosperity and progeny, the former by means of ejaculation of semen and the latter spitting *sarpamani*, the jewel-like carbuncle and the split-tongues. Varahamihira (6th century A.D.) in his *Brhatsamhita* says that the snakes of the lineage of Taksaka and Vasuki roaming at will have bright blue-tinged pearls in their hoods (Banerjea 1974:346n). Therefore the serpents are known as 'the moving phalli'. This analogous concept is noticeable in the consecration of both the *linga* and the serpents together and the latter serves sometimes as the canopy to the former.

Thirdly there is a popular belief that if a person dreams of a serpent it is believed that his wife will soon become pregnant (Aravanan 1988:95). Whenever a barren-woman enquires about the possibility of a child-bearing capacity the astrologer used to remark since she is possessed of *sarpadosa* 'sin/curse of snakes' and hence advocates them to conduct *sarpapuja* to propitiate the Nagas for issues. It is believed that a ritual conducted in honour of serpents, would favour them with child. Fourthly one of the Yogic centres called *kundalini-sakti* at the muladhara level same as *mulaprakrti* (at the bottom of the spinal column) is conceived in the shape of a coiled snake whose *adidevata* (governing-deity) is Ganesa (Pathar 1974:143).

Serpent-like *kundalini* is the intertwined energy of manifestation and conceived as a five-hooded *naga*-representing five gross elements of Nature. *Tantrikas* rouse the *kundalini* and

the force arises in an upward movement to *sahasrara* and by means of these *sadhana* 'yogic exercise', one becomes fit for transcendental aspiration and supreme good.

Viewed against these beliefs, it is pertinent to study a rare bas-relief carving found on a pillar of a sixteen-pillared *mandapa*, located at the entrance to the temple of Ekamresvara temple at Kanchipuram. (Fig.2) The *mandapa* wherein the icon is found, appear to have been built during 17th-18th centuries A.D., Since it bears architectural features of the Nayaka period such as the pendent flowerbud corbel (*puspapotika*-corbel). It depicts that a five-hooded Nagadevi is seen holding an icon of Ganapati or Pillaiyar (Tamil) and presenting the same to a female-figure whose appearance and attitude implies that she must be the consort of the donor. Now the question arises from which authority the textual mandate for carving out the above depiction had originated. Is there any puranic sanction for such a rendering? No. Not at all. Nowhere in the puranas we come across Pillaiyar is held to be as the son of Nagadeva.

Taking into account the belief of the serpentine power of procreation and life as well and its analogous resemblances of its being in phallic character and function, it is not surprising that the sculptor drives home the notion of fecundity by showing Nagadeva presenting a child and the child is none other than Pillai(yar) himself. In this connection we must not forget the etymological trick played in the carving which is aligned with the name and icon of Pillaiyar, the sculptor was perhaps well-acquainted with Tamil paronomasia and hence depicted the icon of Pillaiyar punningly. Literally speaking Pillaiyar is a combination of twin words i.e. *Pillai plus ar*, the former stands endearingly for a child, a synonym of the word *bala*, and the latter for a respectable suffix like that of *garu* in Telugu and *ji* in Hindi. Pillaiyar is artistically fashioned as a fantastic or deceptive substitute in the place of a child. Such a

depiction of Pillaiyar or Bala-Ganapati which originated out of the imaginative power of the artist has to be appreciated in the context of paranomasia as a trend in art as we find in literature. The conceptualisation of the notion of procreation of life or giving birth to a child that rests with the cult of serpents is translated into art and Tamil word Pillaivaram denotes 'Child-giving-boon' (Pillai 'child' and varam 'granting of a boon'). This sculpture provides the basis of the popular notion of the serpentine power of granting a boon of a child to a issueless couple concretising the same in a sculptural form. It must be remembered in this connection that in several temple, one can notice the consecration of naga stone with the statue of Pillaiyar as existing side by side.

When we note the iconographical features, Nagadeva is endowed with four arms; back right arm appears to carry a trisula and the corresponding left a snake. The two front arms are shown extended across the body which are depicted as presenting the icon of Pillaiyar to a woman whose disposition appears to be divine whom must be the Nagini since she is devoid of any serpentine accoutrements or features. Nagadeva wears a short coin-cloth, *hara*, anklets and bracelets whereas the goddess is shown decked with a peculiar *karandamakuta* like head-gear, and klet, bracelets, wristlet and a full *antariya* resembling a modern *sari*. Her arms is extending towards Nagadeva and her hands are chiselled under the plan of the god in an attitude of receiving the boon.

Conclusion

The foregoing analysis points out the hoary tradition and belief in the serpentine power of life-giving power and progeny. The worship of ant-hills of snake mound vouchsafe this character. This unique carving gives an artistic form to the popular belief and the sculptor had chosen the theme of Nagadeva in the attitude of presenting a chil-like image of Pillaiyar to a goddess or a woman. Studying

from the conceptual basis and also etymological trick of the word Pillaiyar and the iconography under study the sculptor had attempted to bring home the hoary concept of the serpentine power of Pillaivaram 'child blessing' and the theme is punningly handled in plastic representation.



12. Naga cult - Kanchi.

THE ROLE OF MUSEUMS IN THE PRESERVATION OF ARCHAEOLOGICAL FINDS

Dr. V. JEYARAJ, CHENNAI.

Introduction

The Government Museum, Chennai was established in 1851 in the St. George's College at College Road with 1100 geological specimens. Later the museum was shifted to the Pantheon buildings in 1854 and slowly it took a shape as a multi-disciplinary museum with collections of archaeology, anthropology, numismatics, art, botany, zoology, etc. As early as 1923, the problem of corrosion in the bronze icons was realised and the then Superintendent of the museum for undertaking this task by an Archaeological chemist moved the Government of Madras. Later Dr. S. Paramasivan was appointed as the Archaeological Chemist in the Government Museum. In 1935, the Museum Commission headed by Mr. S.F. Markham and Mr. H.Hargreaves, visited the Madras Government Museum. Seeing the work of the Laboratory, they suggested that all the objects should be brought under the purview of the Archaeological Chemist. This laboratory started treating all types of museum objects, helped the Archaeological Survey of India in preserving wall paintings, and many research projects were also undertaken and many publications were brought out in conservation.

Madras Museum and Archaeological Survey of India.

The Madras Museum was also of help to the Archaeological Survey of India. In 1935, Mr. J.F. Blakiston, who was then Director

General of Archaeology in India, requested Dr. Gravely, then Superintendent of the Madras Museum to spare the services of the Museum Chemist to examine and report on the condition of the Ajantha like paintings in the Brihadiswara temple at Tanjore. Even though this was not under the purview of the museum, Mr. Gravely co-operated fully with the Archaeological Survey of India in this effort. It may be interest to know that the preliminary work done in the Madras Museum as early as 1935, was the basis for the systematic treatment of Tanjore paintings, which was undertaken by the Archaeological Survey of India in 1946. One copper container was cleaned for the Archaeological Survey of India in 1984. Over 50 copper coins were treated for the Archaeological Survey of India recently during 1997.

Madras Museum and Archaeology Departments

The archaeology departments in Tamil Nadu have frequently used the services of the Government Museum, Chennai. Ancient pottery specimens from the Department of Archaeology, University of Madras were examined for the university. Silver and iron objects from the Department of Epigraphy, Tamil University, Tanjore were studied. One lead ingot was treated for the State Archaeology Department.

Government Museum and HR & CE Dept.

The Hindu Religious and Charitable Endowments department wanted the services of the museum in preserving the paintings and antiquities under their control. In 1972, the 14th Century Hoysala paintings of the Venugopala Shrine of the Srirangam temple were studied and a report was prepared for the treatment of the same and the laboratory of the museum treated the paintings. The paintings on the walls around the golden Lily Tank in the Madurai Meenakshi Amman Temple were treated. The examination of paintings in Sri Varadharajaswamy temple in Kancheepuram was

carried out followed by a report on the treatment of the paintings. The Laboratory of the museum studied the deterioration of a pillar in the Temple at Thiruvallur and the suggestions given were implemented. The Temple Car of the Nedunkudi Temple in Pudukkottai district was studied and the suggestions for the treatment of the temple car was prepared and given to the authorities for implementation. Temple cars at Shri Mushnam, Therazhundur and Thiruchendur were chemically treated and preserved by this department. The paintings at Andal Temple at Srivilliputhur and Chitra Sabha at Courtalum were studied and reports on their preservation were prepared and given for implementation. One Vishnu bronze image from the Hindu Religious and Charitable Endowments department was treated in 1996. The sculptures and antiquities in the Padaleeswarar Temple at Cuddalore and the Ekambaraeswar Temple at Arumbakkam were treated with the help of students. At present the Varadharajaswamy Temple authorities have requested the museum to suggest the treatment of the paintings in the temple in 1997. The Hindu Religious and Charitable Endowments Department has requested now to examine the paintings at Srirangam for their conservation treatment.

Museum and Churches:

The Church authorities in Chennai used the expertise of the Government Museum, Chennai. The marble statues and tablets in St. Andrew's Church and St. George's Cathedral, Chennai were cleaned twice on their request. In 1997, with the help of the students from Stella Maris College, the marble statues and tablets in St. George's Cathedral were treated and preserved. At present the authorities of the St. Andrew's Church are have in discussions with the museum authorities for the restoration of the church.

Museum and Other Organisations.

Government Museum, Chennai has been very useful for all institutions in the preservation of archaeological findings in Tamil

Nadu. A large bronze statue of Duplex was treated and preserved by this department. This museum has preserved a large Vishnu stone sculpture located in the Central Institute of Plastic Engineering Technology, Guindy. This department preserved one large stone sculpture of Madurai Veeran at Paichal, Salem district. Three marble statues in the Presidency College were preserved with the help of students of the college.

Recently the Pondicherry Museum Curator has requested the Government Museum, Chennai to help them to preserve treasure trove bronzes received by the Museum. Similarly the Vijayaraghavachari Library, Salem has requested to treat the life size bronze statue of Vijayaraghavachari.

Conservation Services to Others

The Government Museum, Chennai has introduced a scheme of offering conservation services on charge basis. Many have been benefited by this scheme. By this scheme individuals who possess antiquities can apply to the Museum for conservation services on charge basis. All types of objects are preserved by the laboratory of this Museum. Coins, weapons, wood carvings, paintings, etc., have been conserved for the individuals and institutions in the past and it continues.

Training Programmes

The Government Museum, Chennai is the pioneer institution in India to start a conservation laboratory to preserve the antiquities for posterity. The vast experience gained by this museum is shared with other museums of the country. This museum designed a course in 1974, namely Care of Museum Objects, for the museum personal to preserve the museum collections. This is well attended throughout and so far this museum has trained over 230 persons throughout the country.

At the request of the Commissioner of Hindu Religious and Charitable Endowments Department, a course was designed for the Executive Officers of the department and the course was conducted for ten Executive Officers for a week in 1996. This course has been designed in such a way that the Executive Officers can understand the preservation of temples, antiquities and materials of the temple.

Setting up of District museums

The department of museums has set up 17 museums in the district head quarters in order to preserve the artistic, cultural and scientific culture of the district while presenting them for enjoyment while learning about them. These museums are collecting archaeological objects and are preserving them for posterity. Their activities are great that they carry out educational activities and are conducting awareness programmes to preserve the cultural heritage for posterity. These district museums are the hub of activities educating the public through out archaeological finds.

Conservation of Archaeological Finds

Museum is a non-profit making permanent institution in the services of the society and of its development and open to the public, which acquires, conserves, researches, communicates and exhibits for purposes of material evidence of man and his enjoyment.

The sources of the archaeological objects are varied. The objects may come through exploration, excavation, treasure - trove finds, through purchase, gifts, transfer etc. Once the objects were taken care off by their own environment / owners. When they are brought to the mesums, a very few members of staff manage a large number of objects. The aggression due to nature and human beings is high. In order to control the deterioration of the cultural property, We must be aware of the factors of deterioration or

dangers. The museum personnel should be competent to handle the problems and The conservators - restorers and the museum staff should be good communicators. The message from an object should be communicated to the on lookers and also should be protected.

The curators of the collections in a museum are not much aware of the damaging factors of the objects. There are very few cases, where objects are miraculously protected without the help of any direct or indirect action. If the conservators discuss the problems with the curators most of the objects will be better preserved.

The objects once at different environments and places are brought to a single place i.e. museum for preservation. The archaeological objects brought to the museum are in need of some actions for their proper unkeep. All forms of direct and indirect actions aimed at increasing the life expectancy of (an) undamaged and or damaged element(s) of cultural property is termed as conservation.

All forms of direct action aimed at enhancing the message(s) carried out by (an) damaged element(s) of cultural property are termed as restoration. There are three types of work in the museum. They are : Curative Conservation, Preventive Conservation, Restoration.

Curative Conservation

In a museum about 2% of the collection may be in need of Curative Conservation. When a unique piece is actively damaged, it needs curative conservation. It is an urgent and vital process to be carried out by a trained conservator / restorer.

Preventive Conservation

All the collection in a museum are sound, stable and some are damaged. What ever may be the condition of the objects preventive conservation is essential. A team of people in a museum may do this.

Restoration

About 10% of the objects in the collection of a museum are in a damaged condition. The priority of the treatment is secondary. A trained conservator - restorer may do restoration. Some objects are in need of only Conservation Some objects are only in need of restoration there are objects, which are in need of both conservation and restoration.

In order to increase the life of an object, one must know the life history of the object. The physical integrity of the object is 100% at the time of its creation. The time taken to completely disappear is called the life expectancy. For example an iron object at the time of its making has 100% physical integrity. When it completely corrodes, there is no metal core but the form of the object is maintained. Even though there is deterioration, the life expectancy is maintained further.

The history of an object which comes as a treasure - trove, excavated object, at the time of excavation it is found under a deteriorated condition. By the application of three acts, the life expectancy may be improved, reduced or will reduce at the rate at which it originally deteriorates.

Aggressions of Archaeological objects

The aggressions or the deteriorating factors of an object can be natural or man made. They may be by the environment, building and staff. The natural aggressions may be lead to immediate destruction or progressive destruction. Immediate destruction to

the archaeological objects may be brought about overnight by flood, fire, earthquake etc. Progressive destruction is also natural one. This is brought about by environmental pollution due to air, dust, moisture, heat, light, micro organisms, wind, salt and intrinsic factors like chemical changes with in the material, physical changes etc. The man made aggressions are classified as public aggression and professional aggressions.

The public aggression is mostly due to unawareness. They are such as vandalism, encroachment of a declared monument or site, more tourism attraction, theft, war and terrorism, urbanisation, misusing the cultural property. The aggression due to the professional mishandling of the antiquities and cultural objects is called professional aggression. This is due to the lack of awareness, planning, training, security, control and improper execution of curative conservation, restoration or, transport, storage, exhibition, support, lighting, handling, maintenance etc.

Strategy for Conservation

For better conservation of the cultural property, a systematic strategy is to be adopted. There are seven steps for the conservation measures to be taken. They are : 1. Know your collection, 2. Categorise and identify the aggressors, 3. Avoid the aggressors, 4. Block the aggressors, 5. Check or monitor the aggressors, 6. React against the aggressors, 7. Communicate. The preventive conservation measures may be taken on the above lines.

The curator in consultation with the conservation scientist must determine the degree to which a collection is to be handled and the display area and storage arrangement must be tailored to the demands made upon it.

CONSERVATION OF MURALS IN RAMALINGAVILASAM PALACE

S. SUBBARAMAN, BANGALORE.

The Ramand Fort and the Palace in their present form were constructed by Raghunatha Sethupathi, better known as Kilavan Sethupathi, a powerful king who ruled between 1678 and 1710 A.D. He was succeeded by his nephew Muthu Vijaya Raghunatha Sethupathi (1710 - 1728 A.D.), who was a great patron of the arts. The mural paintings in the Ramalingavilasam were done during his period.

The vast majority of the mural paintings in Tamil Nadu are in Temples and the themes are religious and mythological. The Ramalingavilasam paintings are one of the very few exceptions to this. They are in a palace and there are many secular themes, including historical incidents and the life scenes of the king himself, depicted here in addition, of course, to the usual themes like the Ramayana and the Bhagavatha. These paintings represent easily the largest concentration of old mural paintings in Tamil Nadu. Fortunately the major part of the original painted surface still survives. The remarkable paintings were practically unknown to the public till recently and it is only after the department of Archaeology took over the palace building are they open to view.

Technique of the paintings

The paintings have been executed on lime plaster. First a rough lime plaster consisting of a mixture of lime and sand has been laid on the wall to a thickness ranging from 1/4" to 1/2". This

1. Correct levels of heat and humidity : full air conditioning; improvised micro climate.
2. Well planned storage areas.
3. Protection from light : correct levels of light; blind and curtains.
4. Use of conservation technique and materials for housing.
5. Full instructions to the users of collections; that is clean hands, correct handling, no smoking, no pens or inks.
6. Good surface for viewing.
7. Cleanliness.
8. Use of fascimiles instead of the originals.

Conclusion

The Department of Museums is carrying out many activities to preserve the archaeological findings in Tamil Nadu. Many more museums are going to be established in the future. It is planned to register all the objects in the museums and to prepare a State Directory of Antiquities. The museums are the central hub of activities in preserving our archaeological findings for posterity. The role of the Department of Museums in preserving our archaeological heritage is commendable. This is being understood by its activities.

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corresponds to the "Arrichio" of, Italian murals. Over this is laid the 'intonaco' i.e. fine lime plaster about 1/8" thick consisting almost entirely of lime. After the 'intonaco' is dry, the 'sinopia' i.e. lime drawing (in red colour in this case) is done, which is followed by the filling in of the colours.

Earlier investigations of mural paintings from some important sites in Tamil Nadu by Dr. S. Paramasivan, a pioneer in the study of Indian mural paintings, have shown that the pigments used were of mineral origin. There is a popular belief that vegetable colours have been used in these paintings which does not seem to be borne out by any of the studies so far. This also makes scientific sense because vegetable colours and dyes, being organic in nature, are more susceptible to the photo-chemical effect of Sunlight and have the tendency to fade. In practice, however, the colours are found to be bright even after centuries. Secondly some vegetable colours may react with lime. A case in point is Indigo, which is found to be incompatible with lime, and is never used in the fresco technique.

The pigments used in the Ramanathapuram paintings are found to be as follows : Red - Red ochre Vermillion, Yellow - Yellow ochre, Green - Terreverte Malachite, Blue - Ultramarine, Black - Lamp black, White - Lime, Different shades have been produced by a suitable mixing of the above primary colours. The binding medium in which the powdered pigments were thoroughly ground before application, is a glue. The painting technique employed is therefore tempera.

State of preservation of the paintings

In the large front hall of the palace, to our left as we enter, we can see paintings of historical scenes on the walls. The first few of them depict the battles between Muthu Vijayaraghunatha Sethupathi and king Sarafhoji of Thanjavur. In the next panels are

seen foreign emissaries and Christian missionaries being received at the Sethupathi's court. The last panels on this side depict some holy shrines of Tamil Nadu. On the walls to our right are painted the Dasavathara images of Vishnu and other mythological themes. On the ceilings floral and geometric designs are painted.

On the right side there is considerable loss of the paint surface due to the flow of rain water on the walls, entering from gaps in the ceiling. Such loss is noticed on the left side also but to a lesser extent. The painted plaster itself has been detached and lost in some places. On the ceiling also there is considerable loss of the paint surface due to seepage of rain water. On the right side, the designs are almost completely lost.

There is a deposit of dust and dirt all over the paint surface. The dirt is found to be cemented firmly to the paint surface in some places due to moisture. At the upper levels of the paintings, near the ceiling, are noticed whitish patches of bat droppings. The lowest portions of some panels on the left side were found to be covered with lime wash. A close examination of the paint surface revealed bulging in a number of places. This also occurs because of moisture in the wall and if not treated promptly, there may be the danger of the bulging portion completely detaching itself from the wall and falling off. Fluffy, whitish deposits of fungal growth are observed in a few places.

Fortunately the problem of salt efflorescence is not present, in spite of the wide-scale water seepage. As we proceed inside from the front hall, we first come to the verandah of the inner hall. On the walls of the verandah are painted many lively scenes of the exploits of Lord Krishna as a child. Here the paintings are almost intact with very little loss. Deposits of dust and dirt as well as fungal patches are found.

Next comes the inner hall, known as the Ramar Koodam. Appropriately, the paintings on the walls here depict Ramayana Scenes. The ceilings and the arches also carry paintings of figures and designs. There is some loss of paint surface due to water seepage but much less than in the front hall. The other defects noticed in the front hall are present here also but to a lesser extent.

Ascending the stairs from the inner hall, we come to a chamber on the first floor. The walls here carry rather an exuberant painting display. The King Muthu Vijayaraghunatha Sethupathi and his consorts are portrayed in a number of different situations. The paintings bring out clearly the fact that the king was a connoisseur of the arts and appreciated life in all its finer aspects. Here again paint loss is noticed. What is more glaring, however, is the result of vandalism. The paint surface is covered with deep scratches all over.

Conservation Procedures

It may be appropriate to stress at the very beginning that among the factors causing the deterioration and loss of mural paintings, moisture is the commonest and most powerful. Therefore, before undertaking any conservation project on mural paintings, it is essential to carry out all necessary structural repairs and completely stop the seepage of rain water from the ceiling or the walls. Otherwise any conservation work carried out can be entirely nullified by the subsequent ingress of moisture and all the time, effort and money spent on the conservation work, altogether wasted. In this case, the conservation project was launched after gathering the information that the repairs to the ceiling were complete.

Photographic and graphic documentation

The first step was to make a detailed photographic documentation of the paintings in order to record their condition

before conservation. While complete coverage was done in colour photography, some black and white photographs were also taken in selected areas. Views of complete panels as well as close-ups were photographed. For bringing out surface defects like cracking etc. prominently, raking light (i.e. light directed at the surface from the sides) was used.

In addition, graphic documentation was also carried out. In this, on rough sketches of each panel, the different types of defects like peeling, cracking, bulging, loss of plaster, loss of paint, edge loss etc. were clearly marked with the help of selected symbols.

Consolidation

The actual conservation process begins with consolidation and strengthening of the painted plaster and paint layer. In the case of peeling plaster, the adhesive viz a mixture of lime and casein, made into a thin paste, was injected behind the peeling plaster, which was then kept pressed against the wall for a few hours with a spring arrangement, until the adhesive set. In the case of bulges, the adhesive paste was injected through a small hole made in the painted plaster so as to reach the back and spread on the required area and the painted plaster was then kept pressed against the wall until the adhesive set.

Wherever the paint layer only was peeling, it was fixed back to the ground (i.e. lime plaster) with the help of a 5 to 10% solution of Polyvinyl Acetate (PVA) in Toluene. Fine cracks in the paint layer were also be filled with PVA solution. Wider cracks and gaps in the paint layer caused by plaster loss, were filled with lime-casein mixture. All loose edges were fixed using the filleting technique with the help of a suitably tinted mixture of lime and PVA emulsion. The tinting is required to make the filleted edge inconspicuous.

Cleaning

In the cleaning of these paintings, an important point to remember was that, since they were in a water-soluble medium viz. glue, aqueous solutions had to be avoided except where absolutely necessary and even there, allowing the minimum contact time with the paint surface. Organic solvents, effective in removing the accretions but having no effect on the paint layer, were only to be used.

As much of the loose dust as possible was first removed by careful dry brushing using a flat, soft brush. The next procedure in the cleaning was the application of Rectified spirit or Isopropyl alcohol with cotton swabs, which were gently rolled over the paint surface for removing the dirt. In the case of adherent dirt, a 1% solution of a non-ionic detergent (Teepol) in Rectified spirit was used.

The bat droppings were a tougher proposition. Consisting mostly of inorganic salts like phosphates and oxalates, these deposits are not dissolved by organic solvents. They were softened with an alcohol water mixture (1:1) and then were gradually removed by mechanical means. The fluffy, light grey fungal patches were first removed carefully by brushing so as not to contaminate other areas of the painting. The affected spots were then cleaned with Rectified spirit containing a few drops of fungicide viz Ortho phenyl phenol. The lime coating on the painting at the bottom portions of some panels, had also to be removed only mechanically because the only chemical agents to remove lime are acidic solutions and their use was simply out of the question.

Reintegration

Whether at all or to what extent any missing portion of a painting can be made good for purely aesthetic considerations, is

a ticklish question that has been debated long. In the Archaeological Survey of India and other Departments of Archaeology in this country it is the accepted policy not to make any additions whatsoever, for that would interfere with the authenticity of the original paintings. Therefore losses are left as they are and whatever remains of the original is faithfully conserved. Gaps, however, in the middle of a painting, if left as they are, can be jarring and an eye-sore. These have to be toned down so as to match with the surrounding painted area and become inconspicuous. This process, carried out with careful use of suitable colours, is called reintegration. Reintegration was carried out by using water colours, in such a way that the colours in the treated areas could be easily removed at any time, in case the work was felt to be unsatisfactory and had to be redone at any point of time in the future. Complete reversibility is one of the main criteria to be scrupulously adhered to in any conservation procedure.

Application of preservative.

The last step was the application of a preservative coating on the paint surface. The preservative used was in 1% solution of PVA in Toluene. This leaves a thin, perfectly transparent film on the painting after the evaporation of the solvent.

PVA has several advantages as a preservative. It is chemically stable, retains its transparency and colourlessness for a long time. Above all, it remains completely soluble even after the lapse of years and thus satisfies the criterion of reversibility.

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PRESERVATION OF ESALAM AND KODUMUDI BRONZE IMAGES

M.S. ASHOK DEEN, CHENNAI.

The bronzes displayed in museums are mostly collected from the temples and from the accidental finds. These bronzes are made of the alloy of copper, zinc, Tin and other Trace elements found through the area. When two or more metals are alloyed together as tin and copper are in the case of Bronze images the susceptibility to corrosion is greater than in the case of unalloyed metal and when once it has get in the decay of bronze proceeds more quickly than in case with copper alone.

The Metallic Bronze have wide variety of products on the surface. It may be due to chemical causes, that is the interactions of the metals with salts, acidity, air and moisture. When the corrosion occurs the disintegration starts, which may be slower, accelerated depending the types of the metals and the exposure condition. This causes deface of the brilliant metallic surface, the slight dullness involving removal of metal icons. The corrosion remains on the surface of the Bronze images and falls out in course of time. Depending upon the physical and chemical condition the Bronzes are cleaned by various methods.

Mechanical Method

When the corrosion is in great quantity and hard, the corrosion produce could be reduced mechanically by watching under a binocular microscope and the work should be carried out with more

patience. Proper strength or padding is needed before it is cleaned. Many tools should be designed to serve the purpose needles, chisel, files mounted on wood with different sizes.

Electro Chemical Method

When there is enough metallic core and the incrustation is hard and thick the objects are reduced by zinc and caustic soda. The hydrogen produced by the action of caustic soda on zinc reduces the corrosion to their metallic state. This is called electro chemical method.

Electrolytic Reduction Method

The method of reduction which is normally preferable to that of electro chemical reduction it involves use of electric current. The corroded Bronze is tied to the cathode (acts as cathode) in a suitable electrolytic such as sodium carbonate or Sodium Hydroxide. The positive (Anode) usually being stainless steel. When current passes, hydrogen is evolved at the cathode which reduces the incrustation gradually with the result the details can be exposed.

Cleaning of Bronzes by chemical methods :

1. In certain cases to remove fairly hard and thick incrustations 10% Alkaline Rochelle's salt solution is used (Sodium Hydroxide + Potassium sodium tartarate).

2. When bronze image is very fragile and cannot stand any drastic treatment but have deformed area in the incrustation. Then 10% caustic soda treatment is given.

3. Bronzes with calcareous deposit then it is treated with sodameta phosphate solution.

4. To preserve the Patina or by stabilizing the corrosion while retaining their general character. The bronze object is placed

in subsequent baths of 10% sodium carbonate solution when the chlorides are reduced to certain extent then the object is placed in a 3% benzotriazole solution in methylated spirit. The bronze is taken out excess benzotriazole is wiped out with a help of moistened cotton wool in industrial methylated spirit.

Preservative coating

After chemical treatment and excess chemicals removed the object are given a coat of 3% polyvinyl acetate in toluene and acetone.

Esalam and Kodumudi bronzes

Bronzes assignable chola period were brought to light in Esalam village in Villupuram District, and at Kodumudi Erode district. They were intentionally buried to protect from vandalism. The former was accidentally unearthed while levelling the earth in the temple prakara, at 3ft depth. The later were found at a river bed. A team of scientists and technicians of our department were deputed to those places to preserve those bronzes.

Condition of the Bronzes

The bronzes were laid on sand bed downward position. Since they had more contact with earth the damage was in a great extent in certain objects.

Most of the objects were mechanically cleaned by stripping the cemented portion of chlorides and earth portion. In order to softer the earthy portion the objects were treated with hot distilled water baths and mechanically removed.

The bronzes were treated with sodium sesqui carbonate bath till the chloride level was minimized. Later the bronzes were washed and dried. A preservative coating of 3% polyvinyl acetate was given and handed over to the authorities. After cleaning the bronzes by the above said methods, they are periodically examined and it is confirmed that no traces of bronze disease was noticed.

PRESERVATION OF COINS

P.RAVISHANKAR, CHENNAI

The coin made out of metals displayed in Museums are mostly collected from excavations, on explorations and collections by individuals and some from sea bed. The metals used for coins were usually gold, Silver, Copper, Tin, Lead, Zinc and their alloys. During Roman times copper and zinc were intentionally alloyed for coinage. When two or more metals are alloyed together as tin and copper are in bronze the susceptibility to corrosion is greater than in the case unalloyed metal and when once it has not in, the decay of bronze proceeds more quickly than in the case with copper alone. In the same way here silver is corroded more intensely than pure silver. In case of Gold alloy the surface enrichment is due to the action of salts in removing the baser metals from the surface of the alloy leaving a film of pure gold.

The metallic coins have wide variety of product on the surface. It may be due to chemical causes, i.e. interactions of the metals with salts, acidity, Air, and Moisture. When the corrosion occurs the disintegration starts which may be slower, accelerated depending the types of the metals and the exposure conditions. This causes fading of the brilliant metallic surface, the slight dulness involving removal of metal ions. The corrosion remains at the surface of the coins and falls out in course of time.

Different methods of cleaning Metallic Coins

Depending upon the physical and Chemical conditions the coins can be cleaned by various methods. 1. Mechanical method 2. Electro Chemical Method 3. Electrolytic Reduction Method

Mechanical Method

When the corrosion is in greater quantity and hard the corrosion product could be reduced mechanically by watching under a binocular microscope and the work should be carried out with great patience. Proper strength or padding is needed before it is cleaned. Many tools should be designed to serve the purpose. (e.g.) Needles, Chisel, Files mounted on wood with different sizes.

Electro Chemical Method

It is carried out by using zinc and caustic soda. The hydrogen produced by the action of caustic soda on zinc reduces the corrosion to their metallic states. This is called the Electro Chemical Method.

Electrolytic reduction Method

This method of reduction which is normally preferable to that of Electro Chemical Reduction involves use of Electric Current. The corroded coins are tied one after another and this made the negative (cathode) In a suitable electrolytic such as sodium Carbonate and Sodium Hydroxide. The positive electrode (anode) usually being Stainless Steel. When current passes, hydrogen is evolved at the cathode which reduces the incrustation gradually with the result the details can be exposed.

Cleaning of Copper and its Alloy

Coins with fairly hard and thick incrustation are treated with 10% alkaline rochells salt solution. When the coins are very fragile and cannot stand any drastic treatment but have diseased area in the incrustation then 10% caustic soda treatment is given. Coins with calcareous deposit are treated with metal phosphate solution.

Reduction Method

Only when the coins are with metallic core and the incrustation is hard and thick, the reduction method is carried out. The Coins are reduced with zinc and 10% caustic soda solution. The hydrogen which is evolved by action of alkali on zinc reduces the incrustation. The excess of gassing should be avoided as in that case reduction is not uniform. Reduction is effectively carried out by Electrolysis process.

Silver and its alloys

The usual incrustation on Silver are silver chloride and silver sulphide. When it is an alloy of silver and copper it is covered with green incrustation. Silver sulphide is removed with dilute solution of potassium cyanide. Silver chloride is removed by treating with ammonium solution. Alloy of copper, silver is treated with formic acid and ammonia solution till all green incrustation is dissolved out.

Reduction Method

The coins are reduced with zinc and caustic soda or with acetic acid solution. Gold if it is pure it is found uncorroded. If it is alloyed with copper and silver then the corrosion takes place. The treatment is given depending upon the alloy content.

Preservation

After chemically cleaning by reduction methods the coins should be washed well and dried and 2% solution of polyvinyl acetate in toluene and acetone should be given. When coins need consolidation it can be done by vacuum impregnation. The coins are kept immersed in a solution of 5% polyvinyl acetate in acetone in a beaker in a vacuum tank connected to vacuum pump. During vacuum the polyvinyl acetate absorbed by the object. The bubbling ceases. The connection is removed. The coins are taken out and dried.

ELLAPPATTI - ANCIENT IRON SMELTING SITE

S. SREEKUMAR. CHENNAI

Ellappatti, on the bank of river Mullai is situated near Uthamapalayam in Uthamapalayam Taluk, Theni District. It is considered as an important megalithic site, It had yielded few terracotta pipes, meant for iron smelting, during the survey conducted by the Tamilnadu State Department of Archaeology, in the year 1987. Indeed, it is the first such kind ever found in Tamilnadu. In this juncture, I am to mention that the village Naikund (Lat 21° - 20° N Long 79° 10' E Maharashtra State) is the first megalithic iron smelting factory site discovered in India, which yielded good number of Terracotta pipes on exploration and revealed remains of furnases for this purpose during excavation.

Megalithic cist burials are facing destruction due to ignorances and agricultural activities. Owing to this, one can notice scattered pieces of Black and Red and stone slabs on the surface. Unlike other megalithic sites, Ellappatti, besides megalithic appendages, yielded few Terracostta pipes (along with iron slags) which has thrown light on the existences of megalithic Iron smelting activity in this region.

Terracotta pipes, technically known as Tuyeres, collected form Ellappatti, are found to have been made of clay with quartz particles which are in spare quantity. The purpose of Tuyeres were, obviously, to pass air into furnance from bellows during the process of iron smeltion. The usages of quartz particles might be to keep

the terracotta pipes (Tuyeres) from breaking in the course of iron smelting process, since it has the tendency of distributing heat evenly and retaining heat for longer time. The solidified iron melt adhering (exteriorly) to this pipe attests the fact that these pipes were, exclusively used for iron smelting. The diameter of the pipe and hole are measured to be 4 cm and 1.2 cm respectively.

Generally, industries are always confined to the area where the requisite raw materials are available. In virtue of this, it is presumed that iron ore for smelting might have been obtained from nearby area. Since, we do not find any iron ore deposits in Madurai District, it is assumed that iron-ore might have been brought from distant places, preferably from Salem District. It is interesting to note that a site at Sendamangalam (Salem District) has also yielded few Terracotta pipes. If systematic survey is carried out, we may trace out iron-ore deposits, if any, in and around Ellappatti.

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PADAVEDU EXCAVATION - CHANNELS, BLOW PIPE AND CRUCIBLE

K.S. SAMPATH, POONDI

Padavedu, the picturesque villages, is situated, on the Tiruvannamalai - Vellore High Road, at 40 Km. from Tiruvannamalai town. It lies in the latitude of 12° 40' 16"N and longitude of 79° 6' 30"E. Nature has gifted it with bush green forest and mountains which serve as fortification, allaround. Amidst green look, a small rivulat (Kowndala Nandhi) which drains this region, takes meandering course.

During the exploration here destructed granite fort wall and mounds which yielded pot sheards, crucible, Terracotta lamps and spouts, were noticed. The rich yield of antiquities kindled the interests of State Department of Archaeology to carry out excavation at Padavadu. Following Site selection, the systematic excavation was conducted at Vettagiripalayam and Kottaikaraimedu of Padavedu in the year 1993-94.

This excavation has, interestingly, yeilded considerable number of antiquities which includes coarse red pot sherds, Tiles, bricks, terracotta, knobs, terracotta and few unique antiquities namely pieces of crucible and blow-pipe. Besides this, it has exposed four types of channels which exposes the engineering skill in ancient days.

Type -/1.

This channel was exposed in PDV 7 & 8 at 0.70 Mts. Depth. It has been constructed with four bricks. Of these, two bricks were found placed vertically on either-side of a brick which has been placed horizontally at the bottom. The fourth one has been placed above to ensure closure of the channel. However, an opening probably for clearing blockage, has been left at a place. Size of the brick used here is 23 x 15 x 5 Cm. Depth and breadth of the passage of channel are 10 and 16 cm. respectively. It is ascertained that these bricks are the biggest in size encountered in this excavation.

Type II :

It is a granite channel encountered in PDV-9 at 0.70 Mts. depth. It is found sloping Southern direction. The passage for the flow of water has been formed by chipping off the central portion of the long granite block. The exposed granite channel is found to have been formed by five granite blocks which are firmly connected with lime plaster to ensure no gap is left for leakages, was noticed. Length of the granite blocks are 2.27 Mts., 2.13 mts., 1.30 mts., 0.70 mts. and 0.80 mts.

Type III :

This is the most important type (PDV - 6 & 14) ever found in this excavation. It has been built above a granite slab of 1.60 mts x 0.40 mts. x 0.20 mts. dimension. In this channel bricks are found to have been stacked progressively one above the other to appear as stupa on other side of a raised platform. Airtight construction of this channel ensures that this was meant for the supply of drinking water. To support this fact, river sand and granite pebbles were found dumped around this channel. Nature of the channel suggests that this should have been built for the use of Royal personages.

Type IV :

It has been constructed with T.C. Pipes. These pipes have been intricately designed such that one fits over the other with no room for leakage. Diameter of the pipe is 0.15 mts. at front and 0.11 mts. at rear side. Length of the pipe is found to be 0.20 mts. Exploration has also yielded few T.C. pipes. Of the above mentioned channels, except granite channel, other channels are closed type. The open type channel made out of granite blocks is believed to have been used as outlet.

Apart from potshards, tiles, bricks, T.C. Lamps etc., few unique antiquities were also encountered on this excavation. Of these the significant findings are T.C. Pipes, probably, blow-pipe and crucible.

Blow-pipe and Crucible "

A long cylindrical T.C. pipe was encountered in the trench PDV-I. It is made of clay and quartz particles which are in sparse quantity. It is provided with a tiny hole at the tapering end. Nature of this suggests that it might have been a blow-pipe, for making glass objects. To furnish this fact, glass slag piece was also at the same level. Besides this, few broken pieces of collected crucible were also unearthed in PDV-I. It is thick walled with glass like coating on outer surface. They are believed to have been used for melting metals for making ornaments out of it. Generally, crucible is used to heat materials having high melting point. The occurrence of these antiquities and carbon mixed soil suggest that ornament making activity might have existed here. It is interesting to note that full sized crucible with lid have also been collected while exploring this area.

As Padavedu was the capital city of Sambuvarayars', channels exposed in this excavation is obviously, point out the engineering skill of Sambuvarayars'. And, the blow-pipe and crucible findings stress the existence of activity of ornaments and glass objects making during their rule. Though no ornaments and glass objects were unearthed in this excavation, the nature of the above antiquities suggest that they were used only for the above purpose.

RECENT DISCOVERIES MADE BY CHENNAI CIRCLE DURING THIS DECADE

Dr. K.T. NARASIMAN, CHENNAI.

The Archaeological Survey of India, Chennai Circle, Chennai had undertaken a number of minor excavations at various places under the jurisdiction of this circle to unearth the archaeological evidences. This attempt was very successful because many invaluable artefacts as well as ancient structural remains were encountered by the young archaeologists of this circle. The excavation was conducted at 1. Mahablipuram 2. Gingee. 3. Chennai and 4. Keeranur.

Excavation at Mahabalipuram:

At the beginning of this decade the Archaeological Survey of India, Chennai Circle, Chennai had started scooping out of the sand-due accumulated to the north and northwest of Shore Temple because it was not only screening the world Heritage Monument (Shore Temple) but also an eyesore. Hence, in 1990-91, the Chennai Circle had decided to scoop out the sand-due and to level this area so that the compound was of the shore temple right from *adhithana* mouldings can be exposed.

With this objective, an horizontal excavation was done to the north and north-west of Shore Temple adjacent to the northern prakara wall. This excavation had revealed many hidden histories with success in exposing an elliptical structure within that a monolithic standing Mahavaraha, a miniature shrine and an ancient well, besides well-dressed granite flooring with four steps and an inscription.

This elliptical structure was made in north-south orientation, abutting from edge of the northern prakara of Shore Temple and

having had entry from the north where the evidence (socket) was traced for the existence of the wooden door. At first sight this structure gives an impression of a pond or an open theatre covering an area of 6.5m long; 5m wide and 1.5 m height.

The exposed monolithic sculpture of Varaha stands majestically looking towards the east (sea) abutting the northern prakara wali of the Shore Temple. It is about 1.2m height stands on an elevated square pedestal made of bed-rock, its head is bent downwards, the snout touching the ground, the hooves are chiselled so sharp indicating as it is digging the earth. The well-dressed pedestral contains four title inscriptions of Rajasimha reads *Sri Rajasimha, Sri Ranajaya, Sri Bhara, Sri Chitrakarmukha*. This sculpture was deliberately broken we have collected more than 30 pieces and mended. At the back of this sculpture the clear cut of a number of crow bar marks indicates the unique sculpture was deliberately broken either due to vandalism or religious fanaticism.

The famous Sankrit poet Dhandin who was contemporary of Narasimhavarman I describes in his famous book '*Kavya - Dharsa*' about the monolithic Varaha sculpture carved by Pallava King so nicely as if the Varaha brings out Bhu-devi from the ocean. "*Bhukura kushunna Nagasry Lohitad du-dhudodedeth* (I Chapter verse - 73).

To the north of the said Varaha sculpture a miniature shrine partially cut-out and partially structural was unearthed. It was chiselled out up to the *adhithana* level out of the bedrock which runs north-south orientation. Above which a monolithic *pada* and then typical *dravida vimana*. These two upper portions were found fallen very close to the *adhithana* of this temple. It has octagonal *upana* and other usual *adhithana* mouldings. It looks like square *jagati, pitah* with *padabandha* above which *tripatta kumuda* is provided. The topmost *pattika* of the *adhithana* has got gana on each cordinal. However the *kalasa* is missing.

Cut into the sand-bed had two well-dressed granite stone ring having an opening on the east, where the river Goddess is

engraved attended by Chourri/beareres on either side. Instantly, this well does not have any compound wall or toe-wall and looks like a ring well. This is the first time, the ancient well was encountered within the temple complex of early Pallava period. Though it is very close to the sea it has very sweet water with abundant springs.

The top course on the western side of this elliptical structure has a row of *urdhva padma* just below the said moulding an inscription in Pallava Grantha character was found which reads as "*Sri Rajasimha Yana Kshatriyasimha iti vistruta Punyakirthi Jian maheswara*" This inscription clearly indicates that this elliptical structure was very much available during the Rajasimha period. In other words, it is pre-Rajasimha creations.

During 1997-98, the Chennai Circle carried out the excavation to the north-west of the Shore temple Complex to determine the continuity of flight of steps which was already exposed on the southern side, The continuity of the flight of steps was unearthed which was running in south-north orientation which ends with massive brick platform which supposed to be a jetty point of that time. The platform is approximately 10m long and 5m width was constructed with pure lime cemented brick originally over the second step of the said flight of steps. Unfortunately, the massive brick platform having 13 courses capped with brick jelly mortar was broken and had fallen to the east of the said landings. However, the biggest chunk of the broken platform still is in insitu, over the second landing leaning towards east. From the size of the brick it can be brought back to early centuries of Christian Era.

Thesand aroundthe modern well was scooped. To everybody's surprise at a depth of 2.65m we have encountered a well-dressed granite ancient stone flooring all around the modern well. Due to this chance discovery a horizontal excavation was conducted to the west as well as north of the modern well. As suspected, the said excavation has revealed a numerous brick structures. These structures were constructed over the said stone flooring.

To the north of the modern well a rectangular room made of brick (5x4x2m) was unearthed. Besides adjacent to the modern well a room was (roofless) unearthed which is more than a square feet. The unique feature of this structure is the brick wall constructed over the granite cushion and the said wall on all sides were divided into four squares. Between the two squares a considerable gap is deliberately (8-10cm) made which was filled with pure clay. This shows the engineering stability of a brick wall since it was built right on the beach (sandy area), which may collapse due to slightest friction during the rainy season. Because of the deliberate division (squares) the wall is not having the continuity from the bottom to top and provided with clay a sandwich cushion which can absorb such friction so that the structure can stand for a longer period. That is why these structures are very well preserved beneath the sand-due all these centuries.

In one of the trench we have encountered a number of liquid measures made of iron. Due to age and salinity they were highly corroded. However, these evidences show that there might have been a palace or a temple because in those days the wages were given by means of grains according to the designation. That is why, the iron measures of various quantity were found in this area.

Apart from the structural evidences the excavations have revealed a number of pottery like redware, coarse redware, rims of storage jar, sherds of conical jars, a stucco figurine of torso and all these artefacts can be assignable to early medieval period.

Excavation at Gingee:

At Gingee, the archaeological Survey of India has protected a number of monuments such as Rajagiri, Krishnagiri, within Rajagiri, Kalyana Mahal, Granary, stepped tank, on the hill top. Ranganatha, Balaranganatha, Granary and oil tank are noteworthy. Similarly on the Krishnagiri Krishna Temple, stepped tank, Hawa Mahal are worthy protection.

Due to age and negligence after the fall of Nayak rule at Gingee the Palace complex was completely ruined within the

Rajagiri Fort. To find out the original place of palace and its plan during this decade, the Archaeological Survey of India Chennai Circle, had undertaken small scale excavation adjacent to the Kalayana Mahal.

Here, the highly polished massive granite stone cushion was lying half-buried and the people used to say that the stone was used for gymnastics all these years. The excavation has revealed the real identity and utility of the said stone only here the King conducted Darbar in the open court.

A 8m square platform was unearthed adjacent to the royal palace complex which was excavated few decades ago. On physical examination, the unearthed platform is identified as royal throne. It has all mouldings of adhithana right from upana upto pada. The special feature of this platform was made exclusively for the rulers for their throne. To strengthen this theory further physical features are very much helpful. The platform in question had got flight of steps on all cordinals. Another significant feature of this discovery in question is, it has a single highly polished greenish granite probably imported from Karnataka region which is capped on the platform. The previously mentioned highly polished granite stone cushion is fitted over the royal throne. It is not only perfectly suits but gives a grand look to this royal throne and one can understand that this polished stone was used as a backrest. Because it is cylindrical in shape with flat base having a bead design at the bottom so as to sit properly over the platform without any movement. Besides we have one more sculptural representation depicting a king resting on such cushion infact, that cushion is very much identical with this.

To the north of the royal throne there are many pillar bases which indicates there might have been a mandapa with perishable material. Besides there are two brick platforms at two different levels facing the royal throne, Perhaps for seating arrangements of the audience according to their status.

The recent excavations carried out at Gingee had exposed many structural remains to understand the architectural beauty of

Gingee Nayaks and also to put full stop for non-availability of p complex within the fort and fortifications.

Excavation at Fort St. George, Chennai.

The Fort St. George, Chennai has been built by the India Company and named after St. George. The construction of this fort was started in 1640 and it had nine evolutions through centuries upto 1939. It is the biggest British functional fort in India. As on date, the Tamil Nadu State Assembly, Military Headquarters, Archaeological Survey of India, Chennai Circle, Chennai Office and other Archaeological offices are functioning in this fort.

Secret Tunnel :

While undertaking periodical conservation of the Ramparts of Fort.St. George, Chennai, a secret tunnel was discovered running parallel to the moat near the George Gate.

This secret tunnel is running all along the moat, parallel to the inner Rampart wall, right from Wallajah Gate upto north-west corner of the Fort. It has an opening on the ground level itself in the form of flight of steps leading to the tunnel at regular intervals. Such openings were noticed near George Gate. This secret tunnel is made of well burnt bricks of special size. The height of the tunnel is approximately 2m and width is more than a metre. It has circular openings at regular intervals towards moat sides which indicates these might have been built for transportation of ammunition secretly within the Fort through underground from one place to other. Though we have got the evidence of encounter chamber, adjacent to the moat on beach side (eastern side) but they differ from each other in dimension and not interconnected. It was seen on the northern side of the moat. Hence, this discovery is added some more importance of this British fort. Since, the tunnel was meant for ammunition movement, it was built along the moat, so as to keep the entire operational space under cover to prevent any accident due to heat or otherwise.

Excavation at Uttamanathaswamy Temple, Keeranur, Pudukkottai :

Keeranur, a small town is located 28km from Trichy on the road leads to Pudukkottai. During 1998-99, a major conservation of Rajagopura work was carried out in this temple. During the rainy season, the rain water used to enter into the *prakara* and stagnates for days together. To prevent this problem, a thorough physical examination was made to find out the ancient outlet in the outer *prakara*. In that process an accidental discovery was made here.

After the removal of the humus adjacent to the structure a brick outline was noticed at a depth of 80cm. On its discovery a careful digging was made to find out the feature of this brick core. It is noticed that circular shape brick paved structures considered to be a tub were discovered in between the temple and the *prakara* wall. These tubs measures with a diameter of approximately 80cm and depth of 20 cm with the brick size of 20 x 10 x 3 cm. Some of the tubs have dried up lime which was used for carving of stucco figures over the *vimana* as well as Rajagopura. This paste consists of lime, sand, galnut, jaggery, neem gum and so on. This is the first discovery of this type in this region. Though it is known that the stucco figures are made with such lime paste, but we are not aware that how the paste was prepared or stored during the olden days. This finding has solved problem that the prepared paste was preserved like this. It has got its own advantage instead of using the stone tub where the paste will become hard when compared with brick tub.

Conclusion :

Archaeology of Tamil Nadu has been very much updated during this decade by various excavations conducted by the Archaeological Survey of India, Chennai Circle, Chennai. Therefore, the history of Pallavas has to be re-written in the light of the new discoveries. However, further research has to be carried out on this subject to understand about the ancient past.

TEMPLES AND PEARL FISHERY DURING COLONIAL PERIOD

N.ATHIYAMAN, Thanjavur.

The pearl diving industry at Gulf of Mannar of Indian and Sri Lankan regions has a long and unchequered history that goes even before the commencement of the Christian era. As the diving for pearl and chank was highly lucrative, the involvement in it by the different social hierarchy is quiet evident from the sources available. In a way one's control on the industry indirectly reflected his status in the society and hence this industry always had a geopolitical importance all along. This paper deals with some aspects on the role of temples in this pearl fishing industry and the rulers of the pearl fishery during the colonial period.

The historical and socio-economic aspects of pearl fishing of Tamil Nadu coast have been dealt with in detail by Arunachalam¹ and the author² respectively. Mahroof has given a brief account of history of pearl fishing of Sri Lankan region.³ Before the arrival of Portuguese, the income of the pearl fishing industry was monopolised by the kings who ruled those coastal regions namely Tuticorin, Ramanathapuram and Sri Lanka. They gave protection to the pearl divers from the piracy and a share was taken as a token for such protection given. When Portuguese found it profitable, they wanted to monopolise it in both the regions.

In early part of 1520's, they collected lumpsum from the pearl divers for giving protection from the sea pirates. In the year 1528 the whole pearl fishing rights were held by the Portuguese. They

started levying Stone Money as the tax on every stone used in the fishery to give protection in the pearl fishing.⁴ The stone tied at one end of a long rope is the essential tool of a diver to go down into the sea bed. One stone is used by two divers in turn.⁵ Hence the stone money meant the tax on two divers. Though, this stone money was collected from either the divers or the boat owners who employed the divers, to have a smooth relation with the local kings of the respective coastal region, the Portuguese allowed the boats of the kings to ply with free of tax.

The Nayaks, who then in power held a complete sway over the coastal regions of Tuticorin had an agreement with the Portuguese to allow the Muslim community which was friendly with the Nayaks to dive freely in the Kayal region with limited number of divers. In return the traders with Portuguese articles were allowed to move inland uninhibited by the Nayaks. This could be gleaned from a copper plate grant referring to ⁷ free boats with 961/2 of stones allowed by the Portuguese to be superintended by Mudaliyar Pillai Maraikayar of Tuticorin, the head of Muslim community. For that he was given 60 *chacrums* per month and was favoured with ten stones to dive for him at Mannar and Tuticorin fishery.⁶ Besides the Portuguese also allowed some free diving boats to Sethupathi of Ramanathapuram, the chieftain of the region, for guarding and providing pilots for the passage of the narrow strait called Pamban pass.⁷ Some free boats were also allowed to fish in the fishery for the native headmen called *Patangattiyans* or *Jati talaivan* who were thorough not only on pearl banks but also had a complete sway over divers and boats to be employed in these regions.

After the fall of the Portuguese power, the fishery rights were transferred to the Dutch in the year 1658. Juan Rebeiro (1685 AD) in his *History of Ceilo* while referring to the Sri Lankan fishery brings to the light that guards were sent for diving.⁸ The privilege extended to the Nayaks, Sethupathis and local chiefs continued uninterrupted

as during the period of Portuguese for some time. After the decline of the Nayaks and Sethupathis due to internal strife, the number of free boats allowed in the fisheries were reduced and later they were denied even the privilege extended so far.⁹ In the year 1744 the *stone money* system was abolished and the fish-ery was rented to a single or a group of renters. The free stone allowed for the Nayaks and Sethupathis and local chiefs were completely done away with it.¹⁰

To have smooth commercial interaction and to avoid confrontation with the rising power of the British, the Dutch, to gain friendship of the Nawab of Karnatic, then ruling power in the Madura region, allowed him to employ 30 free divers¹¹ in the fishery in 1747 and was increased to 35 divers in the next year¹² But the same privilege extended sofar to the Sethupathi was refused as he was not a decisive force.¹³ However, in the year 1754 as a way compromise, the Dutch allowed some free stones to him in the pearl fishery near Kilakarai but at the same time strongly refused access in the Sri Lankan fishery¹⁴

Later in 1771, the Dutch allowed the same privilege enjoyed by the Nayaks in previous decades to the Nawab of Karnatic, that is 961/2 free stones and two boats of twenty divers, 10 free stones to the Sethupathi of Ramanathapuram. Later in 1786, when the Dutch were on the wane the Nawab got the equal share in the profit, besides the employment of 36 boats in Sri Lankan fishery¹⁵ When British took over the fisheries in the year 1796, all the privilege offered to the local chieftains sofar have been gradually reduced and ultimately abandoned as they themselves took over the pearl fishing till independence.

Some of those free stones allowed by the Portuguese were donated to the temples by the Nayaks and the Sethupathis for their upkeep. Due to paucity of materials available as how the income derived from the pearl fishery by the temples was earmarked

for their upkeep, it may not be fair here to divulge such aspects connected with them. Hence the involvement of the temples in pearl fishery is alone focussed in proper perspective.

From a copper plate grant, it becomes clear that the Nayaks as devout Hindus had donated some free stones to temples in 1542 and 1546 respectively¹⁶ But the names of such temples are unfortunately missing as the contents of the copper plate mentioned is not published so far. One of the temples discussed above which enjoyed the privilege of donation must have been Thiruchendur temple as the British record dated 5.3.1832 states that in the Fishery of Calpentyn in Sri Lankan region, the authorities of Thiruchendur temple requested the supervisor of fishery to allow them to fish in a boat freely at the fishery based on the copper plate grant¹⁷ The British rejected their claim on the ground that the privilege thus offered was tenable only in the Mannar banks which is the part of Indian and Sri Lankan coast and not at Calpentyn which is off Sri Lankan Coast. Similarly the Sethupathis of Ramanathapuram donated a few of their privileged stones to the temples. A copper plate grant issued in the year 1625 by Talavai Sethupathi mentions that he has donated seven stones to fish at Mannar fishery to the Ramanathasamy temple of Rameswaram¹⁸. Besides, from other copper plate grants it is learnt that five stones to the Tiruppulani Theivasi-lai Therpasayana Ramasamy temple in the year 1699,¹⁹ three stones to the Parvathavarthini temple of Rameswaram²⁰ and 5 stones to the Thirupperunthurai Athmanatha swamy temple²¹ were donated by the Sethupathis.

It must be clear that the free boats and diving stones offered to the temples by Nayaks and Sethupathis were part of their privilege given by the Portuguese in the fishery of Indian and Sri Lankan regions. When Dutch took over the rights of the fishery from Portuguese these privileges were in force for some time and later it turned out to be a constant dispute among the kings and

the Dutch. Since this free boat rights were in dispute the privilege enjoyed by the temples were also under dispute. It seems during this period, the temple authorities would have started collecting the charity oysters from each boat every day as their pretended rights were under constant dispute.

As mentioned earlier the free stones were abolished in the year 1744 as the privilege enjoyed by the temples in the fishery stood void and the Dutch were reluctant to offer any free stones or concessions in the fishery. There was always a dispute between the Government and the temple authorities regarding those privileges. But the renters of the fishery who were generally natives, owing to their faith in their king and fear of God allowed the kings' boat and temple boats to fish freely in their fishery. In the year 1771, some privileges were extended to the Sethupathi and so the temples as well.

When British took over the fishery of Gulf of Mannar, the organised exploitation of the pearl oyster began as they themselves conducted the fishery. The pearl banks were charted and inspected for the abundance of the pearl. The number of boats and the divers were reduced greatly. Three fourths of the collected oysters were taken by the Government, the remaining one fourth was shared by the crew after deducting some oysters as the shares of the Government officials who were engaged in the fishery, shark charmers and the charity oysters for the temples²² When hundreds of boats were employed in the earlier fisheries, the free boats allowed to the kings, local headmen and the temples did not produce much problem. When the boats were limited to such as 50 or 100 the boats employed freely produced great difficulty for the supervisors of the fishery to account for the income. In early part of the 19th century there was always a plea made by the temples to allow them to fish freely in the fishery owned by the Government. This matter was referred to the high officials by the superintendents.

Though there was the problem in convincing the Government concerning free boat privilege, the temple priests insisted on their share of pearl oysters from each boat as charity to the temples. The share was officially deducted in the share of the employee. A memorandum prepared on 21.09.1832 on the basis of the Commissioner's report of pearl fishery of Sri Lankan coast, refers to the loss incurred in the small fishery at Aripo. According to it, 10 boats of Hindu temples of India fished along only 50 boats of the Government boat amounting 20 percent of the total income²³

As stated earlier the claim of Thiruchendur temple in the fishery of Calpenty of Sri Lankan region also has been recorded by the Government²⁴ It explains how they have been insisting on their privilege even when it was vehemently rejected by the incharge of the fishery. In the same fishery there was a dispute with the divers and the temples over collection of the charity oysters. The matter was settled by the British authorities on the ground that the donation of oysters by the divers to the temples should be voluntary and could never be forced²⁵

Notwithstanding the decided refusal by the Sri Lankan Government, the temple authorities petitioned the Government of Madras, claiming their share in Sri Lankan pearl fishery, which the present Governor Sir Edward Barnes refused. Even in absence of the proof of the privilege offered by Dutch or British, the Home Government viewed it as a political and religious right and the Secretary of states for the Colonies instructed the Governor of Sri Lanka to allow these temples of India to enjoy the privilege as usual²⁶

The unceasing claims made by the temples during successive fisheries were viewed by the British secretary as an interference and the Secretary to the Colonies appointed George Lee, then the Post Master General of Sri Lanka to prepare a report on this

subject. After analysing all the records held by the temples and the Dutch, he has submitted a report on the temples' claim in the year 1838, concluding that there was no conclusive evidence either from the Dutch or the British records to extend the privilege to the temples. He adduced that the privilege offered by the Nayaks and Sethupathis during the Dutch regime could not be claimed as a matter of right²⁷

It seems even on rejecting the share as charity oyster for the temples by the Government the priests started claiming them from the divers and the Government had issued a notice to all who were involved in the fishery. The fifth point of the notice issued on 18.12.1857 states that

"The boatmen and divers and all person in general are to take notice that no one is authoritative to make any deduction from their shares on account of privilege or charity oysters. All contribution they choose to make for charitable purpose will therefore be perfectly voluntary and in case of divers delivering the oysters into the government koottos (Collecting place), it will not be permitted, even with the consent of the divers that such contributions should be received by any one inside the koottos. Any violation of this rule should be immediately reported to the superintendent. After they leave the koottos, the divers will be at a liberty to do as they please with their oysters and if molested they should apply to the police for protection"²⁸

The records after 1857 are silent about the claims made by the temples for free fishing or charity oysters for the temples.

In fine, it could be gleaned from the sources that during the middle of the sixteenth century when Portuguese held the entire sway over the pearl fishery of Gulf of Mannar, as a compromise, they allowed the Nayaks and Sethupathis the privilege of employing certain number of boats in the above fishery, free of tax. As devout

Hindus, the Nayaks and Sethupathis surrendered some of these privileges to the Hindu temples for their upkeep. When the Dutch took over the monopoly of this fishery from the Portuguese, these privileges were continued to be enjoyed by the kings and temples. In 1744, the privileges offered to the native kings as well as the temples were denied, as the native kings did not have the requisite power and vigour to defy the foreign force which held the total sway over the whole domain. As a sequel, the claims made by the kings and temples were always under dispute for one or the other reasons. In 1832, when the British was the paramount power, they had done away with this privilege totally. The charity oysters collected by the temples from the boat owners and the divers right from middle of the eighteenth century also ceased as a result of the notice of 1857 issued by the British Government which strictly prohibited the temples from claiming such privilege or right.

Footnotes

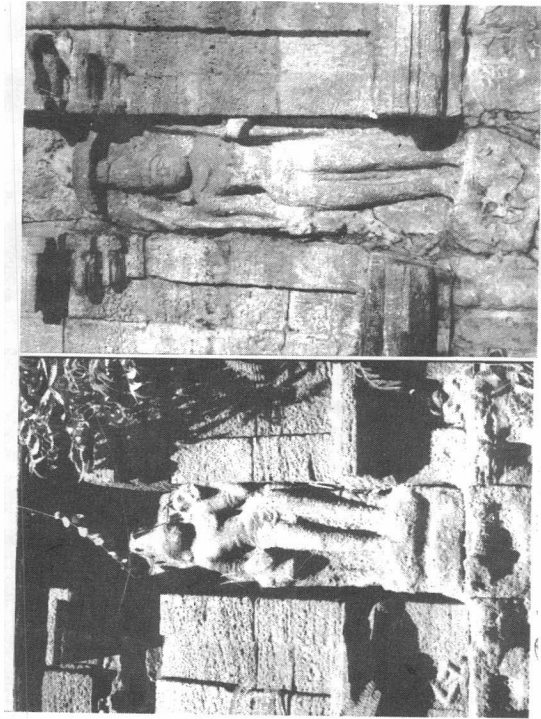
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25. Ibid, p.71.
26. Ibid, p.28.
27. Ibid, pp. 99-103.
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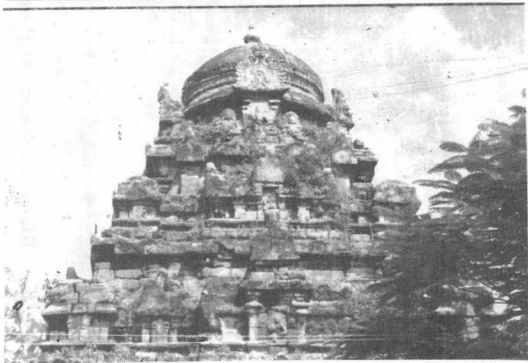


PLATES

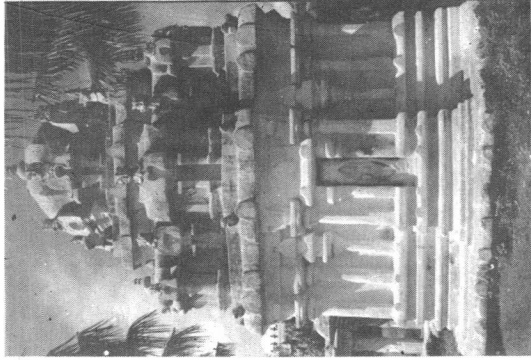
(Numbers denote the article numbers)



6. Rishabhavahana Ardhanari
Tripurantaka. Ramesvaram Chola Shrines



6. Ramesvaram Shrine No. 1
Dakshinamurthi and Vimana



6. Rameswaram - Twin Shrines.



10. Muthupatti - Mahavira



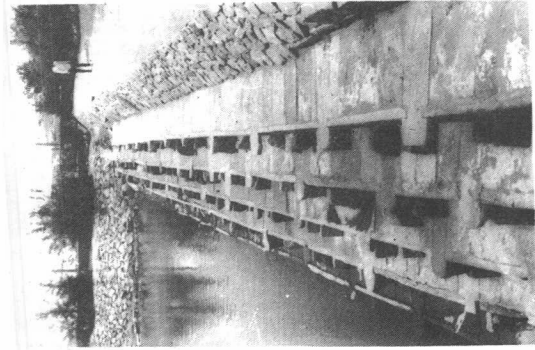
10. Mahavira, Parsvanatha. Samanamalai

11. Jyestha - Kanchi Kailasanatha Temple.

11. Jyestha - Sirukalathur.



15. Before - After
Conservation of Bronzes.



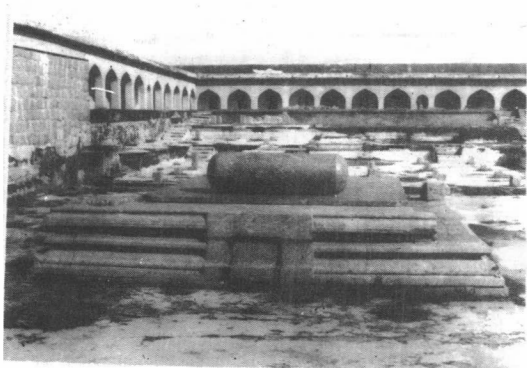
19. Ancient Port - Mamallapuram.



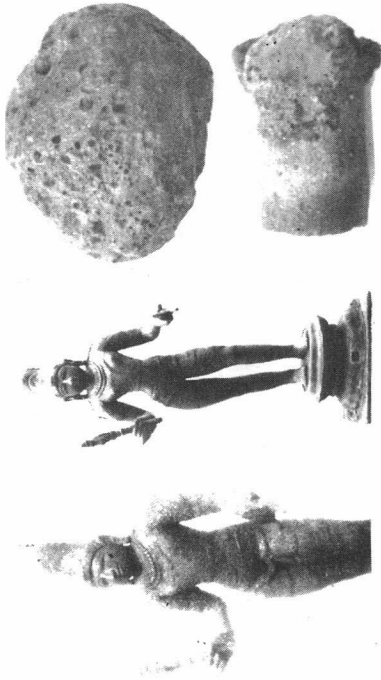
19. Secret Tunnel Fort St. George, Chennai.



19. Sea-Shore Miniature Temple - Mamallapuram



19. Royal Throne - Rajagiri - Gingi.



15. Conservation of Bronzes Before After 17. Iron slag and Blow pipe

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