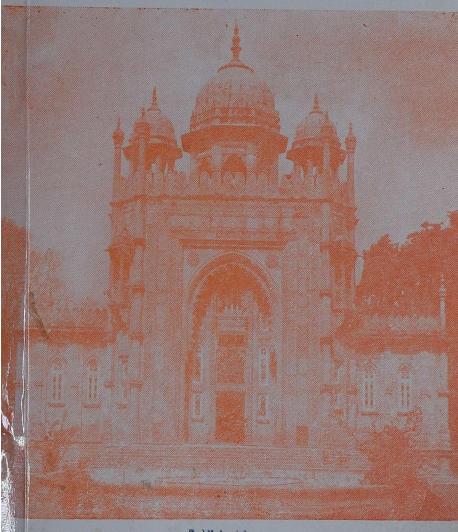
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Government Museum, Chennai

MUSEUM'S JOURNAL

(October 2000 - March 2001)



Published by

Dr. R. KANNAN, Ph.D., I.A.S.,

Commissioner of Muscums.

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GOVERNMENT MUSEUM, CHENNAI

MUSEUM'S JOURNAL October 2000- March 2001

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Front Cover

National Art Gallery (Victoria Hall), 1906 AD.

Back Cover

Museum Theatre, 1896 AD.

Authors of the articles are responsible for their views in their articles.

Acknowledgements

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Letter from the Commissioner. .

I am happy to present this issue of the journal of this Museum for the period from October 2000 to March 2001.

The Government Museum, Chennai was established in the year 1851. Now it has entered the 150th year in the service of the preservation of arts and cultural Heritage of South India. We are planning to celebrate the 150th year celebration with various programmes such as conservation / restoration of old buildings of the museum (Pantheon Buildings and National Art Gallery), a seminar, release of souvenir and a postal stamp of the Museum Theatre.

The 20th District Museum was inaugurated in Virudhunagar on 10.3.2001. A new Government building was allotted to the Government Museum, Coimbatore and preliminary arrangements are in progress to shift the Government Museum, Coimbatore.

In order to provide access to the Museum from anywhere in the World, a Web site and a Virtual Museum are to be made operational shortly.

2000-2001 project works providing luxury toilet facilities with all modern amenities for the convenience of the visiting public, at Government Museum, Chennai modern lighting arrangements such as Fibre optic lighting and Track lighting for paintings displayed in the National Art Gallery, sliding screen storage for paintings security measures for Rani Mangammal Building where Tiruchirapalli Museum is housed etc., were carried out at a cost of Rs. 40 lakhs.

In order to promote traditional folklore art and to train interested persons, workshops have been conducted in collaboration with the National Folklore Support Centre, Chennai in the Government Museum, Chennai. Three workshops on Warli paintings, Patachitra paintings and Rajasthani paintings were conducted.

Monthly popular lectures, summer courses, seminars, exhibitions, competitions, training programmes etc., were conducted both in Chennai and in the district museums in order to inculcate a taste for preserving art in the minds of children. The Commissioner of Museums and Curators conducted research on topics pertaining to their subjects and the outcomes were published in the form of articles, monographs and books. These have received good reviews and attracted a great deal of public attention.

There were three special lectures by foreign experts on Buddha and Buddhist Art besides one on Anthropology and Rock Art in Nilgiris. A special seminar on "Our Role in Protecting Cultural Heritage", which several agencies like Archaeological Survey of India, Police, Insurance Company, Colleges etc., attended was special Occasion.

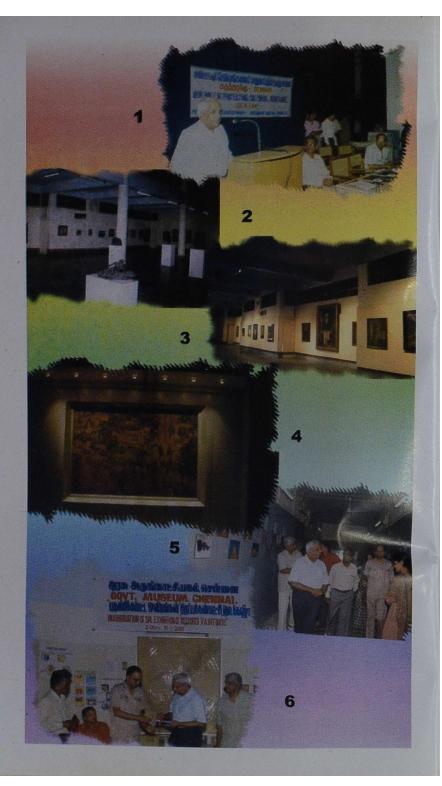
I have given a bird's eye view of the important activities that had taken place in the period of six months from October 2000 to March 2001.

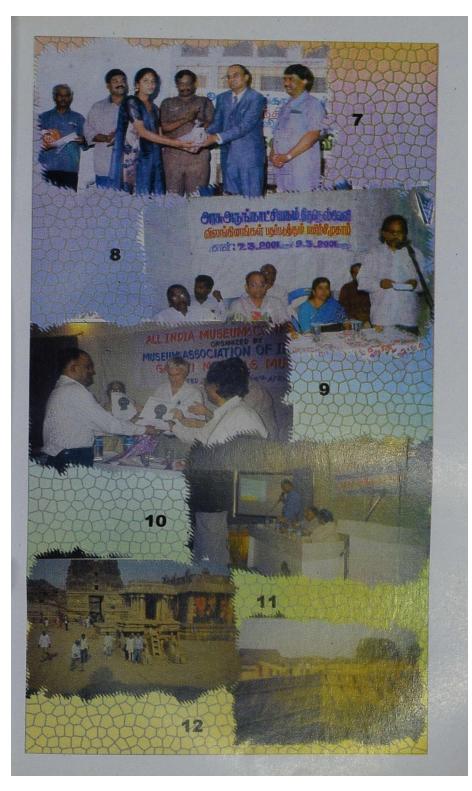
Suggestions are welcome on how to improve the journal in future issues.

Chennai-600008, 18-05-2001

(Dr.R.KANNAN, Ph.D., IAS.)

MISEUM NEWS





Description of the colour photographs in the previous pages

- 1 Thiru. S. Ramakrishnan, I.A.S., Secretary, Tamil Development-Culture & Endowments Department, delivering the inaugural address during the inauguration of the Seminar on "Our Role in Protecting Cultural Heritage".
- 2 View of the Contemporary Art Gallery display in ordinary tube light.
- 3 View of the Contemporary Art Gallery display in Dichroic Halogen lighting
- 4 A pioneering project for the first time in India, Fibre Optic Lighting arrangements are fixed in the National Art Gallery. A view of the painting (Boats on a Canal, K.C.S. Paniker Oils) under Fibre Optic lighting arrangements
- 5 After declaring open the refurbished Chemical Conservation Gallery Thiru S. Ramakrishnan, I.A.S., Secretary, Tamil Development-Culture & Endowments Department, Dr. R. Kannan, Ph.D., I.A.S., visiting the gallery
- Thiru S. Ramakrishnan, I.A.S., Secretary, Tamil Development-Culture & Endowments Department, Dr. R. Kannan, Ph.D., I.A.S., releasing the book on Disaster Management during the inauguration of the special exhibition, valedictory function of "Care of Paintings" and inauguration of refurbished Chemical Conservation Gallery.
- 7 Dr. R. Kannan, Ph.D., I.A.S., Commissioner of Museums, participated as Chief Guest and distributed prizes to the winners of the Child Art Competitions at Government Museum, Madurai
- 8 Valedictory function of "Zoological Specimens Preservation Course" conducted for the Zoology students of Rani Anna Government College for Women at Government Museum, Tirunelveli.
- 9 Dr. R. Kannan, Ph.D., I.A.S., presenting he book on "Jain Iconography" (recent Publication of Government Museum, Chennai) to the President of Museum Association of India, during the All India Museum Conference held at Nasik from April 26th to 29th 2001 at the all India release.
- 10 Dr. R. Kannan. Ph.D., I.A.S., presenting his paper in the All India Museum Conference held at Nasik from April 26th to 28th 2001.
- 11 Dr. R. Kannan, Ph.D., I.A.S., and his curatorial staff on their study of Hampi, (the capital of the Vijayanagar Empire and Ajantha caves) at the Hazara Rama temple, near the Ratha Mandapa, Hampi.
- 12 Dr. R. Kannan, Ph.D., I.A.S., and his curatorial staff during their study, on the bank of the stepped tank, Hampi.

MUSEUM NEWS

DEPARTMENT OF MUSEUMS - AN INTRODUCTION

Government Museum, Chennai was established in the year 1851, with 1100 geological objects. This Museum has now developed into a multipurpose museum with various sections like Archaeology, Numismatics, Anthropology, Botany, Zoology, Geology, Chemical Conservation and Children's Museum. It also includes Education, Design and Display section and Chemical Conservation and Research Laboratory as supporting branches. In order to preserve art, cultural and natural heritage and impart museum education through out the State of Tamil Nadu, 20 district museums have been established in districts. Collection, registration, preservation of objects, display, research and publication are the major objectives of these museums.

Government Museum, Chennai functions from 9.30 A.M to 5.00 P.M on all working days. Except Fridays and National Holidays.

This Museum Journal includes a number of articles and information about the activities of the museums under the Department of museum from October 2000 to March 2001.

The district museums are functioning on all days from 9.30 am to 5.00 pm except fridays, second saturdays and national holidays at the following places:

- 1. Government Museum, Thirugokarnam, Pudukkottai- 622 002. Ph: 04322-22247
- 2. Government Museum, Navalar Salai, Salem-636 001

- 3. Government Museum, Gandhi Museum Complex, Madurai- 625 020. Ph: 0452-650298
- 4. Government Museum, Rani Mangammal Hall, Tiruchirapalli- 620 002
- 5. Government Museum, Fort, Vellore-632 004
- 6. Government Museum, Municipal Office Complex, Erode-638 001
- Government Museum, Bali House, 70, Mysore Road, Udagamandalam-643 001
- 8. Government Museum, Kattur, Coimbatore-642 009
- 9. Government Museum, Government Hospital Road, Cuddalore-607 001
- 10. Government Museum, St. Mark's Road, Samathanapuram, Palayamkottai, Tirunelveli-627 002
- Government Museum, Gandhi Memorial Road, Kanyakumari-622 702
- 12. Government Museum, Near Apsara Theatre, Krishanagiri-635 001
- 13. Government Museum, Foot of the Hills, Palani-624 601
- 14. Government Museum, Weekly Market Road, Sivaganga-630 561
- 15. Government Museum, A/M Thiagarajaswami Temple, Tiruvarur-627 002
- Government Museum, 35, First Line Beach, Nagapattinam-611 001
- 17. Government Museum, 117, Munusamy Avenue, Kanchipuram-636 501
- Government Museum, Asanammal Buildings, Head Post Office Road, Ramanathapuram-623 501
- 19. Government Museum, Municipal Commercial Complex, Karur-639 001
- 20. Government Museum, T.T Road, Virudhunagar-626 001

SPECIAL FEATURES

A meeting headed by Dr. K. Venkatasubramanian, Planning Commission Member, Government of India was held at the Secretariat in connection with the 150th year celebrations of Government Museum, Chennai. Thiru. S. Ramakrishnan, I.A.S., Tamil Development-Culture and Endowments Department, Thiru Farooqui, I.A.S., Secretary, Department, Tmt. Girija Vaidyanathan, Additional Secretary to Finance Department, Dr. R. Kannan, Ph.D., I.A.S., Commissioner of Museums, Selvi. B.Jemima Ramanibai. Deputy Secretary to government, Thiru A. Abdul Majeed, Director of the State Archaeology Department, Tmt. Sathyabhama, Deputy Superintending Archaeologist, Archaeological Survey of India, Officials of the Postal Department and officials of the Museums Department were present.

The Hon'ble Minister for Tamil Official Language, Tamil Culture, Hindu Religious and Endowments, Dr. M. Tamizhkkudimagan, inaugurated the 20th district museum at Virudhunagar on 10.3.2001. The district collector, Thiru.M. Sai kumar, I.A.S., presided over the function. In connection with the inauguration of Government Museum, Virudhunagar a seminar on "Our Role in Protecting Cultural Heritage" was organised in the Government Museum at the Museum Theatre on 23.3.2001, inaugurated by Thiru. S. Ramakrishnan, I.A.S., Secretary, Tamil Development-Culture and Endowments Department. Thiru. Nanchil Kumaran, I.P.S., Inspector General of Police delivered the valedictory address.

Dr. R. Kannan, Ph.D., I.A.S., Commissioner of Museums, Thiru. A. Subramanian, I.P.S., Commissioner of Police, Madurai, Thiru. R. Kannan, I.F.S., Forest Training College, Vaigai Dam, Dr. R Jayaraman, Member Secretary, C.E.D., Madurai graced the occasion in the Children's Day Celebrations-Prize Distribution function organised in the Government Museum, Madurai.



Thiru.R.Sivakumar, I.A.S., District Collector, Vellore inaugurated the three days training programme to study inscriptions iconography and temple architecture conducted for 20 Post Graduate students of history at Government Museum, Vellore on 3.11.2000.

Government Museum, Pudukkottai organised a seminar on "History of Pudukkottai". 13 research papers were presented. Her Highness The Rani of Pudukkottai, Mrs. Charubala Thondaiman was the Chief guest. Yuvaraja Dinakar Sethupathi from the royal family of Sethupathies of Ramnad also graced the occasion.



IMPORTANT ADDITIONS

As Treasure-trove Finds

In Chennai:

A gold Amman kasu (2.213 grams), twisted gold wire (4.590 grams), 2 gold wire pieces and 2 gold sheets (1.211 grams), and a metal container with lid from Nochikulam village, Kunnam taluk of Perambalur district, a silver talisman (12.21 grams) and a broken piece of a pottery from Thenkarai kottai village, Pappireddipatti taluk, Dharmapuri district were received and added to the collection of anthropology section.

Two South Indian panams (gold) from Nochikulam village of Perambalur district were received and added to the collection of numismatics.

In Districts

Pudukkottai:

19th Century A.D. bronze icons from Kumbakonam, viz Durga (Ht 29cm, Wt.1.5Kg), 17-18th Century bronze icons from Tiruvarur, viz Vishnu (41.43 cm, wt.4 kg), 13-14th Century bronze icons from Kuthalam viz Chandikeshwara (Ht.64cm, Wt.46Kg), Chandrasekara (Ht 69cm), Uma (Ht.57cm) on a single pedestal of wt.64 Kg form the Additional Chief Judicial Magistrate Court, Kumbakonam and Bhama and Rukmani bronzes (Ht.17cm wt.900 gms each) of 16-17th Century A.D from the Collector, Pudukkottai district were received and added to the collection.

Tiruchirapalli:

Bronze icons of Amman (broken into two pieces) and bust of Siva belonging to Poomalliankulam village, bronze idols of Rajagopala (Ht.82cm), Rama (Ht.60cm), Rukmini (Ht.58cm), Thirumal (Ht.62cm), Bhudevi (Ht.54cm), Sridevi (Ht.54 Cm), and two icons of Tirumal (Ht. 44cm each) were received as treasure-trove objects from Pattukkottai taluk and added to the collection.

Erode:

Seven pieces of a burial urn (terracotta) from Surampatty, Four Roads were received and added to the collection.

Coimbatore:

Three megalithic burial urns (Terracotta) along with accessories from Kalappatti of Coimbatore South were acquired in broken condition and added to the collection. One of the urns was restored and displayed



Cuddalore:

A Chatter Thandava Nataraja bronze idol found at Neyveli Township as an un-claimed property (19th Centuary AD, Ht. 60cm Wt. 20Kg) was received from the Tahsildar, Panruti and added to the collection.

Palani:

Ayyanar stone sculpture of 15th Century AD from Mattapparai village, Nilakkottai taluk was received as treasure-trove and added to the collection.

Tiruvarur:

Megalithic burial urn (terracotta) with mud pot from Avoor village, two Devi bronze idols of 12th century AD and 5 metal wares from Gopalasamuthiram town were received from the Tahsildar, Valangaiman taluk and added to the collection

Kanchipuram:

Bhadrakaliamman stone sculpture (modern period, Ht.90cm, Breadth 30cm), was received as treasure- trove from Madhuramangalam village of Sriperumbudur taluk and added to the collection.

Ramanathapuram:

A 18th Century Devi stone sculpture from Devipatinam and a bundle of copper (wt. 7.Kg) from Maraikayarpattinam were received and added to the collection.

Virudhunagar:

Seven bronze idols such as Vishnu (9th Century), Vishnu (15th Century AD), Vishnu with Sridevi and Bhudevi (15th Century AD), Vishnu (18th Century AD), Tirumangai Alvar (18th Century AD) from Kansapuram village of Srivilliputtur were received and added to the collection.



Through Field Collections and Gifts

In Chennai:

Three multicolour granites such as Dolerite, Gabbro and Leptinite from Dharmapuri district, Geological Survey of India and three specimens of iron ores of Portland, U.S.A. from Dr.N.Devasahayam, former Deputy Director of Museums as gift (Geology Section); 100 vascular plants were collected and preserved as field collection and 4 vascular plants as gift from Kuopio Museum, Finland (Botany Section); 52 molluscan shells from Cuddalore as field collection (Zoology Section); 24 first day covers, 24 brochures and 24 stamps from the Chief Post Master, Head Post Office, Chennai-2, as gift (Numismatic section) were added to the respective collections.

In Districts:

Salem:

Two megalithic burial urns (terracotta broken) with accessories like small pot, mud jar from the Head Master. Government H.S.School. Mohanur. Namakkal district. Century coin of Singapore, 10 paise coin of Pakistan from Thiru. Anbazhagan of Salem: 5 copper coins of Bahmini Sultan, 5 Chola copper coins Moorthy, Thiru. Namakkal; 3 copper coins of Arcot Nawab, Chera and Pandiya (each one number)



from Thiru.N. Sulaiman, Regional Assistant Director, Art and Culture Department, Salem; 19 first day covers, stamps and folders from Senior Post Master, Coimbatore were received as gift and added to the collection.

Madurai:

5 copper coins of the Nayak (17th-18th Century A.D) from Thiru. Srikanth, Anna Nagar, Madurai; 2 wooden chakras a wooden vessel, 2 dye-pots and 2 porcelain jars from Thiru. R. Rajendran, K.pudur, Madurai were received and added to the collection.

Thiruchirapalli:

20 copper coins of Ramnad Nayak; 2 metal images, (Ht. 3cm), 2 brass scales (small size), brass model of a lizard (7.5cm length), a brass ring with the face of Hanuman from Thiru. M. Nazer, 74 first day covers with stamps and brochures from the Head Post Office, Tiruchirappalli were received and added to the collection.

Vellore:

21 structural stone fragments from Thirumalpur old Manikandesvara temple from H.R. & C.E. Department, British period Kerosene street-lamp enclosures from Thiru. Syed Khaleem Ahammed; an iron dagger from Thiru. Gunasekaran, and 16 first day covers from the Department of Posts were received and added to the collection.

Erode:

18 First Day covers with stamps and brochures from the Senior Post Master, Coimbatore; herbaria of 3 medicinal plants collected as field collection were added to the collection.

Udhagamandalam:

A piece of oak tree from Government Arts College, Udhagamandalam, pieces of terra cotta figurines like elephant, human head from the megalithic site, "Thalakundha" as field collection were added to the collection.

Coimbatore:

"Peeki", "Mango", "Thiruli" the indigenous herophones of Irula tribes and a "Kathari" the indigenous animal trap of Irula tribes from Thiru. Ramasamy of Perumpathi, an Irula hamlet in Palamalai and a portion of Saptha mathrika panel sculpture from Thiru. R. Nataraj, B.K.Pudur, Kuniamuthur were received as gift and added to the collection.

Cuddalore:

A map of "Cuddalore 1758" (on plywood) from Thiru N. Balamurugan, student of Arts and Crafts College, a Quarter Anna copper coin of 1901 and 2 Shillings coin from Thiru. Sabarigiri, a school student; a stone sculpture of Sridevi down to the hip (Ht.30cm, Wt.8.7 Kg, 18th Century AD) collected as field collection from a land near Palaniswarar Higher Secondary School, Turuppapuliyur were added to the collection.

Tirunelveli:

Ten stone sculptures of Early Pandyas, (7th Century AD) from Iranian Kudiyiruppu, Nanguneri taluk as field collection and a "Tree Coral" of Tuticorin seashore from Thiru. Sitharanjan, Tirunelveli as gift were added to the collection.

Kanyakumari:

6 metalware objects such as crawling Krishna, peedam, lamp, vessel, incisor were received as gift form M/S Ajanda Pazham Porul Virpanai Nilayam, Kanyakumari.

Krishnagiri:

A lance point, 2 scrapers, an artificial blade and a bifacial blade from Dr. C. Muruganayanar (Ht.28 cm, 20 Century AD) from R. Sundaram, Gudiyatham; 19 First Day covers from Senior Post Master, Coimbatore were received as gift and added to the collection.

Palani:

16 First Day covers with stamps and brochures from Postal Department; three water-colour paintings and one oil colour painting from Thiru. V.R. Venkateswaran were received as gift and added to the collection.

Tiruvarur:

A ten rupees currency note of SriLanka from Thiru. R. Rajanathan and two rupees currency note of Malaysia from Thiru. Ariram, Tiruvarur were received as gift and added to the collection.

Nagapattinam:

2 brass candle stands (Ht. 14 cm) were received as gift from Thiru. M. Anbazhagan, District Adidravider Welfare Officer, Nagapattinam and added to the collection.

Ramanathapuram:

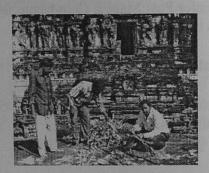
A knife and a spear made of iron from Thiru. Karthigaipandi; a rare size moongil thattu and Tirukural book (5cm x 4cm) form Thiru. Satyamoorthi, two art works made of paddy-husk from Selvi. Amina Sahila, a Malaysian bamboo uri from Thiru. Subramanian as gift and two measures and a pot hanging arrangement uri made of iron as field collection were added to the collection.

Kanchipuram:

Two long-horned beetles and 100 Indian and foreign stamps were collected by the Curator and added to the collection

Karur:

Old palm-leaf manuscripts were collected from the Sivapuri Eswarar Temple of Sivayam village, as field collection and added to the collection.



VIP Visits

In Chennai:

Dr. R.C. Agarwal, Director (Monuments), Archaeological Survey of India, New Delhi and Thiru. Gangaram Bedia I.A.S.,Director of Archives, Karnataka State, paid a visit to the Chemical Conservation and Research Laboratory, Government Museum, Chennai.

Thiru. S. Ramakrishnan IAS, Special Commissioner and Secretary, Tamil Development Culture and Endowments Department visited the museum on 22.03.2001 to inaugurate a seminar.

In Districts:

Honourable Minister for Tamil Official Language, Tamil Culture, Hindu Religious and Endowments, Dr. M. Tamizhkkudimagan inaugurated the Government Museum, Virudhunagar on 10.03.2001.

Thiru. Navin Chowla, IAS., Principal Secretary (Power, Port, Art and Culture and Fisheries), Government of Pondicherry visited the Government Museum, Pudukkottai on 02.02.2001.

Thirumathi. Rupika Howla, Restorer, New Delhi and Dr. Amin Jaffer, Research Scholar, Victoria and Albert Museum, London paid a visit to the Government Museum, Pudukkottai.

The Honourable Minister for Handlooms, Thiru. N.K.K. Periyasamy inaugurated the Golden Jubilee Republic day Exhibition on 12.2.2001 in the Government Museum, Erode.

Thiru. Dheerajkumar, I.A.S., Commissioner of Corporation, Tirunelveli, visited the Government Museum, Tirunelveli on 7.03.2001.

Thiru. K.B. Kothandaraman, General Manager, TNSTC, Karaikudi visited the Government Museum, Sivagangai on 10.10.2000. Thiru. M. Anbazhakan, District Adidravidar & Tribal Welfare Officer, and Thiru V.C. Rameswara Murugan Chief Educational Officer visited the Government Museum, Nagapattinam on 24.2.2001 and 25.2.2001 respectively.

Dr. Amir Jaffer, Research Scholar, Victoria Albert Museum visited the Government Museum, Ramanathapuram on 6.3.2001.

Research Facilities and Loan of Objects

In Chennai:

Research facilities were rendered to the following persons for their research:

Selvi. Bhavani, research student, Tamil University, Thanjavur (Medival coins) (Numismatic section); Prof. H.S.H. Hussainy and 30 students of III B.Sc., Bishop Heber College, Tiruchirapalli studied the preservation and display of zoological objects (Zoology section); Selvi. Nalini student of M.C.C., studied Morinda (Botany section); six students from Sathya Bhama Engineering College (Conservation of Buildings), Ms. Smitha Kutty, Mumbai (Government Museum, Chennai); Thiruvalargal, Kurumani, Rajendran, Karunanidhi, Anbukadhir, Chennai (Conservation of Paintings), Thiru. Anandan, Chennai, (Conservation of Library Materials), Archivist of Sacred Heart College, Kodaikanal (Conservation of Library Materials); Richard Blurton, Asst. Curator, British Museum, London (visit to the Bronze Gallery) (Chemical Conservation and Research Laboratory); Study materials and loan specimens of Botany Section, Zoology Section and Children Museum of the Government Museum were given to Annai Terasa Matriculation School, M.G.R Nagar, Chennai-78.

In Districts:

Pudukkottai:

Research facilities were rendered to Selvi Anbumani, a Ph.D Research Scholar (Cultural and Economic Impact of Tourism in Cholamandala Region), Selvi K. Anbu, M.Phil., Research Scholar and (Thirumananjeri Temple in Pudukkottai District).

Salem:

Research facilities were rendered to Thiru. Manoj Kumar of Bangalore (Temples of Salem, Dharmapuri Namakkal Districts) and five students of Rajaji Institute of Technology and S. Sridhar, B. Sridhar, J. Vadivel, Obuli Venkatesh and J.R. Selvi

for completing their project work on Government Museum, Salem.

Madurai:

Research facilities were rendered to Prof. S. Hari Ramanathan (Inscriptions), Thiru. K. Nallamohamed M.Phil thesis on "Government Museum, Pudukkottai" - a Historical Survey, Thiru. S. Murugananthan (Pandya History), Thirumathi. S.S. Kavitha (Temple Tank of Madurai Koodal Alagar Temple), Miss. K. Lalitha, M.Phil., Thesis "Position of Women-gleaned from Madurai Meenakshi Amman Temple, Prof. Ganesan, (Sathavahana Coins).

Tiruchirapalli:

Research facilities were extended to Selvi. J. Anbumani, Research Scholar (Sculptures of the Cholas); Thiru K. Rengasamy, candidate of Civil Service Examination (History of Tamil Nadu).

Erode:

Research facilities were rendered to Thiru. Mariadas (History of Erode District); Thiru. Rajendran (Tamil Nadu Coins) and Thiru. Rajib Mukherjee, Research Scholar, West Bengal (South Indian Village Deities).

Coimbatore:

Research facilities were rendered to Dr. R. Poongunran, Curator, Archaeological Museum, Coimbatore, (Hero-stone Tradition - An Anthropological Perspective), Dr. Silambu N. Selvaraj, Lecturer, Pondicherry Institute of Linguistics and Culture (Application of Soul-substance concept in the research arenas about Folklore traditions), Thiru. Saravanan and Thiru. Rm. Subramanian of Ainthinai Voluntary Organisation (Indigenous Knowledge System of the Tribes), Thiru. Sengo.

Varadharajan, Retd. AEO (The Tribes of Coimbatore District), Thiru. Karthikeyan of Trekkers Association (Wild Life Biology Coimbatore District), Thiru. Prabakara Rao of Salem Steel Plant (Ancient Iron Industry of Tamil Nadu).

Tirunelveli:

Research facilities were rendered to Prof. K. Rajan and research scholar, Thiru. N. Adhiyaman, Thiru. P. Jeyakumar of Tanjore Tamil University (Adichanallur Antiquities), Thiru. G.K. Natarajan of Intelligence Bureau (Tourist Interested Places of Nellai), Thiru. Krishnamurthy of Health Department (Stone Sculptures). Loan objects of woodcarvings, herbaria, sea creatures and marine animals were given to Sri Mandiramoorthy Hr. Sec. School of Nellai Town on loan basis and got back.

Palani:

Research facilities were rendered to Siddha Doctor, S. Krishnamoorthy of Dharapuram on "Palm-leaf Manuscripts".

Nagapattinam:

Research facilities were rendered to Thiru. P. Senthil Kumar, research student, Bharathidasan University, Tiruchirappalli (Nagapattinam Sea- fishes and Sea-shore Fauna).

Ramanathapuram:

Research facilities were rendered to Thiru. Dhanapal (Leather Puppetry); Thiru. Sutharson (Uttirakosamangai Nataraja), Thirumathi.Latha (Sea-cow), Selvi. Christina (Ramanathapuram District Information with Statistical Reports), Thiru. Ramalingam (Rotation of the Planets), The Hon'ble Minister for Labour and Welfare and Revenue, Thiru. Raguman Khan (Alagankulam Roman Coins and Roman Jars during the Time of Excavation).

Training Course, Competitions and Celebrations.

following training programmes, courses, and celebrations were conducted the competitions at Government Museum. Chennai and district museums.

Government N	ruscum, Chemai and district muscums.
11.10.2000	Museology - special training course for the students of Emerald Hights Women's College,
	Ooty- Government Museum, Udhagamandalam.
12.10.2000	Elocution Competition - for school students on
	Mamannar Marudhu Pandiar and Velunachiar -
	Government Museum, Sivaganga.
15.10.2000	Painting Competition - for 800 students -
٠.	Government Museum, Tiruchirappalli.
30.10.2000	Essay Competition on Protection of Wildlife -
	for school and college students in connection
	with Wildlife Week Celebrations - Government
	Museum, Pudukkottai.
1.11.2000	Wildlife Week 2000 and World Ecology Day
	Celebrations' - Government Museum
	Pudukkottai.
03.11.2000-	Three days' training programme to study
05.11.2000	Inscriptions, Iconography and Temple
	Architecture conducted for 20 History Post-
	Graduate Students from Voorhees College,
	Vellore-Government Museum, Vellore.
Nov. 2000	Induction Course for the newly recruited
	Assistant Curators, Thiruvalargal. A. Pugalendhi
	(Anthropology) and K.A. Murugavel (Botany) in
	all the Sections of Government Museum,
	Chennai.
Nov. 2000 -	'Care of Paintings' - Project course for 5 students
Feb. 2001	from the College of Arts and Crafts, Chennai -
	from the College of Arts and Crafts, Chennai -

Chemical Conservation and Research Laboratory.

00 11 0000	
08.11.2000-	'Children's Day Celebrations' - Special
14.11.2000	Competitions among school children -
	Government Museum, Palani.
10.11.2000-	'Children's Day 2000' - Child Art Competition,
14.11.2000	Music Competition, Oratorial Competition, VIPs
	participation and prize distribution to the winners
	- Government Museum, Pudukkottai
13.11.2000	
15.11.2000	'Children's Day Celebrations' - Drawing
	Competition and Prize Distribution to the Lingam
	Nursery School Students - Government Museum
	Kanyakumari and Ethamozhi, Central Lion's
	Club.
14.11.2000	'Children's Day Celebrations'- The District
	Collector, Thiru. V. Moorthy, I.A.S., distributed
	the prizes and certificates to the winners of the
	painting competition at Anna Stadium -
	Government Museum, Tiruchirappalli.
14.11.2000	'Children's Day Celebrations - Essay Competition
	for 198 students - Government Museum,
	Kanchipuram.
14.11.2000	A Children's Day Celebrations - Oratory
11.11.2000	Competition for the 150 school students -
TOTAL SE	Government Museum, Salem.
20.11.2000	
20.11.2000	'Child Art Competitions' - for School Children -
00 11 0000	Government Museum, Madurai.
22.11.2000	Children's Day
	Celebration's - Dr. R.
	Kannan, Ph.D., I.A.S.
	Commissioner of Museums
nor south	participated as chief guest
	and distributed prizes to
	the winners of the 'Child

Art Competition'- Govern-

ment Museum, Madurai.

27.11.2000-	'Drawing Competition and Prize Distribution
28.11.2000	Function' - for the students at Saraswathi
	Vidhyalaya, Nagercoil - Government Museum,
	Kanyakumari in collaboration with Central Lion's
	Club of Ethamozhil.
01 10 0000	17: 7:1: 6 1 7 1 66 6 1

01.12.2000 - 'Fire Fighting Course' - For the staff of the 08.12.2000 Government Museum Chennai and PWD with the help of the Fire Services Deparetment in three batches - Chemical Conservation and Research Laboratory.

03.12.2000 "Art Competition-Prize Distribution" and inauguration of Art Exhibition— Government Museum, Vellore

11.12.2000 - 'Training Course on Archaeology' - for 30 22.12.2000 students of Chikkiah Naicker College - Government Museum, Erode.

07.01.2001 'Kolam Competition' - Government Museum, Palani.

26.01.2000 Art Competition for 630 school students – Government Museum, Vellore.

26.01.2001 'Republic Day Celebrations' - Government Museum, Erode.

O5.02.2001 'Art Training Camp' - Specially arranged for the deaf and dumb students at Government Higher Secondary School, Orikkai - Government Museum, Kanchipuram.

14.03.2001 -15.02.2001



'Museum Week Celebrations' Drawing, Essay and Elocution Competitions for students Government Museum, Sivaganga.

07.03.2001- 'Zoological Specimens
09.03.2001 Preservation Course' Special Training Camp
conducted by the
Zoology Section,
Chennai, for 38 B.Sc.
Zoology students of
Rani Anna Government
College for Women Government Museum.

Tirunelveli.



14.03.2001 'Short-term Training Course in Museology' for 50 students from the Government College for Women - Government Museum, Pudukkottai '2nd Annual Day Celebrations and Valedictory function of the Art Camp' -Government Museum, Kanchipuram.

Seminars, Workshops and Camps

22.03.2001

The Department of Museums conducted the following seminars, workshops and camps in Chennai and districts.

Seminar on "Our Role in Protecting Cultural

Heritage" - organised by the Government Museum, Chennai at the Museum Theatre in connection with the establishment of Government Museum, Virudhunagar.

25.01.2001 Seminar on "Competitive Examinations and Personality Development" - organised in collaboration with Temple City Lions Club - Government Museum, Palani.

16.02.2001 Seminar on "Medicinal Plants" organised in collaboration with Temple City Lions Club Government Museum, Palani.

24.02.2000 - Workshop on "Care of 25.02.2001 Museum Objects" - organised in collaboration with Gnanambigai Government Women's College - Mailaduthurai at Government Museum, Nagapattinam.



24.03.2001 Seminar on "History of Pudukkottai" organised in the museum premises. 13 Research papers were presented - Government Museum, Pudukkottai.

27.01.2001 One day workshop on "Chinaclay Toy- making" - organised in collaboration with Tamilnadu Makkal Nala Seva Sangam - Government Museum, Vellore.

15.11.2000 Workshop on 'Warli Painting' organised in collaboration with National Folklore Support Center (NFSC), Chennai in Government Museum, Chennai (Education and Art Sections).

18.12.2000 Workshop 'Patachitra' organised in collaboration with National Folklore Support Center (NFSC), Chennai in Government Museum, Chennai, (Education and Art Sections).

28.03.2001 Workshop on "Rajasthani Painting" organised in collaboration with National Folklore Support Center (NFSC), Chennai in Government Museum, Chennai (Education and Art Sections).

Presentation of Paper in Seminars / Workshops

In Chennai:

Dr. R. Kannan. Ph.D., I.A.S., Commissioner of Museums

22.03.2001 Prevention of Illegal Traffic in Intellectual Property Especially Cultural Property - Seminar on "Our Role in the Protection of Cultural Heritage" Government Museum, Chennai - March 2001.

Thiru. K. Lakshminarayanan, Curator, Education Section

22.03.2001 "The Portrait Sculptures in Virudhunagar District" - Paper Presented in the seminar on "Our Role in protecting Cultural Heritage" organised by the Government Museum, Chennai.

Thiru. P. Jawahar, Curator, Zoology Section

15.03.2001 Lecture-cum-Demonstration in the workshop on "Collection, Preservation, Identification of Zoological Specimens" -organised by the Zoological Survey of India, Chennai.

Dr. V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory

09.12.2000 "Museum Architecture and Some Conservation Aspects" - paper sent to the Calicut Regional Engineering College for presentation in the workshop on 'Conservation of Architecture'.

15.02.2001 1. Disaster Management for a Museum.

17.02.2001 2.Present Status of Conservation in India with Reference to Tamilnadu.

3. Chemical Conservation Gallery in Government Museum, Chennai.

4. The Role of Conservator in the preservation of Objects in a Museum (Joint Paper), Papers presented in the seminar organised by the Indian Association for the Study of Conservation of Cultural Property in India, New Delhi.

24.02.2001- "Fire Disaster Management in Cultural 26.02.2001 Institutions" - paper sent to the International Seminar on Manuscripts Conservation organised by the Brindavan Institute, Brindavan, U.P.

22.03.2001 1. Repatriation - Return of Museum objects

2. A Survey of Global Legislative Measures on Art, Cultural and Natural Heritage

3 .Faking and Authentication

4. Conservation of Cultural Property - in the seminar organised by Government Museum, Chennai on "Our Role in Protecting Cultural Heritage".

"South Indian Bronzes and Their Authentication"
- presented in the Seminar on 'Bronzes of India'
Organised by the Government College of Arts
and Science, Raipur, Chattisgarh.

Thirumathi R. Santhi, Curator, Numismatic Section

11.02.2001 - 'Sangam Chola Coin' - paper sent to the South 12.02.2001 Indian Numismatics Society conference held at Ernakulam, Kerala State.

Thiru. J.R. Asokan, Curator, Design and Display Section

- 22.03.2001 1. "Educational Activities through District Museums"
 - 2. "Computerised Documentation of Museum Objects". Papers presented in the seminar on "Our Role in Protecting Cultural Heritage" organised by the Government Museum, Chennai

Thiru. R. Balasubramanian Curator, Archaeology Section

- 22.03.2001 "Treasure-trove Problems" Paper presented in the seminar on "Our Role in Protecting Cultural Heritage" organised by the Government Museum, Chennai.
- 31.03.2001 "Sati-stones of Madras Presidency" Paper presented in the seminar held in the Vivekananda College, Chennai, on 'Recent Trends in Sanskrit Research.

Dr. J. Raja Mohamed, Curator, Government Museum, Pudukkottai.

30.12.2000 "Maritime Trade Activities in the Ports in Sethunadu" - Paper presented in Vallal Seethakkathi 320th Year Celebrations at Keelakkarai, organised by Ramnad Tamil Sangam.

24

- 24.03.2001
 - 1. Indigo Export from Pudukkottai to England in 19th Century.
 - 2. Administrators of Pudukkottai State 19-20th Century" paper presented in the History Seminar in the Government Museum, Pudukkottai.

Thiru. M. Gandhi, Curator, Government Museum, Vellore

- 22.03.2001 Role of the Public in Protecting Cultural Heritage" paper presented in the seminar on "Our Role in Protecting Cultural Heritage, organised by Government Museum, Chennai.
- 29.03.2001 "Sculpturel Wealth of Pondichery Territory" 30.03.2001 Paper Presented in the ICHR National Seminar on "Historiography of Pondicherry" organised by the Pondicherry University.

Thiru. P. Sam Sathiaraj, Curator, Government Museum, Madurai

22.03.2001 "Srivilliputthur Bronzes" in the collection of Virudhunagar Museum - paper presented in the seminar on "Our Role in Protecting Cultural Heritage" held at Government Museum, Chennai.

Dr. C. Maheshwaran, Curator, Government Museum, Coimbatore

"Contribution of Tamil Nilgris in the Preservation of Our Art and Cultural Heritage" - paper presented in the seminar on "Our Role in Protecting Cultural Heritage" held at Government Museum, Chennai.

Thiru. G. Karunanidhi, Curator, Government Museum, Tiruvarur

22.03.2001 "Art Nurtured by Temples - Paintings"- paper sent to the seminar on "Our Role in Protecting Cultural Heritage", held at Government Museum, Chennai.

Thiru. T. Pakirisamy, Curator, Government Museum, Sivaganga

22.03.2001 "Methods of Conservation of Artifacts" - paper sent to the seminar on "Our Role in Protecting Cultural Heritage" held at Government Museum, Chennai.

Thiru. N. Sundararajan, Curator, Government Museum, Cuddalore

- 22.03.2001 "Services Rendered by Museums to the Foreign Tourists" paper presented in the seminar on Our Role in Protecting Cultural Heritage", held at Government Museum, Chennai.
- 25.02.2001 "Preservation of Art Objects" paper presented in the workshop on "Care of Museum Objects" organised by Government Museum, Nagapattinam

Participation in Workshops, Expert Committees, Seminars etc...

22.03.2001 "Our Role in Protecting Cultural Heritage" - seminar organised and Conducted in Government Museum, Chennai. - Thiru. M. Mohan, Thiru. P. Jawahar, Thirmathi. R. Shanthi, Thiru.D. Jawahar Prasad Raj, Thirumathi. M.N. Pushpa, Thiru. K. Sekar participated. Thiru. M. Gandhi, Dr.C.Maheswaran, Thiru. P. Sam Sathiaraj, Thiru. N.Sundararajan acted as raporteurs.

10.10.2000 - Participated in the International Seminar organised by the International Institute of Conservation, London at Melbourne, Australia and presented a paper on "Current Status of Conservation in India" in the programme organised among the Getty Travel Scholars who attended the Conference. - Dr.V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory.

16.10.2000 - Participated in the workshop on "The Museum Building and Environment" Melbourne, Australia - Dr.V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory.

Popular Lectures and Special Lectures

In Chennai

30.10.2000 "Marine Mammals of India" - Thiru. Pl. Kumaran, Research Fellow, University of Barcelona, Spain

- 30.11.2000 "Tamils Culture in the Past and Present"- Pavalar A. Muthuramalingam, Tamil Etymological Dictionary Project, Chennai.
- 0 4 .12.2000 "A New Look at Nilgiri Hills" (in Anthropological and Archaeological Prospectives) Professor Allen Zagarell, Professor of Anthropology, West Michigan University, Kalamazoo, U.S.A
- 12.01.2001 "Buddhist Lokpalakas "(with Special Reference to Amaravati and Nagarjunakonda Sculputures) Ms. Kim Hyang Sook (JSPS Research Fellow) National Museum of Ethnology, Osaka, Japan.
- 30.1.2001 "Buddhist Art of Kizil A Cross Discourse Between India, Central Asia and China along the Silk Route" Dr. Rajeshwari Ghose, Ph.D., Research Fellow, Center of Asian Studies, University of Hongkong, Hongkong.
- 28.02.2001 "Natural Hazards and its Environmental Impact" Professor. Dr. C. Mohan Doss. Director, Center for Geo-Science and Engineering, Anna University, Chennai- 25.
- 28.3.2001 "Ancient Tamil Nadu Thiru. Sathur Sekaran, Editor, Directorate of Tamil Etymology, Chennai.

In District:

- 04.10.2000 "Forest and its Uses" Thiru. Ragunath, I.F.S., District Forest Officer Government Museum, Sivaganga.
- 12.10.2000 "Salem District's "Freedom Fighters" Love 'O' Nagarajan, President, Bharat Venpura Public Service Center- Government Museum, Salem.

09.11.2000 "Musical Instruments of Ancient Tamils" Thiru. Ve. Muthukrishnan, Nathaswaram.
Teacher and Thiru. K.V. Palanivel, Thavil
Teacher Government Music School,
Kanchipuram - Government Museum,
Kanchipuram.



10.11.2000 "The Folklore Tradition of Villupattu" - Thiru.
C. Govindarajan, Retired Teacher - Government
Museum, Pudukkottai.

06.12.2000 "Krishnapuram - Kallilum, Sollilum" - Rama Kannan - Tirunelveli.

21.12.2000 "Sons of the Soil" - Venpura. A.K.P. Kathirvelu, Founder, Bharat Venpura Public Service Center, Salem - Government Museum, Salem.

27.12.2000 "Indo - French Coins" - Thiru. M. Kandasamy, Numismatist of Tiruchirappalli - Government Museum, Tiruchirappalli.

"History of Cuddalore with Special Reference to European Settlements" - Thiru. V. Rayappan, Lecturer, Department of History, St. Joseph's College, Cuddalore - Government Museum, Cuddalore.

Special Lectures for the Trainees

01.12.2000 -	Mr. Karthikayan, Ever life Fire Services, Mr. S.
08.12.2000	Veerasami, and Mr. Namasivayam, Assistant
	Divisional Fire Officers gave Lecture - Cum -
	Demonstration on fire fighting to the Staff of the
	Government Museum, Chennai and P.W.D.
12.12.2000	1. 'Coins of Erode District' - Professor K.A.
	Thiruganasambandam.
14.12.2000	2.Environmental Problems –
	Dr.V Jeevanandam.

19.12.2000 3. Stone Inscriptions of Kongunadu - Professor K. Aranga Samy.

"Archaeological Importance of 20.12.2000 District" - Pulavar. S. Rasu. in the 'Archaeology Training Course, organised by Government Museum, Erode.

27.02.2001 "Soil should be benefited" -Thiru.S. Lakshmipathy, Sub Registrar, Cheyyar. Government Museum, Vellore.

20.03.2001 "Historically Important Sites of Sivaganga" -Thiru. M. Balakrishnan, Head Master, (Retired) - Government Museum, Sivaganga.

The following Popular and Special Lectures were delivered by the Curators of the Chennai and District Museums.

In Chennai:

Thiru. K. Lakshminarayanan, Curator, Education Section

'Inscriptions' - Lecture delivered in the training 03.11.2000 course in Government Museum, Vellore.

- 20.12.2000 'Patachitra' Lecture delivered in the workshop conducted in collaboration with the National Folklore Support Center, Chennai at Government Museum, Chennai.
- 18.11.2000 'Warli Paintings' Lecture delivered in the workshop conducted in collaboration with the National Folklore Support Center, Chennai at Government Museum, Chennai.
- 12.03.2001 'Ancient Terracotta'-Special lecture delivered for the National Master - Craftsmen at Regional Handicrafts Development Corporation, Bangalore.
- 30.3.2001 "Rajasthani Paintings"- Lecture delivered in the workshop conducted in collaboration with National Folklore Support Center, Chennai at Government Museum, Chennai.

Dr. V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory, Chennai

- 14.01.2001 "Conservation of Metals" and "Conservation of Paintings" 8 lectures were delivered to the students of museology of the Baroda University as a visiting faculty.
- 05.02.2001 "Preservation of Antiquities" Lecture delivered to the Rotarians of Chennai Mid-town Rotary Club, Chennai.
- 31.10.2000 "Conservation of Buildings" Lecture delivered to the Architecture students from Sathyabhama Engineering College.
- 09.11.2000- Over 15 Lectures on "Care of Paintings" were delivered to the students of College of Arts and Crafts, Chennai during their project training.

Thirumathi. R. Shanthi, Curator, Numismatic Section

05.11.2000 "Ancient Inscriptions on Coins" - Lecture delivered to the postgraduate history students, during the training on Stone Inscription 'Epigraphic Study' organised in Government Museum, Vellore.

Thiru. P. Jawahar, Curator, Zoology Section

- 07.03.2001 A series of lectures delivered on "Preservation of 20.03.2001 Zoological specimens" during the training course organised by the Government Museum, Tirunelveli.
- 15.03.2001 "Collection, Preservation, Identification and Display of Zoological Specimens" Lecture delivered to the 25 teachers at Zoological Survey of India, Chennai.

Thiru. R. Balasubramanian, Curator, Archaeology

- 22.12.2000 "South Indian Bronzes" Special Lecture delivered to the Indian Y.M.C.A. Students, London.
- 13.01.2001 "South Indian Images of Worship" Special lecture to the students of Herron University, London.
- 25.01.2001 "Amaravati Style" Special lecture to the students of Aurow University, London.

Thiru. P. Kasilingam, Curator, Government Museum, Salem

- 02.02.2001 "Salem District Museum and its Activities" Lecture delivered during the inauguration of
 "History Association" at Government Arts
 College for Women, Salem.
- 09.03.2001 "Salem District Museum and its Significance" Lecture delivered during the inauguration of
 "History Association at Tiruvalluvar Government
 Arts College, Rasipuram.
- 09.03.2001 Presided over the function and delivered keynote 10.03.2001 address during the "World Women's Day" Celebrations on 09.03.2001, and during the 'Training of Trekking' conducted on 10.03.2001 by 'Nehru Yuvak Kendra', Salem.

Thiru. P. Raja Mohan, Curator, Government Museum, Tiruchirappalli

15.03.2001 "Importance of the Erstwhile Tiruchirappalli District" - Lecture delivered in the Bishop Heber College, Tiruchirappalli.

Thiru. J. Mullai Arasu, Curator, Government Museum, Erode

11.12.2000 "Erode Government Museum" - Lecture delivered in the Archaeological Training Course-Government Museum, Erode

Thiru. N. Sundararajan, Curator, Government Museum, Cuddalore

02.02.2001 "Cuddalore Government Museum" - Lecture delivered in the Government High School, Vallakarai, Kattupalayam

Thiru. C. Srinivasan, Curator, Government Museum, Tirunelveli

08.03.2001 "Wet Preservation of Zoological Specimens"-Lecture delivered during the training course on "Preservation of Zoological Specimens" at Government Museum, Tirunelveli.

Thiru. N. Soundarapandian, Curator, Government Museum, Kanyakumari.

28.11.2000 "Manitha Neyam" - Lecture delivered in the function organised by the District Administration and Tamil Development Department.

Tirumathi. J.M. Gandhimathi, Curator, Government Museum, Kanchipuram

23.03.2001 "Museum as Educational Institution" - Lecture delivered during the "Second Annual Day Celebrations" of the Government Museum, Kanchipuram.

Dr. J. Rajamohamed, Curator, Government Museum, Pudukkottai

- 07.12.2000 "Pudukkottai Sculptures and Bronzes"- Lecture delivered in the Tamil University, Thanjavur.
- 18.01.2001 "New Trends in Historical Research "- Studies in Pudukkottai History" Lecture delivered in the Bharathidasan University, Tiruchirappalli.
- 12.02.2001 "The Multifaces of History Museum Education, a Tool of History" Lecture delivered in the Seethalakshmi Ramasamy College, Tiruchirappalli.
- 04.03.2001 "Pre-historic Repository at Government Museum, Pudukkottai" Lecture delivered in the H.H. The Raja's College, Pudukkottai.
- 25.03.2001 "Recent Researches on the Sultanate of Madurai A Study of Pudukkottai Inscriptions" Lecture delivered at Jamal Mohamed College, Tiruchirappalli.

Dr. C. Maheswaran, Curator, Government Museum, Coimbatore

- 15.02.2001 "Human Evolution" Lecture delivered in the "Ainthinai" Voluntary Organization, Coimbatore.
- 04.02.2001 "Anthropology of Tamil Nadu An Introduction" Lecture delivered in the Ainthinai Voluntary Organization, Coimbatore.
- 31.03.2001 "Irula (Tribal) Culture" Lecture delivered in the Tribal Heritage Celebration held at the Department of History, Government College of Arts and Science, Coimbatore.

Thiru. M. Gandhi, Curator, Government Museum, Vellore

- 01.03.2001 "Inscription and Temple Architecture" Lecture delivered with slides and charts to B.Ed history students at Government College of Education, Vellore.
- 08.03.2001 "Cultural History of Tamil Nadu" Lecture delivered to the B.A., Tamil Literature students of Voorhees College, Vellore.
- 06.03.2001 "Importance of Museums" Lecture delivered to Adult Education students of Arcottan Kudisai, Vellore.

Radio Talks / Television Programmes

- 30.10.2000 "Museology" (Tamil) All India Radio Udhagamandalam, broadcasted at 8.30 p.m.-Thiru. C. Govindaraj, Curator, Government Museum, Udagamandalam.
- 23.11.2000 Cock with Three Legs Genetical Miracle (Tamil) Interview in Sun News and Raj T.V. Channel Thiru. C. Srinivasan, Curator, Government Museum, Tirunelveli.
- 28011.2000 "Madurai Museum" (Tamil) All India Radio Madurai, Direct Relay in Listener's Choice Programme Thiru. P. Sam Sathiaraj, Curator, Government Museum, Madurai.
- 01.12.2000 "Vandalism of Erotic Sculptures of Temples" (Tamil) Telecasted in the Vijai T.V. News Bulletin at 8.30. pm Dr. C. Maheswaran, Curator, Government Museum, Coimbatore.

07.12.2000-	Choice Exhibits of Government Museum,
12.12.2000	Coimbatore, such as bronzes of Chandra Sekara,
	Navaneetha Krishna and Hanuman, Ancient
	Coins and Irula Tribal Artefacts of Coimbatore.
	District were telecasted with their details in the
	'Thagaval Kalangium' slot with in the Kalai
	Thenral Programme of Raj. T.V Dr. C.
	Maheswaran, Curator, Government Museum,
	Coimbatore.

31.01.2001 "Conservation of Art Objects" - Interview telecasted in the Vijay T.V. - Dr. V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory, Chennai.

14.03.2001 - Early Pandya's Sculptures of Iranian
15.03.2001 Kudiyiruppu and Crawling Krishna of Kil
Manjuvilai - Interview in 'Karan T.V.' News
Nellai - Thiru. C. Srinivasan, Curator,
Government Museum, Tirunelveli.

31.03.2001 "The Tribes of Coimbatore District" - All India Radio, Coimbatore, broadcast in the "Sandippu" programme. - Dr. C. Maheswaran, Curator, Government Museum, Coimbatore.

Renovations and Improvements to Museums Galleries

Government Museum, Chennai:

Zoology Section:

Mounted specimens of Sambar, Hippopotamus, Sloth bear, Mandarin ducks, "Duck billed platypus, Orang - utan, Langurs were renovated and redisplayed. Diorama showcases of

Lion, SlothBear, Herbivorous mammals, Limb bones of animals and cut family were renovated and organised display.

Botany Section:

Sangam Literature plants were displayed. Showcase of 'Algae' was renovated and the specimens were re-displayed.

Numismatic Section:

Plaster cast coins of Roman, Venetian and Chinese were displayed along with colour photographs. Showcase on "Foreign Coins" was re - organised.

Children's Museum:

Semi - diorama display arrangements along with 12 colour photo relief cutout models of Indian Satellite were carried out and displayed in the Virudhunagar Government Museum.

In the Physical Science Gallery, 6 electrical and 6 electronics gadgets were prepared, displayed and changed fortnightly to explain the basic principles of electricity and electronics.

Design and Display Section:

Design and display arrangements for the new district museum at Virudhunagar were carried out. Works related to part II Scheme Projects like special lighting and storage facilities to contemporary Art Gallery and National Art Gallery, purchase of computers, co - ordination work for website and digitisation of artifacts for National Register were carried out.

Chemical Conservation Gallery:

The Chemical Conservation Gallery was refurbished and reopen to the public on 31.01.2001.

In District:

Madurai:

An existing showcase was modified to display the Museum Publications.

Tiruchirapalli:

8 vertical showcases and one slopping showcase were made by order under Part II Scheme and bronze idols were displayed in them. Public Works Department carried out the work to the tune of Rs. 4.00 lakhs for strengthening the security in the museum building.

Cudddalore:

Recent collections of bronze idol of Nataraja, stone tools, 'Cuddalore 1758 -map', repainted 'Amphora', 'Evaluation of Man' painting and photographs were displayed in relevant galleries.

Tirunelveli:

Musical instruments collected from Government Museum, Madurai, such as, Flute, Thappattai, Mirudhangam and Thavil were exhibited.

Kanyakumari:

Plaster - cast models and stone sculptures were reorganised. Building maintenance work was carried out.

Palani:

Nataraja and Devi bronze idols and 2 palm-leaf bundles were displayed.

Tiruvarur:

Recent collections of burial urn pots, 4 wood carvings, Landscape, Mother and Child water-colour paintings of Thiru. A. Edward Kennedy were displayed



Pudukkottai:

Renovation and repair work of the museum building ware undertaken by the Public Works Department at a cost of Rs. 2 Lakhs.

Coimbatore:

Restoration work of burial urn and "Sapthamatruka" stone panel Sculpture display works were carried out.



Vellore:

Skeleton of a buried and dead panther was excavated from Amirthi forest and displayed in the museum after preservation measures.

Exhibition:

31.01.2000 - "Exhibition on" Restored Paintings under 05.02.2000 Conservation Cunsultancy Services" - Chemical Conservation and Research Laboratory.

18.10.2000 - "Paintings Exhibition" 31.10.2000 Paintings drawn by the
Students in the "Painting
Competition 2000"Inaugurated by the
District Collector, Thiru.
C. Uma Shankar, I.A.S.
- Government Museum,
Tiruvarur.



01.11.2000 - "Wild Life - Photo Exhibition" - Government 10.11.2000 Museum, Pudukkottai.

14.11.2000 - "Child Art Exhibition" - Government Museum,

20.11.2000 Pudukkottai.

22.11.2000 "Child Art Exhibition" - in connection with the Children's Day Celebrations - Government Museum, Madurai.

Dec. 2000 - "Indo - French and French Coins and Currencies"
- Special Exhibition, inaugurated by Thiru. John
Kumar, Lecturer, History Department, Bishop
Heber College - Government Museum,
Tiruchirapppalli.

03.12.2000 - "Child Art Exhibition" - Child Art drawn in the Competition, conducted by the museum were displayed - Government Museum, Vellore.

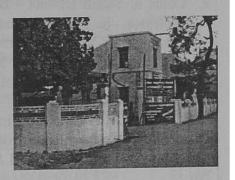
22.12.2000 - "Special Exhibition on Coins", - Government 31.12.2000 Museum, Erode.

24.01.2001 "Photography Exhibition" 'Salem District Freedom Fighters' - Inaugurated by Captain Srinivasan, Assistant Director, Ex. Serviceman Welfare Office - Government Museum, Salem.

- 23.01.2001 "Photography Exhibition on Freedom Fighters of
- 26.01.2001 Erode District" Government Museum, Erode.
- 24.01.2001 "Manitha Neya Vara Vizha" Exhibition,
- 30.01.2001 Conducted in the Breaks School, Udagamandalam.
- 12.02.2001 "Photography Exhibition" Organised in connection with the Golden Jubilee Republic Day Celebrations" Government Museum, Erode.
- "Special Exhibition organised in connection with the Museum Week Celebrations, inaugurated by Thiru. B. Bhaskaran, Joint Commissioner, Hindu Religious and Charitable Endowments, Government Museum, Sivaganga. "Drawings Exhibition" inaugurated by Dr. Thangavel, M.S., D.L.O., President, History Forum, Sivaganga.
- 16.02.2001 Exhibition on "Medicinal Plants" in collaboration with Temple City Lion's Club Government Museum, Palani.
- 28.03.2001 "Art Exhibition" Students of Government 29.03.2001 Higher Secondary School for Deaf and Dumb, Orikkai took active participation - Government Museum, Kanchipuram.
- 31.03.2001 Exhibition on "Tribal Arts and Crafts of Coimbatore District" in collaboration with the Government College of Arts and Science at the Museum of the History Department, in connection with the 'Tribal Heritage Celebrations' Government Museum, Coimbatore.

New Museum:

Government Museum, Virudhunagar was declared open to the public on 10.3.2001 at 3. D. D. Road, Virudhunagar Milk Producer's Co-operative Society, Virudhunager -1. Phone Number: 43177.



Publications

During the period October 2000 - March 2001, the following books were published:

1. Iconography of the Jain Images in The Government Museum Chennai (Madras)-Museum Publication- Dr. R. Kannan, Ph.D.,I.A.S., Commissioner of Museums and Thiru. K. Lakshiminarayanan, Curator for Education Section.

2. Nayak Sculptures in Virudhunagar District (Tamil)- Museum publication- Thiru. K. Lakshminarayanan, Curator for

Education Section.

3. Care of paintings.

4. Pamphlet on Exhibition on Restored Paintings Under Consultancy Services, Dr. V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory

5. Pamphlet on Chemical Conservation Gallery.

6. Education Proceedings of the Seminar on "Our Role in the Protection of Cultural Heritage".

7. Disaster Management in Museums - Museum publication - Dr. R. Kannan, Ph.D. I.A.S.

- 8. Museum Journal (Tamil & English) December 2000 Editors Dr. V. Jeyaraj and Thiru. K. Sekar.
- 9. Coins of Salem District Booklet released on 29.03.2001-Professor. K. A. Thirugnanasambantham and Thiru. P. Kasilingam, Curator, Government Museum, Salem
- 10. Pamphlet on 'Virudhunagar Museum'
- 11. Crocodiles booklet Thiru. J. R. Asokan, Curator, Design and Display Section.

List of the Museums Publications Available for Sale in Chennai and District Museums:

Sl.	Titles and Authors	Price
No		Rs.
1.	Descriptive Catalogue of Butterflies In The	231.00
	Collection Of Madras Museum-S. Thomas	
	Satyamurti	
2.	The Echinodermata In The Collection of Madras	36.40
	Government Museum-S. Thomas Satyamurti	
3.	The Wild Ferns Of Madras City And Its	7.10
	Immediate Neighbourhood-M.S. Chandrasekar	
4.	The Birds' Eggs And Nests In The Collection Of	43.95
ł	The Madras Government Museum- S. Thomas	
	Satyamurti	
5.	Grasshoppers In The Collection of The	85.00
	Government Museum-G. Kesavaram	
6.	Guide To The Bird's Gallery- S. T. Satyamurti	11.30
7.	பாலூட்டிகள் – S. Thomas Satyamurti	8.30
8.	Guide To The Principal Exhibits In The	13.55
	Geological Galleries-E. George Jesudosan	
9.	Guide To The Important Monuments In And	30.00
	Around PudukkottaiM. Raghupathy	
10	Guide To The Archaeological Galleries - An	25.00
-	Introduction To South Indian Temple	
	Architecture And Sculpture	
L	-F. H. Gravely & C. Sivaramamurti	

11	Guide To The Buddhist Antiquities-A. Aiyppan	30.00
<u> </u>	& P. R. Srinivasan	
12	Guide To The Anthropological Exhibits-	39.00
	C. J. Jayadev	
13	Illustration of Indian Sculptures Mostly Southern	25.00
	for Use With the Guide To the Archaeological	
	Galleries-F. H. Gravely & C. Sivaramamurti	
14	Select Bronzes in the Madras Government	35.00
į	Museum- M. Raman, IAS.	
15	Guide To The Bronze Gallery-	50.00
1	V. N. Srinivasadesikan	
16	A Souvenir Released on the Occasion of The	51.00
1	Exhibition on South Indian Bronzes	
}	-M. Raman, IAS	
17	Amaravati Sculptures in the Madras Government	210.00
1	Museum- C. Sivaramamurti	
18	Nagapattinam and Other Buddhist Bronzes	117.00
•	- T. N. Ramachandran	
19	Adivasis of Kodiakkarai-A. V. N. Sarma	9.75
20	The Tali in Relation to South Indian Initiation	7.55
	Rites-C. J. Jayadev	
21	Catalogue of Vijayanagar Coins in the Madras	74.00
ļ	Government Museum-N. Sankaranarayana	
22	Catalogue of Venetian Coins in the Madras	40.00
	Government Museum-T. G. Aravamudan	
23	Catalogue of Venetian Coins in the Madras	25.00
	Government Museum -N. Sankaranarayana	
24	The Harappan and the Vedic Cultures Musing	15.00
	On Some Moot Problems- K. R. Srinivasan	
25	Bronzes of South India-P. R. Srinivasan	386.00
26	Flowering Plants of Madras City and its	308.00
	Immediate Neighbourhood-P. V. Mayuranathan	
27	Coins of India Through Ages-P. N. Mohandoss	10.00
28	மருத்துவத் தாவரங்கள் <i>– ம. ந. புஷ்பா</i>	10.00

29	Handbook of Madras Government Museum -S. T. Satyamurti	80.00
30	Notes on Hindu Images- F. H. Gravely &	12.00
	C. Sivaramamurti	
31	Handbook of Preservation of Zoological	10.00
	Specimens-P. Jawahar	
32	சித்த மருத்துவத்தின் சிறப்புகள் – <i>ம. ந. புஷ்பா</i>	25.00
33	Handbook of Museum Technique-A. Aiyappan	71.00
34	Jain Sculptures-R. Balasubramanian	20.00
35	Medals -N. Sankaranarayana	31.50
36	Tiruchi Museum Stone Sculptures	20.00
	-N. Sankaranarayana	
37	Catalogue of Prehistoric Antiquities	35.00
38	Small Handbook of the Government Museum	5.00
39	Folder	10.00
40	Catalogue of Musical Instruments	35.00
Ĺ	-P. Sambamoorthy	
41	Ancient Industries of Tamil Nadu	
42	The Adichanallur Skulls-S, Zuxkweman	25.00
43	Sri Vaishnava Brahmins-K. Rangachar	100.00
44	Early Eastern and Chalukya Sculpture	70.00
45	Select Satavahana Coins-M. Ramarao	20.00
46	Excavation at Kilpauk-M.D. Raghavan	25.00
47	Scripts in and Around India- V. Kannaiyan	50.00
48	கலைச்செல்வங்கள் — <i>இரா. நாகசாமி</i>	50.00
49	Buddhist Sculpture from the Stupa Near Goli	40.00
	Village	
50	Nayars of Malabar-F. Fawcett	35.00
51	Copper Plate Grants	40.00
52	List of Tombs-Julian James Cotton	110.00
53	Story of Buddhism - A. Aiyappan and	115.00
	P. R. Srinivasan	
L		

54	Report on the Socio Economic Conditions of the	85.00
` '	Tribes of Tamil Nadu	33.00
55	Nolamba Sculptures-C. Sivaramamurti	50.00
56	பெரியார் மாவட்டக் கோயில்கள் – வே. ஜெயராஜ்	70.00
57	Handbook on Preservation of Botanical	21.00
}	Specimens- M. N. Pushpa	
58	ஆவணங்கள் பாதுகாப்பு — வே. ஜெயராஜ்	15.00
59	Documentation on the Cannon in the	50.00
1	Government Museum, Chennai-	
į	R. Kannan, IAS., & R. Balasubramanian	
60	Guide to the Fish Gallery- S. T. Satyamurti	65.00
61	Guide to the Lizards, Crocodile, Turtles and	55.00
	Tortoises Exhibited in the Reptile Gallery- S. T.	
	Satyamurti	
62	Guide to the Galleries of Foreign Animals- S. T.	50.00
	Satyamurti	7.7.00
63	பழங்காலப் பணபாடும் பழங்குடிகளின் பணபாடும் – சி. ஜெ. ஜெயதேவ்	25.00
		200.00
64	The Foote Collections of Indian Prehistoric and	200.00
	Protohistoric Antiquities-Robert Bruce Foote	55.00
65	Puppets in the Collection of the Madras	33.00
<u> </u>	Government Museum-N. Devasahayam	285.00
66	Indian Epigraphy and South Indian Scripts	175.00
67	Centenary Souvenir, Government Museum,	175.00
	Chennai Three Main Styles of Temple Architecture	20.00
68	Recognised by Silpa Sastra	20.00
69	Beginnings of the Traditions of South Indian	20.00
עס ן	Temple Architecture	
70	An Outline of Indian Temple Architecture	20.00
71	Guide to the Sharks Exhibited in the Reptile	20.00
'1	Gallery-S. T. Satyamurti	
72	தியிங்கிலங்கள் –ஜா. ரா. அசோகன்	10.00
'-		

73	Holistic Approach to Dating in Ancient History	35.00
13	Especially Indian History-	33.00
	R. Kannan, IAS.,	
74	டுதலைகள் <i>–ஜா. ரா. அசோகன்</i>	15.00
	பாம்புகள் பற்றிய அறிவியல் செய்திகள்—	
75	<i>ஜா. ரா. அசோகன்</i>	20.00
76	Government Museum, Chennai – As a Research	35.00
	Institution-N. Devasahayam & Dr.V. Jeyaraj	
77	Proceedings of the Seminar on Conservation of	15.00
	Cultural Heritage- Dr. V. Jeyaraj	_
78	Snakes-J. R. Asokan	10.00
79	Medicinal Plants Used in the Siddha System of	
	Medicine-M. N. Pushpa	
80	An Introduction to the Chemical Conservation	5.00
	and Research Laboratory- Dr. V. Jeyaraj	
81	Guide to the Invertebrate Galleries	7.05
	- S. T. Satyamurti	
82	Handbook on Conservation in Museums	35.00
	- Dr. V . Jeyaraj	
83	Care of Museum Objects	20.00
	- N. Harinarayana & Dr. V. Jeyaraj	
84	Restored Paintings of the Madras Christian	15.00
	College- Dr. V. Jeyaraj	
85	ஈரோடு அருங்காட்சியகக் கைபேடு	15.00
	வே.ஜெயராஜ்	10.00
86	நாகப்பட்டினை அருங்காட்சியகக் கை&யைடு — <i>வே.ஜெயராஜ், க. சரவணன்.</i>	10.00
87	நாகப்பட்டினம் அருங்காட்சியகம் – ஓர்	25.00
<u> </u>	கண்ணோட்டம் –வே.ஜெயராஜ், க. சரவணன்	
88	Iconography of the Jain Images in the	200.00
	Government Museum Chennai (Madras)	
	-Dr.R. kannan, I.A.S., & K. Lakshminarayanan	

Articles Published

Dr. R. Kannan Ph.D., I.A.S., Commissioner of Museums

- 1. Astrological Astronomy as Part of the Holistic Approach to Dating Ancient History Especially Indian History Museum Journal (English) December 2000.

Thiru. K. Lakshminarayanan, Curator, Education Section

- 1. Orchids Museum Journal (English & Tamil) December 2000.
- 2. The Portrait Sculptures in Virudhunagar District- Seminar proceedings on "Our Role in the Protection of Cultural Heritage" Government Museum, Chennai March 2001.

Thiru. Dr. V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory

- 1. Fire Extinguishing and Fire Fighting Equipments Museum Journal, Volume. 4 December 2000
- 2. Museum Environment- Museum Journal, Volume.4 December 2000.
- 3. I. Repatriation Return of Museum Objects
 II. A Survey of Global Legislative Measure of Art,
 Cultural and Natural Heritage
 - III. Faking and Authentication
 - IIII. Conservation of Cultural Property Seminar proceedings on "Our Role in the Protection of Cultural Heritage", Government Museum, Chennai March 2001.

Thiru. P. Jawahar, Curator, Zoology Sections

Animal Poisoners - Museum Journal, English December 2000.

Thirumathi. R. Santhi, Curator, Numismatic Section

- 1. A Venetian Coin from Coimbatore District
- 2. " A Pallava Coin with Ship Symbol" Dinamalar (Tamil Daily), 04.11.2000.

Thirumathi. M. N. Pushpa, Curator, Botany Section

Stories of Spices - Museum Journal, English, December 2000.

Thiru. J. R. Asokan, Curator, Design and Display Section

- 1. "Educational Activities through District Museums"
- 2. "Computerised Documentation of Museum Objects". Seminar Proceedings on "Our Role in Protecting Cultural Heritage" organised by the Government Museum, Chennai

Thiru . R . Balasubramanian, Curator, Archaeology Section

Tapasvini Parvati and Sthanu Linga - Museum Journal, (English) December 2000.

Thiru. M. Mohan, Curator, Gallery of Contemporary Art

Tanjore Painting Collection in the Government Museum Journal, English - December 2000.

Thiru. K. Sekar, Curator, Children's Museum

Models of Satellite Launch Vehicles in Children's Museum - Museum Journal, (English) December 2000.

Dr. J. Raja Mohamed, Curator, Government Museum, Pudukkottai:

- "The Family of Vallal Seethakkathi" as Gleaned Through the Dutch Records" - Vallal Seethakkathi 320th Year Souvenir -December 2000.
- "Commercial and Cultural Contacts of the Arabs with Tamil Country and it's Impacts" - Tamil Social and Cultural Association Souvenir - February - 2001, Bahrain, Saudi Arabia.

Thiru. P. Rajamohan, Curator, Government Museum, Tiruchirappalli

"Cave Temples in the Rock Fort" - Dina Malar (Tamil Daily).

Thiru. P. Sam Sathiaraj, Curator, Government Museum, Madurai

"Srivilliputhur Bronzes in the Collection of Virudhunagar Museum" - proceedings of the seminar on "Our Role in Protecting Cultural Heritage", Government Museum, Chennai.

Dr. C. Maheswaran, Curator, Government Museum, Coimbatore

 "The Prehistoric Rock Art of Moongilthooru Site with in Marudhamalai" (in Tamil) - Museum Journal, December 2000

- 2. The Indigenous Knowledge System of the Paniya Tribes of the Nilgiris in the Hunting Gathering Activities Museum Journal (English) December 2000.
- 3. Contribution of Tribal Nilgris in the Preservation of Our Art and Cultural Heritage" proceedings of the seminar on "Our Role in Protecting Cultural Heritage", March 2001.
- 4. "History of Senguntha Kaikolar Clan" 'Tamil Researches', Multiphase Outlook, Bangalore, Kavya, March 2001.

Thiru. N. Sundararajan Curator, Government Museum, Cuddalore

- 1. Monkey Mandapam (Tamil) Museums Journal, December 2000.
- 2. Pamphlet on 'Cuddalore under the British Region'
- 3. "Service Rendered by Museums to the Foreign Tourists" proceeding of the seminar on "Our Role in the Protection of Cultural Heritage".

Thiru. K. Saravanan, Curator, Government Museum, Nagapattinam

- 1. "Stone Sculpture of Tamil Daity in Government Museum, Nagapatinam" Museums Journal, (Tamil) December 2000.
- "A Note on Pillaiperumal Nallur Treasure trove Finds" -Museum Journal, (English) December - 2000.

Thirumathi. J. M. Ganthimathi, Curator, Government Museum, Kanchipuram

Kaviya Nagaram Kanchipuram (Tamil) - Museum, Journal, December 2000.

Thiru. T. Packirisami, Curator, Government Museum, Sivaganga

"Principles of Conservation of Artifacts" - proceedings of the seminar on "Our Role in the Protection of Cultural Heritage" - March 2001.

Thiru. N. Soundarapandian, Curator, Government Museum Kanyakumari

"Stone Sculptures of Batreswari Amman and Srinivasar" - Museum's Journal (Tamil) December 2000.

Research Activities

- 1. Finger-printing of South Indian Bronzes in collaboration with the Indira Gandhi Center for Atomic Research Kalpakkam (Chemical Conservation and Research Laboratory and Archaeology)
- 2. Holography of Bronzes in collaboration with the Center for Laser Technology, Anna University, Chennai (Chemical Conservation and Research Laboratory and Archaeology).
- 3. Technical Study of Chola Coins undertaken by Mr. Livingston Jebaraj under the guidance of Dr.V. Jeyaraj.
- 4. Technical Study of Stone Objects, Dr. V. Jeyaraj.
- 5. Dr. J. Rajamohamed is continuing the research on the Minor Ports that Nourished in the Sea Shore Stretch of Pudukkottai District. Search for data from Madras Archival records of the English East India Company is in progress.

Reports

Dr. V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory

- "Be Prepared for a Disaster in the National Rail Museum - 18th February 2001.
- Examination of British Paper Prints of Mr. C.D.
 Gopinath" 14th March 2001.
- 3. "Preliminary Report on the Conservation of a Thanjavur Painting" 14th November 2000.
- Report on Suggested Restoration of An Oil Painting of Mr. R. Viswanathan - 30th November 2000.
- Preliminary Report on the Suggested Conservation of the Painting in the Arulmigu Devarajaswamy Temple in Kanchipuram.

Conservation Work:

The following were received from various sections of the Government Museum and conserved / restored suitably by the Chemical Conservation and Research Laboratory:

- 1) 250 copper coins and 114 silver coins (Numismatics)
- 2) 20 bronze icons (Archaeology)
- 3) 7 musical instruments and 3 leather puppets icons (Anthropology)
- 4) 4 fossilised objects from Canada (Geology)

- 5) 5 Thajavur panel paintings, 2 glass paintings, 3 oil paintings, 2 water colour paintings (Art)
- 6) 1 Oil Painting at Pudukkottai and 3 Bronzes at Madurai and Sivaganga Museums.

Conservation Services

The Chemical Conservation and Research Laboratory extended conservation Services as follows:

- Conservation of 126 copper coins for the Epigraphical Survey of India, Mysore - 18th November 2000.
- 2. Conservation of the Bronze Statue of Dr. C. Vijiaragavachariar, Salem 27th November 2000.
- 3. Restoration of 5 photographs to the Government Ophthalmic Hospital, Chennai 31st January 2001.
- 4. Preparation of an Oil Painting for the Madras Medical College, Chennai 31st January 2001.
- 5. Restoration of an Oil Painting to Mr. R. Viswanathan- 31st January 2001.
- 6. Restoration of Madras Presidency Railway Map for the Southern Railway, Chennai.

Staff Changes

Thiruvalargal A. Pugalendhi (Anthropology) and K. A. Murugavel (Botany) were appointed as Assistant Curators in the Government Museum, Chennai on 06.11.2000.

Tours Undertaken

Dr. R. Kannan, Ph. D., I.A.S., Commissioner of Museums

04-10-2000 -	Attended meeting on "Strengthening and
07-10-2000	Modernisation of Museums" in Baroda.
09-11-2000 -	Attended meeting on "Strengthening and
10-11-2000	Modernization Museums" in Hydrabad.
13-11-2000-	Attended one week training at ASCI on "Issues
17-11-2000	in Organisational Behaviour / Managing
	Changes in Organisation in Administrative
	Staff College of India, Bella Vista, Hydrabad.
21-11-2000 -	Inspected Government Museum, Trichy and
23-11-2000	Madurai
25-11-2000	Inspected Government Museum, Cuddalore
05-12-2000-	Attended the meeting on "AA", "A" category of
07-12-2000	items in State Museums in New Delhi
14-01-2001 -	To visit Government Museum, Kancheepuram
15-01-2001	and Jain temples and discussed with Curator,
	Government Museum, Vellore
23-02-2001 -	Inspected Government Museum, Vellore and
25-02-2001	inspected art caves and temple sculptures.
05-03-2001-	Inspection of Padmanabapuram Palace,
11-03-2001	Government Museum, Kanyakumari,
	Tirunelveli and attended inaugural function at
	Virudhunagar Museum

Thiru. K. Lakshminarayanan, Curator, Education Section

•				
25.2.2001-	Study tour to V	irudhu	nagar inconnecti	on with the
27.2.2001	establishment	of	Government	Museum,
	Virudhunagar.			
08.03.2001-	Attended works	conn	ected with the in	nauguration
10.3.2001	of Government	Musei	ım, Virudhunaga	ır.

Dr.V. Jeyaraj, Curator, Chemical Conservation and Research Laboratory

09.10.2000-	Attended the IIC-International Congress on
22.10.2000	Tradition and Innovation - Advances in
	Conservation in Melbourne, Australia.
14.01.2001-	Went as a visiting faculty to the University of
16.01.2001	Baroda to deliver eight lectures on conservation.
16.02.2001-	Attended the seminar on " Conservation of
19.02.2001	Cultural Property," New Delhi.
28.03.2001-	Visited to Government Museums at Sivaganga,
30.03.2001	Ramanathapuram, Madurai, Virudhunagar,
	Tirunelveli and Kanyakumari to study the
	conservation status of the museums

Thiru. P Jawahar, Curator, Zoology section

03.11.2000	Visited the Government Museum, Pudukkottai.			
14.12.2000	Inspection of new building for the Government			
	Museum, Kanchipuram.			
10.03.2001	To attend the work in connection with the inauguration of the Government Museum, Virudhunagar.			

Thiru. R.Balasubramanian, Curator, Archaeology Section

26.11.2000- 21.2.2001	Nehru Trust Fellowship Study Tour to London			
04.03.2001-	Inspected	the	Government	Museum,
05.03.2001. 08.03.2001	Udagamandalam Attended works connected with the inauguration of Government Museum, Virudhunggar.			

Thrumathi.R. Shanthi, Curator, Numismatic Section

09.03.2001 Attended the inaugural works at Virudhunagar 11.03.2001 and to inspect the Nayak Sculptures at Madurai.

Thirumathi. M.N. Pushpa, Curator, Botany Section

09.03.2001 Attended the inaugural works at Virudhunagar 11.03.2001 and to inspect the Nayak Sculptures at Madurai.

Thiru.D. Jawahar Prasad Raj, Curator, Geology Section

07.03.2001 Attended to the works related to the inauguration of the Government Museum, Virudhunagar.

Thiru.M. Mohan, Curator, Gallery of Contemporary Art

07.03.2001 Attended to the works related to the inauguration of the Government Museum, Virudhunagar.

Thiru. P. Kasilingam, Curator, Government Museum, Salem

23.11.2000 Inspected and collected the burial urn from the Headmaster, Government Higher Secondry School, Mohanur, Namakka.

15.03.2001 Inspection of treasure-trove objects at Omalur.

Thiru. P. Sam Sathiaraj, Curator, Government Museum, Madurai

26.12.2000 Inspection of treasure-trove objects (gold coins-South Indian Panam) at Rajapalayam, Virudhunagar District. 03.01.2001- Accompanied the departmental photographers to photograph the monuments in all the taluks of Virudhunagar district

Thiru. J. R. Asokan, Curator, Design and Display Section

16.02.2001- Along with his section staff to attend the design 25.02.2000 and display work of all the show cases inconnection with the establishment of the District Museum at Virudhunagar.

Thiru. T.Pakirisamy, Curator, Government Museum, Sivaganga

28.11.2000 Inspection of treasure-trove objects (19 Bronzes) at Devakkottai.

Thiru.P. Rajamohan, Curator, Government Museum, Tiruchirappalli

- 03.10.2000 Attended the meeting to "Promote Tourism in the District", organised by the Tiruchirapalli District Collector.
- 08.01.2001 Received the treasure-trove bronzes from Pattukottai.

Thiru. J. Mullaiarasu, Curator, Government Museum, Erode

27.11.2000 Inspected a stone inscription at Nathakadu.

28.11.2000 Inspection of burial urn at Bhavani Sagar.

13.03.2001 Inspection of treasure-trove objects at Gobichetty Palayam.

15.03.2001 Inspection of Stone Sculptures at Kolanalli, Karuvelampalayam.

Thiru. N.Sundararajan, Curator, Government Museum, Cuddalore

14.11.2000	Inspection	of	treasure-trove	bronzes	at
	Chidambaram Tahsildhar's office.				

- 16.11.2000 Inspection of bronze Peedam and Thiruvatchi at Cuddalore Tahsildhar's office.
- 20.11.2000 Inspection of treasure-trove coins of Raja Raja-1 period at Tittakudi.

Thiru. N.Soundrapandian, Curator, Government Museum, Kanyakumari

- 12.01.2001 Inspection of loose sculptures at Komandai Amman koil, Vadasery.
- 29.01.2001 Inspection of 10 stone sculptures found near seashore, Kanyakumari.
- 09.02.2001 Inspection of stone inscriptions at Ramanthurai, Vilavancode.

Thiru. C. Srinivasan, Curator, Government Museum, Tirunelveli

- 16.11.2000 Inspection of Mahavir sculpture at Venkalapottal, Tirunelveli taluk.
- 8.12.2000 Inspection of treasures confiscated by the police at Ellayaranenthan village, Sankarankoil.
- 13.12.2000 Inspection of British period lamp post at Nellaiappar temple.
- 16.03.2001 Inspection of confiscated treasures at Tenkasi taluk office.

Thiru. G. Karunanidhi, Curator, Government Museum, Tiruvarur

- 20.10.2000 Inspection of treasure-trove bronzes at Mannarkudi Tahsildhar's office.
- 17.11.2000 Inspection of bronzes and metalware objects at Kumbakonam Tahsildhar's office.

Thiru. K. Saravanan, Curator, Government Museum, Nagapattinam

13.12.2000 Examined the Thiruvazhanthur and Moovalur village treasure-trove objects at Mailaduthurai taluk office.

Thirumathi. S. Krishnammal, Curator, Government Museum, Ramanathapuram

- 31.10.2000 Inspection of treasure-trove objects at Thiruvadanai.
- 24.10.2000 Inspection of whal skeleton at Tondi seashore area, Kankollappattinam.
- 01.12.2000 Inspection of Dwarapalaka stone sculpture at Paramakudi.
- 27.02.2001 Inspection of confiscated bronze icons at Perunazhi Police Station, Sayalkudi taluk.

Thiru. G. Kalathi, Curator, Government Museum, Karur

Inspection of palm-leaf manuscripts at Sivapuri Easwaran temple, Sivayam village in Kulithalai taluk.

Thiru. C. Govindaraj, Curator, Government Museum, Udagamandalam

23.10.2000 Inspection of Hero-stones near Masinakudi
--

05.02.2001, Inspection of megalithic burial site at

14.03.2001 Thalaikundha.

20.3.2001 Inspection of a temple and ancient habitation site at Bannimaram

Thirumathi. J.M. Gandhimathi, Curator, Government Museum, Kanchipuram

08.12.2000 Inspection of Sri Lakshmi Narasimhan bronze idol got from Nilankarai village, Tambaram taluk.

Dr. C. Maheswaran, Curator, Government Museum, Coimbatore

- 27.10.2000 Inspection of hero-stone (tiger fighting) at Kinathukadavu, Amaneswarar temple sculpture at Devanampalayam.
- 19.11.2000 Study tour to Irula tribe hamlets at Perumpati, Kunjarpathi and Pasumani area.
- 13.01.2001 Study tour to dilapidated Siva temple at Thadagam.
- 25.03.2001 Study tour to the 'Megalithic stone circles', 'dolmen', 'burial urn' and hero stone at Kalimangalam near Alandurai.

Visitors

During the period (October 2000 to March 2001) the number of visitors, visited the museums were furnished below including school children.

Chennai	1,78,992
Pudukkottai	48,370
Salem	7,338
Maduai	34,994
Tiruchirappalli	8,608
Vellore	27,708
Erode	5,323
Udhagamandalam	2,766
Cuddalore	1,964
Tirunelveli	10,910
Kanyakumari	3,764
Krishnagiri	3,524
Palani	14,248
Tiruvarur	15,341
Nagapattinam	5,792
Kanchipuram	4,822
Ramanathapuram	6,199
Sivaganga	1,964
Karur	3,183
Virudhunagar (10 th -31 st march)	500

Some of the Press Coverage

Seminar on heritage protection

By Our Staff Reporter

CHENNAI, MARCH 21. Issues pertaining to protection of cultural heritage will be discussed at a daylong seminar to be held at the Museum theatre, Egmore, on Thursday.

Nearly 30 experts from different parts of the State are presenting papers in the seminar. Besides from the Museum department, officials from the Archaeological Survey of India, State Archaeology department and the idol wing of the CB-CID are participating in

the seminar.

Four publications including a manual for disaster management in museums, both in Tamil and English, will be released. Among the other publications are iconography of Jain images in the Chennai Government Museum and sculptures in Virudhunagar district.

The Secretary of the Tamil Development-Gulture department, Mr. S. Ramakrishnan will inaugurate the seminar and Mr. Nanjil Kumaran, Inspector General of

Police (Economic Offences), will give the valedictory address.

Mr. Ramakrishnan released two publications — iconography of Jain Images in the Government Museum, and Manual for Disaster Management in Museums — authored by Dr. K. Kannan, Commissioner, Government Museum. He also released a publication on Sculptures in Virudhunagar District by Mr. K. Lakshminarayanan.

Dr. B. Kannan said the Centre was keen on preparing a national register of antiquities. After the WTO, it had become important to register sculptures and paintings. It was now possible for "Nataraja", the symbol of the Government Museum and the National Museum, to be copyrighted and registered in some other country.

The seminar provided a platform to discuss the issues pertaining to protection of cultural property, especially in an envitonment where some agencies were unclear about their jurisdiction and initiatives.

He. Among them are Tanfore palutings on Raja Serfolf and Salm

tamanujar.

The map is not the only liem to be restored. Neatly a dozen old paintings have also got a fresh lense of

ago, in a moribund state. Today new life has been breathed into it

new light

Images of another ere brought alive.

refurbished. The Gallery, now thrown open to the public, focuseca on culturent, aspecta ;(.gl. ; conservation.y. By T. Ramakrishnan Photo: R. Raguj

The restoration because pussible, thanks to the work of five studerits from the Government
College of Aris and Credits under the
guidance of the Egniore Museum's
Chemical Conservation and Re-

64

1929 map of the erstwhile

Museum to 'fingerprint' temple icons

By S. Shanker

CHENNAI, MARCH 22. Bronze and metal icons in temples will be finger printed (authenticated) by the Government Museum, Chennai. The museum authorities have offered their expertise in the field to the Hindu Religious and Charitable Endowment Department (HR and CE).

While the proposal has been agreed to in principle by HR and CE, the two government agencies lid not touch upon Idols that are worshipped. A number of

stand the ore composition of idols, which, in turn, facilitated locating the place from where it was taken for casting the lcons. It involves precision photography of minute details of the icons and employing X-Ray fluorescence spectroscopy to study chemical compositions. Radiography assisted in recording internal design and defects. In addition holography and other chemical analysis are also done.

"The 'documentation' exof antiquities factiones " identification

By Our Special Correspondent

SALEM, MARCH 1. A 100-year-old building housing a section of the Government Museum is facing a threat of being pulled down to make way for an entrance to the surgical wards of the Government Mohan Kumaramangalam Medical College Hospital.

The surgical wing is scheduled to be inaugurated by the Chief Minister, Mr. M. Karunanidhi, on March 4, 2001. It so happened that soon after Mr. Veerapandi S.



- quipment).

THE three-day workshop to impart specialised training in preservation of animals, conducted by the State Department of Museums for college students undergoing Zoology course, at the Government Museum, Palayamkottai, created a lot of awareness among students in this totally ignored field.

rogramme was conducted

In the latest method, all parts of dead birds and animals are removed, except the skull, skin and the limb bones. Preservation is given to the interior of the skin and mounting is done to get the original structure and shape of the animal. Finally artificially painted glass eyes are fixed to the eye sockets, to give life to the preserved animals.

R. Kannan, Commissioner of Museums, who was here in

Appreciation Letters...

I am delighted to say that the book that you have so kindly sent us (Iconography of Jain Images in the Government Museum, Chennai) has at last arrived safely. Thank you for sending us so valuable publication. It will be a hugely useful addition to our departmental library and will join several other famous publications from your Museum, present here for many years and in constant use.

J.R. Knox, Keeper, British Museum, London.

Thanks to you and your dedicated staff for the excellent publication: "Iconography of Jain Images in the Government Museum, Chennai", a copy of which you have kindly sent us for the benefit of the scholars who use our library.

Heras Institute of Indian History and Culture, St.Xavier's College, Mahapalika Marg, Mumbai-400001.

I thankfully acknowledge the receipt of bulletin on 'Iconography of the Jain Images in the Government Museum, Chennai'. The present volume is so illustrative and written in such a simple language that a person like me who has no knowledge of Iconography or Jain Images has become wiser in the subject. I appreciate the work of present volume as well as other publications of your department, which I receive regularly. Probably yours is the only department, which is taking so much interest and pains to document the various aspects of Museology

for the benefit of the scholars as well as for non-professional. Please keep it up, our country requires the spirit like your department.

Shri V.N.Dhaulakhandi, Asst.Director, Birla Museum, Pilani, Rajasthan.

Many thanks for sending me a copy of your informative and picturesque book entitled 'Iconography of Jain Images in the Government Museum, Chennai'. It will be very useful to me.

Dr. Kalpana Desai, Director, Prince of Wales Museum of Western India, 159/61, Mahatma Gandi Road, Fort, Mumbai-400023.

I thankfully acknowledge the receipt of the Museums' Journal (April –September 2000) from your Museum, for our library. This Journal is very much benificial for the students and faculty members of this Institute.

Dr. I.K. Bhatnagar,
Deen of Academic Affairs & Registrar
National Museum Institute of History of Art, Conservation and
Museology (Deemed University).
C/o National Museum, Janpath, New Delhi.



A PARTICIPATIVE APPROACH TO MODERNISATION OF TWO GALLERIES AND PROVISION OF VIRTUAL MUSEUM IN THE GOVERNMENT MUSEUM, CHENNAI

By
Dr. R. Kannan, Ph. D., I.A.S.,
Commissioner of Museums,
Government Museum, Chennai-600 008.

Abstract

The Government Museum, Chennai is a multi-disciplinary museum established in 1851. This museum is famous for its multifarious collections. The bronze and the stone sculpture collections especially the Amaravati lime stone sculptures are worth mentioning. Its collection of paintings has national treasures. The display of objects is being modernised. The lighting is outdated in certain galleries. The Government of Tamil Nadu sanctioned funds to modernise the lighting in the Contemporary Art Gallery as well as the National Art Gallery of the Government Museum, Chennai.

The Contemporary Art Gallery has a collection of contemporary paintings and sculptures. It was felt necessary to improve the lighting by cutting off the excess daylight. The use of natural daylight for paintings is considered obsolete in modern museums. Artificial lighting, which focuses on the objects alone is used. This is energy intensive. Track lighting suspended from the ceiling was provided to the Contemporary Art Gallery. The Raja Ravi Varma collections were taken to the National Art Gallery, where complete darkness could be created. Here fibre

optic lighting has created a dramatic effect. It is the first of its kind in Indian Museums to our knowledge.

Visual storage using sliding aluminium screens are the state of the art in storage of paintings. This technique has been made use of for the storage of paintings in the Contemporary Art Gallery. There are 13 sliding screens in the storage, which can store about 300 paintings of the reserve collection.

Use of Holograms for the display of rare objects is a recent trend. The Government Museum, Chennai has taken up a project with the Centre for Laser Technology of the Anna University, Chennai to holograph the rare bronze icons in the Government Museum, Chennai. The holograms will replace the rare objects. They will be displayed on the second floor of the Contemporary Art Gallery building. This will solve the question of security in places other than museums.

A Virtual Museum based on three Dimensional Modelling, so that a visitor will feel as if he is actually visiting the museum, is about to be ready within a short time. This will enable any person in any part of the world to visit the Government Museum, Chennai from the comfort of his home or office.

Use of participative methods within the framework of government rules and procedures has been a key feature while planning and executing the above projects. This has made the task of learning the new technology like fibre optics and Virtual Reality easier while avoiding costly blunders.

Introduction

The Government Museum, Chennai is the oldest and largest museum in India functioning under the control of a State Government in India. It was established in 1851 with just 1100 geological collections. Today, it is a multi-disciplinary museum consisting of anthropology, archaeology, art, botany, chemical conservation, children's section, geology, numismatics and zoology display sections with supporting sections like design and display, chemical conservation and research laboratory, education, printing, photography, videography etc. Government Museum, Chennai is the central museum in the State and has world famous bronze icons and Amaravati limestone sculptures. There are about 47 galleries in this museum and several of them have been modernised. This article deals with modernisation of some of the galleries by special lighting such as fibre optic and track lighting, visual storage of the reserve painting collection, the proposed holographic gallery and Virtual Museum in the Government Museum, Chennai. A key feature is the use of participatory approaches while planning and executing the projects within the government framework of rules and procedures. This has resulted in shortening the learning process of new technologies while maximising value for money.

The Galleries under Modernisation

Lighting for a part of the National Art Gallery and the ground and first floors of the Contemporary Art Gallery of the museum is being redesigned with track lighting and fibre optic lighting respectively. A holographic gallery is going to be set up in the second floor of the Contemporary Art Gallery.

National Art Gallery - Fibre Optic Lighting

The Victoria Hall, where the Victoria Technical Institute was functioning was renamed as the National Art Gallery of the Government Museum, Chennai by the then Prime Minister of India, Pandit Jawaharlal Nehru, in 1951. Miniatures, Thanjavur panel paintings, wood carvings, ivory objects, bidriware, mica paintings, paintings on ivory and oil paintings of Raja Ravi Varma and a few bronzes are displayed here. These paintings were displayed in the Contemporary Art Gallery under spotlights. As the Raja Ravi Varma oil paintings are categorised as AA (most valuable), it was felt necessary to provide the best lighting i.e. fibre optic lighting, which will emit neither heat nor harmful rays. These rays i.e. Ultra Violet and Infra Red rays are deleterious to the longevity of the paintings. Sufficient darkness with false roofing to enable the dramatic effects of fibre optic lighting to come out has been provided. The existing lighting fittings were removed and providing an aluminium frame fitted with thermocool sheets provided false roofing. The frame was ingeniously attached to the steel reinforcement rods of the barrel vaulted roof by spot welding and affixing screwable pipes, so that it can be removed many times without wrenching the welding. This ensures that the heritage structure undisturbed. The room looks like a semi-octagonal room now. The control units of the fibre optic lighting have been kept over the existing showcases invisible to the viewer. Since the medium of the paintings is oil, the illumination level is kept around 50 lux. This room is dark and hence the fibre optic lighting highlights the display of Raja Ravi Varma paintings dramatically.

Lighting in the Contemporary Art Gallery with Dichroic Halogen Track Based Lamps:

The Contemporary Art Gallery was established in the year 1984 and is devoted to the paintings of the contemporary artists of India especially of Tamil Nadu like Devi Prasad Roy Chaudhary etc. The gallery used daylight directly entering the building from the Atrium, the ventilators and from the front to light the paintings. This design gave excess light and reflection on the paintings. Though this design is energy saving, it is not in tune with the modern display technology developed in the West, which emphasis aesthetics and conservation. A large ventilator running through out as an apron also let in direct sunlight and heat. Originally there was light up to 1000 lux or more in some parts of the gallery and illumination by the spot lamps added to this. It was decided to improve the lighting in the Contemporary Art Gallery. The glass on the ventilator running as an apron was painted black to cut off the daylight It was decided to have track lighting with dichroic halogen lamps to highlight to bring the display of paintings to modern standards. This enables to have the right level of illumination i.e. (30 -70 or 100 lux). The temperature is also appropriate to the preservation of paintings.

Storage of Paintings:

The Contemporary Art Gallery of the museum has a permanent collection of over 1200 paintings such as oil on canvas, water colour on canvas, tempera, paintings on panel, glass, ivory, mica, card board, paper, miniatures etc. The storage was not up to modern museological standards. It was decided to have a sliding screen storage to bring the storage on par with international standards. The first floor of the gallery has the room of the Curator cum storage area. The storage area has been modernised. 13 aluminium screens were fitted and the paintings

were suspended on the screens. This enables the Curator to store over 300 paintings on these screens. To my knowledge, this type of visual display may be the first of its kind in the State museums in India.

Holographic Gallery:

Holography is the process of three-dimensional recording of an object. This can be used for two purposes. A hologram can be used as a convenient medium for displaying antiquities. The valuable and rare antiquity can be stored in a safe place and their holograms can be used for public display. This technique is particularly important for outstation exhibitions and even for inhouse exhibitions, if the object is very rare. Thus the originals will not be exposed to theft and vandalism. In the case of an eventuality, when an antiquity is stolen and later retrieved, holograms can come to the aid of an art expert in establishing the identity of the object.

The Government Museum, Chennai entered into collaboration with the Centre for Laser Technology of the Anna University, Chennai to produce holograms of rare bronze icons in the Government Museum, Chennai. A sum of Rs. 7 lakhs has been paid. The holograms will be on display in the second floor of the Contemporary Art Gallery of the Government Museum, Chennai. For this also Track lighting using Dichroic Halogen lamps is planned.

Virtual Museum:

Photographs in digital mode are being taken of the 'AA' and 'A' grade objects in all the galleries. They are being also put on the Virtual Museum which has been created based on three dimensional modelling so that a person who visits will feel as if

he is really physically visiting the museum and the galleries. Multiple rotated views of the important 'AA' grade artefacts are being put on the Web. This will enable viewing from many angles. Zoom-in feature to closely study details of the artefacts has also been provided. A lot of descriptive material has also been made available on the Web, since our museum has the advantage of exhaustive documentation done in the past. Additions have been made from time to time to keep abreast of the new finds and additions. Documentation of the Cannons and Jain Images in our collection are the latest additions. This move takes us to the frontiers of the current rage in technology i.e. Information Technology.

Participatory Planning for Arriving at the Correct Design and Implementation

Use of fibre optic lighting is a first in museums in India. A meeting was held with the Curators to get suggestions. The commissioner suggested using the Internet. After roaming the net, the Web sites of foreign suppliers who had also displays of where the system was actually working were seen. Catalogues were acquired. This was furnished to the Public Works Department (PWD) engineer along with that of a multi - national company (MNC) who have a long presence in India. engineers of the MNC visited the museum and produced a design besides suggesting a suitable location for the gallery. They explained the technology and its use and effect with a Compact Disc. Since the money available was not huge, it was felt after discussions in which the MNC's engineers, the PWD engineer and Curators participated that this was a technology demonstrator and hence the location stated above was decided. At each stage there was discussion to ensure that the false roofing tallied with the requirements of the lighting like space for the generator etc. This ensured that working at cross

purposes, damage to the heritage structure and waste was avoided. The project also got completed quickly.

In this case, the use of Dichroic halogen was decided upon after the meeting of Curators, the PWD engineer and lighting engineers of two reputed lighting companies explained its advantages at a joint meeting. Dichroic halogen reflects back the heat while letting the light alone through. The estimate was initially developed based on the assumption that the brightness required was about 800 lux. This was due to the PWD reverting to their normal working pattern of developing the technical design without consultation. Luckily, since the Commissioner was closely monitoring the work and made daily gallery visits he tested the lighting level with the help of the Curators of the Chemical Conservation, Design and Display and Art sections. The Lux meter showed the high illumination level and also the rise in temperature near the paintings. The engineers of the MNC were asked to provide an alternative design, which was approved by the PWD engineer. Experiments were done with lamps of 12°, 24° and 36° angle. 24° was found most suitable for the Lux and temperature range desired for the preservation of paintings without damage. This resulted in the realisation that the tracks were sufficient to cover two floors instead one floor or slightly more originally planned to be covered. Provision of Circuit breakers for the tracks and light generators was insisted upon to remove the possibility of short circuits and fires to such priceless paintings. Participatory methods of project management have nearly doubled the value for the money spent.

The PWD Civil engineer participated along with the Curators, the Commissioner and the contractor at each stage of the Visual storage project. Where to load the weight depending on the load bearing capacity of the floor was advised by the

PWD engineer. The design was developed by the Curators based on their experience and learning in the Victoria and Albert Museum. In this case also, participatory approaches saved a lot of money and time besides resulting in the best design possible.

Conclusion:

The Government Museum, Chennai has taken up the modernisation of the galleries in the museum in a phased manner subject to the usual resource constraints. Most of the buildings are heritage buildings over a hundred years old. Modernisation of the galleries housed in these can be taken up only after the buildings are restored. Funds are expected from the Government of India for restoration of heritage buildings. If enough funds are provided, these buildings can have a new look with modern display and lighting in the galleries.

Fibre optic lighting, sliding screen storage and holography take the Government Museum, Chennai to the frontier of technology in display. The Virtual Museum is an import art aspect of this modernisation bringing the museum to any person anywhere in the world.

Use of Participatory Techniques of management has resulted in getting the maximum value for every rupee spent besides completing the project in time. There is great satisfaction in being the pioneers in bringing the very latest technology in display to India.

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(For Before-After Photos of the galleries, see colour plate)

Indian Terracotta

Thiru K. Lakshminarayanan, Curator, Education Section, Government Museum. Chennai.

The term terracotta is formed by two Italian words terra and cotta. It literally means 'baked earth' and it denotes one type of the objects referred by a common term ceramic, the others being earthernware, stoneware, faience and porcelain. Earthen ware is pottery fired at a low temperature (about 700°C) and is the most common form of ceramic ware found in all ages and in all parts of the world. The pottery fired at a higher temperature (about 1250°C) to the level of vitrifying the clay is called as stoneware. Stoneware is non-porous and durable. Stoneware with a glassy surface of their semi-transparent coloured outer layer is termed as faience. In U.K. this term is used to refer to cladding units of both glazed and unglazed types also.

The highest grade of ceramic ware is porcelain. Firing the clay (containing feldspar, Kaolin and flint) makes it at a very high temperature (about 1350°C). China, is the birthplace of porcelain and it developed a formula of producing porcelain as early as c. 7th century AD. The true Chinese porcelain has a translucent appearance and produces a clear tone when struck. In colour ranges from white to gray. The baked clay figures which raises the status of their makers from that of an artisan to artist is especially known as terracotta. Even though the term terracotta is applicable to earthenware and stoneware potteries, the archaeologists and art-historians prefer this term to use for burnt clay figures and figurines.

Manufacturing Methods

From the time of Neolithic age to the present day, terracotta objects are being made continuously without any interruption. Clay being so pliable to use offered a handy and convenient medium to artisans and artists for making figures of any desired shape. Terracotta figures have been made either by modelling or by moulding. Modelling may be done either by hand or by using scrappers. In modelling the artists creates the figure by removing the unwanted portions and adding the needed additions. Moulding could be either single mould or double mould. Double moulding method is adopted to produce terracotta sculptures in round. In this method, the front and back halves of the sculpture are moulded separately and fixed together. Dr. Paramesvarilal Gupta classifies Indian terracotta as:

- 1. Archaic and primitive figures
- 2. Modeled figures with moulded faces
- 3. Moulded plaques and bas-reliefs
- 4. Life-size images.

 We may add to this list one more the architectural pieces.

Dating

Over the centuries, the manufacturingtechnology of terracotta figures changed very little. This factor, in the absence of relevant records intensifies the problems of their identification and dating. So their association with dates them dated objects such as coins, inscriptions or through being found in a deposit which can be dated by one of the archaeological methods. Another important means is finding of the terracotta figure in a context that can be assigned to a particular historical event. In short, the most reliable sources of its identification could be found in the history of the find spot, its period of occupation and

the correlation to stylistic and iconographic details of works in other media like stone and metal.

Prehistoric terracotta

The history of Indian terracotta art begins in the Neolithic period. Burial urns and sarcophagi of the succeeding Iron and Megalithic ages are two important ceramic items of prehistoric archaeology. Megalithic sarcophagi from the South Indian prehistoric sites are very fine specimens for the prehistoric primitive terracotta art. Oblong terracotta sarcophagi both mounted with lid and unmounted have been found out from several sites in North and South India from Maski in the North to Pudukkottai in the South. Some of the sarcophagi have been designed as theriomorphic. At Chandravalli of Mysore region, debris of an elephant legged sarcophagus was found in the near proximity of Satavahana coins. A sarcophagus from Pallavaram as reported by Prof. T. Balakrishna Nayar, resembles an elephant. An interesting specimen of theriomorphic terracotta sarcophagus from Markapuram, Cuddappah district, Andhra Pradesh (now in the Government Museum, Chennai) has a modeled head of a ram.

Indus Valley Terracotta

The Indus Valley Civilisation sites have yielded a great number of beautiful terracotta figures, which had been produced both as religious objects and play toys. The design of these terracotta figures ranges from simple to complex and from representational to abstract. There are many good specimens of terracotta figures gathered from Indus sites in the National Museum, New Delhi and in the Karachi Museum in Pakistan. Of them four terracotta figures are important for our purpose. The female figures with elaborate hair-dress collected from the

Indus sites are considered either as Mother goddess or as the symbols of fertility. One such figure in the National Museum, Karachi is remarkable for its features. This highly stylised figure is characterised by a tall head-dress, a rich series of necklaces and a girdle. All these rich ornaments are designed in simple pattern by using appliqué decoration technique. This grey figure might be made for household worship and it has traces of polychromy.

Miniature draw cart with squatted female figure and a naked standing human figure are other two important terracotta works now housed in the National Museum, Karachi. Both these figures come from Mohenjodaro and datable to third millenium B.C. Draw cart with a squatted female figure might have been made either as a votive object or as a toy. It consists of the body of the cart, two humped bulls and two wheels of the cart. A nude female figure is depicted as squatting on the front edge of the cart. This ensemble for its composition sake is comparable with the famous Daimabad chariot bronze. This bronze depicts the theme of a charioteer standing with a dog, on the long pole and pulling beast, a humped bull.

The other red terracotta figurine of a nude standing human being is very special for the treatment of its pronounced bosom and penis. On this score, Prof. Mario Bussagli of Rome University and C. Sivaramamurti identify this figure as an androgynous being connected with some orginastic rites. But it is also possible to interpret this figure as that of a nude ascetic similar to a Jain Thirthankara.

Mauryan Terracotta

The Patna Museum has a fabulous collection of Mauryan terracotta objects, collected from the excavations conducted at Bulandibagh (1912-16) and Kumrahar (1922-28) in U.P. The naturalistic pose and vitality of these terracotta objects rank

them among the finest of ancient Indian Terracotta objects. The Chennai Government Museum, Chennai also has a small collection of Mauryan terracotta. In spite of their crudeness in certain points, most of these terracottas display a high level of artistic achievement.

Sunga Terracotta

Many Sunga period terracotta objects have been collected in North India. They have been identified on the basis of their stylistic analogue to more securely established Sunga stone sculptures. The female figures terracotta from Tamluk, West Bengal, now in the Ashmolean Museum, Oxford, U.K. is a superb specimen for Sunga terracotta art. The figure is elaborately ornamented and delicately executed. In dress and decoration this figure is very similar to those of the sculptures found at Bhoja and other Sunga sites. The earrings and the headdress of this figure are quite interesting. The earrings are in large saucer like forms with hanging bead strings. The elaborate headdress is also amply beaded and jeweled. The headdress is embellished with a series of five weapons like ornaments stuck into the cloth like hatpins. This particular ornamentation is worth to compare with the Aimpadai Thali (ஐம்படைத்தாலிchain of five weapons) spoken in the ancient Tamil literature.

Terracotta from Gujarat Region (C.300 B.C.-400A.D.)

Excavations conducted at sites like Akota, Amreli, Devnimori, Nagara, Somnath, Timbarva and Junagadh in Gujarat region yielded a good number of terracotta figures covering a period of about seven hundred years from C. 3rd century B.C. to C. 4th century A.D. While the Deccan was under the rule of Satavahana kings, Gujarat was under the sway of Kshatrapa dynasty. Kshatrapas were a branch of Sakas. During the period from pre-Kshatrapas to post-Kshatrapas, the

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terracotta art flourished well in this region. The pre-Kshatrapa period terracotta objects from Central and South Gujarat depict mostly the figure of the Mother goddess. They had been designed with pinched face, short upper arms and breast with diffle type lower parts. Some of them have rounded lower portion without legs. All of them are hand modeled with flat back. They are fired both black and red. Nagara, Somnath and Timbarva are some of the important sites from where we got a number of these figures.

The modelling of Kshatrapa period figures is quite simple without many decorations. No applied or stamped details were found. They were made either by simple moulding with flat back or by moulding in pieces and then joined together as in the case of Devnomori Buddha figures. Devnomori was a centre art wherein developed a huge Buddhist of Buddhist establishment with two viharas, a big sarira stupa four uddesra stupa and an apsidal temple. All these structures were encircled by a protective wall. The settlements here started by about the early fourth century A.D. and prospered for about three hundred years. Images of Buddha are the main figured composition of this complex. They were prepared by piece moulding technique. Various parts of the body were modeled separately and then assembled together. The suave countenance of the Buddha figures of this place display a close affinity to Kushana Art School.

New art forms, focussing on the production of religious icons emerged during Kshatrapa period. Icons of Hindu, Jain and Buddhist with iconic details were produced. The figure of mother and child, Yakshas, deities like Siva and Naigamesha, Buddha and Bodhisatvas were produced for the first time in Gujarat during this period. Another popular theme of this period was to Lajja gowri or heraldic woman related to fertility cult.

They had been produced as small plaques from moulds for household shrines.

Gupta Terracotta

Under Guptas' rule, interest in brick and terracotta works had been revived. A number of monuments had been built with brick works and terracotta decoration. The brick temples at Bhitragoan and Ahichchatra in U.P. are famous for their excellent terracotta panels and figures. The early examples for bas-relief terracotta panels are from Harvan in Kashmir, Suralgarh, Rangmahal, Barapat and Hanumangarh. This kind of terracotta art spread from the north - west and west towards east and reached up to Bengal and beyond. The Gupta terracotta objects have a peculiar ochre deep biscuit colour of their own and they can be generally recognised by their colour and characteristic style.

Among the terracotta objects in the National Museum, New Delhi two panels and two life-size figures of Gupta period are quite remarkable for their theme and execution. One panel depicts the amours of Vikrama and Urvasi. The latter is shown as centauress. A hovering Gandharva is carved on the right corner of the panel, above the shoulder of the riding Vikrama. The Gandharva carrys a garland. The other panel contains a main figure of an ascetic god with four hands surrounded by a gana and a lady worshipper with folded hands. The seated figure of the ascetic god carrys a rosary and a vessel in his upper right and left hands respectively Banyan sapling sprouts out from the vessel. The fore-arm portion of the lower right hand is broken and missing. The lower left hand is kept on the left thigh and the portion below the thigh is broken. Prof. Mario Bussagli and C. Sivaramamurti see this ascetic god as Dakshinamurti and visualise a link between the Banyan tree under which Siva as Dakshinamurti sits in South Indian depiction of the theme and

the banyan sapling shown in this terracotta panel. To put the sprouting sapling in place where scorching fire is usually shown is quite contrast and it needs a sound convincing exposition.

The two life-size figures from the Siva temple in Ahichchatra, U.P. are the most impressive works of Gupta period. They depict the river goddesses Ganga and Yamuna standing on their respective vahanas the makara and the tortoise and holding a water vessel. Each one of them is attended by a dwarfish lady carrying a royal umbrella aloft. The heavy drapery folds and tight bodies and facial features of these figures reveal their folk origin in spite of their classical execution.

Architectural Panels and Plaques

Terracotta bas-reliefs were introduced as architectural panels in the beginning of Gupta period. Kings in Gupta period built brick temples and ornamented them with terracotta panels and plaques. As early as 636 A.D. a Chinese traveler in India reported seeing a brick temple over 65 meters high with the embellishment of terracotta plaque. Such early examples are known from Harvan in Kashmir, and Surahgarh, Rangmahal, Barapat and Hanumangarh in Bikanir. This style spread gradually from the north-west and west towards east and in the post-Gupta period it spread to Bengal and Assam.

In Bengal

The terracotta art that came to Bengal in the post-Gupta period reached its zenith under the rule of Malla kings in their Mallabhumi (the land of Mallas), during 16th and 17th centuryies A.D. The Keshta-Raya temple is Bishnupur of Bankura district is the finest among the temples of its region. It is famous for its exquisite terracotta art. The epigraphical records state that the temple was built in 1655 A.D. by the Malla ruler Raghunatha

Singha. The temple is formed of two hut-type structures, each having two sloping roofs, joined together to form a single temple set up with a char-chala tower on the top. This temple is extensively decorated with terracotta ornamentation upon the façade of the porch and all three sides. The decorations on the walls are arranged in panels made by vertical, horizontal and curved bands filled with plaques put up in rows. The plaques depicts subjects of very wide variety of scenes from the epics Ramayana and Mahabharatha and Krishna leela. Vastrahasana and Nauka vilasa episodes of Krishnaleela were very vividly executed in two panels in this temple.

Tamil Nadu Terracotta

We have a number of Terracotta figures came from various archaeological sites of Tamil Nadu. They have been collected both as surface collection and excavation finds. Though they are few in numbers, they represent almost allimportant periods of Tamil Nadu art history from megalithic period to modern times. A terracotta sculpture with a figure of bull with large horns has been found out at Paiyampalli prehistoric site in North Arcot district. From The Nilgiris megalithic burials, a good number of pottery lids with figures of The prevalence of birds and animals have been collected. terracotta industry in Tamil Nadu in Sangam Age (which merges with the megalithic period) is well attested in the literatures of In these literary works terracotta is referred as that period. Manneedu (ယာဏ်ထော်ပြာ = made of earth) and the terracotta makers as Manneettalar (பண்ணீட்டாளர்). The place where terracotta objects were produced was called, in those Manneettakam (மண்ணிட்டகம்). The moulds used for mass production was known as Muzhuvu (ഗ്രഥ്രഖ്വ).

The Archaeology Department of Madras University has excavated interesting terracotta figures datable to early years of Christian era in the excavations if conducted at Kanchipuram. **Excavations** conducted Pallavamedu were at Kachchapesvarar temple, Sankara Madam and near Kamatchi Amman temple where from many terracotta male figures had been unearthed. These figures have very nicely designed headdress, which make us to identify them as figures of chieftains. Besides these figures, beads, earrings and play objects in terracotta medium also were gathered from these sites. The male and female terracotta figures from the famous Arikkamedu site in Pondicherry also belong to the period of about 2nd century A.D.

The State Department of Archaeology also have collected a number of terracotta figures as surface collections and excavations at several places in Dharmapuri, Coimbatore, Ramnad and Thanjavur regions. Some of the terracotta figures picked up from Dharmapuri region exhibit features worth to compare with those of Kushan style. Terracotta works assignable to Pallava period have been obtained from Poluvampatti near Coimbatore.

Cult Image

Abdul Majeed had reported five seated terracotta female figures gathered from three different places. Three of them came from Manmangalam, a small village about 8KM away from Karur on the Karur-Pugalur high road. One came from Sayavanan near the famous Chola port Kaveripumpattinam and the other one from Thirukkampuliyur, 15KM away from Karur. Except one lady figure from the Manmangalam group, all the remaining figures are depicted in seated pose with a child. Abdul Majeed dates the Manmangalam terracottas to the period 11-13th century A.D. and the date of other figures from

Sayavanam and Thirukkampuliyur to 10-11th century A.D. Similar terracotta figures of female with a child have been collected from Dharmapuri region also. Most probably they might be cult images worshipped for the protection and welfare of children and used in the household worship. There might be some connection either with mother goddess worship or with yakshi cult of Jain origin.

Aiyanar Horses

During the journey in countryside in Tamil Nadu, travelers may often encounter with richly painted, huge seated figure holding unsheathed sword with the tip facing the sky. This figure represents the village guardian deity and is called by various names such as Aiyappan, Aiyanarappan, Muniyappan and Munisvaran. Sometimes we may see two or more than two such figures depicted in a row. In such cases these figures are referred as those of Munis. In the case of Aiyappan, he is depicted as a single main deity. In olden days the figures of Aiyanar and Munis were made in stucco but now they are built with brick and cement and painted with enamel paints.

The vahanas of Aiyanar, dynamic horses in various sizes from the smaller to larger than life-size are made in rows either in front of the Aiyanar or by his sides. These Aiyanar horse figures made in terracotta medium display eloquently the mores of folk art as it developed in Tamil Nadu. Along with these horse figures, votive figures of bulls and other animals and human forms are also made in terracotta medium and placed in the temple.

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INDIGO EXPORT FROM PUDUKKOTTAI TO ENGLAND IN 19TH CENTURY

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Indigo is the vegetable blue dye used for dyeing textiles and was a much wanted commodity in Europe from 17th Century AD. Indigo dye was manufactured by fermenting the green leaves of the plant, Indigofera tintoria (Neeli or Auri in Tamil). The leaves are soaked in water in big vats and then beaten well. The extracts of the leaves become stronger after beating. The water from the vats drained and boiled in copper vessels to get indigo dye in the form of dry mass and later cut into cakes. This cake was used as blue dye for dyeing cotton, silk and wool.

The European trading companies in India procured indigo for consumption in their home market. The Dutch East India Company had a network to procure indigo in their settlements in the East Coast and exported to Holland. Hollanders (Dutch) were expert dyers in Indigo. The textile manufacturers of England sent their white cloth to be dyed in Holland and hence the blue cloth came to be called as Holland. The art of indigo dyeing was learnt in England during the first quarter of the 17th Century AD. The English East India Company commenced procuring indigo for the textile manufacture at Manchester. The company's officers were also freely permitted to trade in this commodity. India became foremost among the indigo producing countries and the cultivation of indigo expanded rapidly along the East Coast and also in inland 2. It was generally cultivated as a dry crop and also sown mixed with millet crops. The cutting of leaves obtained in October and January. A third cutting was also obtained in fertile

areas. The cultivation widened in Tamilnadu on the strength of demand in export market. Pudukkottai also shared a place in the export map of indigo to England in the 19th Century AD.

Sir William Black Burn, the British resident of Thanjavur was appointed as the Political Officer (as a representative of the British Government) to look into the affairs of Pudukkottai State in the year 1807. He introduced many reforms and developmental schemes in Pudukkottai. Taking advantage of the favourable condition in the State, he proposed to start an industry for the manufacture of indigo. After a detailed survey, Karambakudi was selected for the location of the farm and factory and a factory was established here in the year 1814, under the joint partnership of the Pudukkottai Raja and John Black Burn, brother of William Black Burn. Indigo crop cultivation was encouraged in the State and money was advanced to the ryots. Indigo crop was cultivated in about 400 veli of lands. About 1350 Kalam seeds were distributed to the ryots in every season ³.

Indigo cultivation was undertaken in the following villages and hamlets around them: Kulandhaivinayakarkottai, Keelathur, Vadakadu, Mangadu, Thirukkattalai, Vennavalgudi, Varappur, Mankottai, Andakulam, Sothupalai, Nemaveli, Killukkottai, Uchani, Mullur, Killukkottai, Thennangudi, Minnathur, Keezhaiyur, Oduvampatti, Mangathathevanpatti, Puliyur, Lakshmanapatti, Sengalur, Odukkur, Sathiamangalam, Keelakurichi, Karambakudi, Pilaviduthi and Pallavarayanpathai

The cuttings were collected and brought to Karambakudi and processed. The indigo dye so manufactured was packed in chests and transported to Sethubavachathiram (The Maratha Port, Saluvanayakkanpattinam) and ferried to Tharangambadi to be shipped to Madras for export to England. It is interesting to

note that the shipping (Cargo) changes is given as " கேழவு" (Kezhavu) a term which the maritime scholars are searching much ⁵

The indigo industry brought prosperity to Karambakudi area. A statistics on Karambakudi in 1813 mention that there were 103 houses of 24 different description and the population was about 1000. But, in 1822 the houses went up to 615 and the inhabitants increased to 2906. About 30 – 40 persons were employed regularly in the indigo works and during seasons about 200-300 persons. The ryots were also happy. About 12000 pounds (one pound = about 500 gms) of leaves were produced in an acre which could yield 2 mounds (about 50 pounds) of dye worth of Rs.90/-.

East India Company sale records in London give details about the sale of Indigo from Pudukkottai. A record of the company for the year 1824 show that 10604 pounds of a consignment of Karambakudi indigo sold for 3812 British pounds, the value of a pound being Rs.10/- (Indian Rupee) so a pound of indigo had been sold for Rs.3/- excluding cargo (shipping) charges, brokerage, insurance and company commission. The net amount was equally shared between the Raja and John Black Burn⁶.

The monthly salary of the Chief Accountant of the factory was fifteen Varahan (gold panam) (about Rs.21/-) and that of the labourers ranged from four to six Varahans. It is interesting to note that the factory expenses included the regular pooja expenses to the Anantheesvaramudaya Mohini Temple in Karambakudi ⁷.

In the year 1823, John Black Burn left India for England and the indigo farm and factory at Karambakudi were handed over the Pudukkottai Raja. It was agreed that the indigo manufactured at the works to be shipped to London for being sold under the supervision of John Black Burn and the net amount to be shared equally as before⁸. Accordingly the indigo manufactured was shipped to London regularly and it brought good profit to the partners.

The indigo factories in Pudukkottai were running on sound lines till 1840. Because of the fluctuation in London market according to the demand and supply and also the competition from synthetic dyes, the profit went down. Further in Pudukkottai the ryots complained bitterly of being compelled to cultivate indigo which was not remunerative to them. Hence, the factories were facing crisis and working in loss by the year 1841. Hence, indigo manufacture was given up and the Raja decided to close the factories by the end of the year. Thus an export oriented industry, which brought considerable profit to the State came to an end in the year 1841.

Indigo production had been stopped about 150 years ago, but still Karambakudi has the vestiges of this old industry. A curious visitor can see the ruined vats and wells in the area where the factory was functioning, now called Bungalow Thope (Saya thoppu) 11.

Though the indigo industry in Pudukkottai was short lived one, it brought Pudukkottai into export market directly and has also contributed for the development of the zero industry zone like Karambakudi.

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ASTA MAHA PRATIHARYA

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The Ancient Indian artists have depicted many events from the life of the Buddha in sculptures and monuments over the span of thousand years from the Sunga to the Pala dynasties. These episodes of the Buddha's life not only continued to fascinate the artists but also retained their popularity with the devotees as well as the masses. The major eight episodes of the Buddha's life became crystallized over the centuries are otherwise known as the Asta Maha Pratiharyas. These have been frequently represented in stelaes and roundels. They are -The Birth, Enlightenment, First sermon, Maha parinirvana, Miracle at Sravasti, descent from the Tushita Heaven, Subduing Nalagiri, and monkey offering the honey bowl to the Buddha. These eight events are main in the Buddha's life. The dictionary meaning of "Pratiharya" is "Miracle" in the sense of a magician's tricks and in that sense the miracle at Sravasti is appropriately a miracle. In this article it is proposed to take up the Birth of the Buddha first. Dr.Ratan Parimoo says,"the birth by itself is not a miracle, nevertheless, once the Buddha was deified ceased to be a historical person, all these incidents took on the significance of miracle or miraculous occurrences were interwoven around them". Foucher was probably one of the earliest scholars to trace some of the textual sources and sculptural representations of these miracles while identifying and interpreting in particular the miracle Sravasti². Most of at these episodes independently depicted in the early stupas at Bharhut; Sanchi dating from before the Christian era and also at Gandhara and

Amaravati in the Krishna Valley sites subsequently. This study intends to show in brief the development of narrative compositions as predominant feature.

Birth:

The Buddha's birth as Siddhartha is depicted as a dream of Queen Mayadevi, at Bharhut in a medallion, in which she is reclining on a couch while a large sized elephant is hovering above. The scene is inscribed on the stone above as "bhagvata ukranthi". (Skt.Garbhavakranti). It is significant to note that in written descriptions the Buddha as the elephant enters his mother's womb whereas in the relief sculpture here shown the sleeping woman and the elephant hovering above her, stand for the dream of the conception. Since the actual birth is not depicted here the label implies "descent", and therefore this relief may well stand for both conception and Birth. The labels, which invariably accompany the reliefs at Bharhut, have been an important phenomenon that makes it easy for identification of them probably even before the Jataka or other texts became known.

The elephant as the object of dream together with the reclining female figure, is again depicted in Amaravathi with a sole difference that the elephant is covered in outline. The sleeping woman's posture is much more conspicuous with several bhangas in her body, one of the main features of Amaravati relief.

Strangely railings and copyrights beginning with the dream scene absent in the famous British Museum Amaravati relief, which contains four continuous moments of Birth story, in four compartments, ingeniously divide the elephant. Only the reclining female figure is shown.

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ICONOGRAPHY OF THE TREASURE-TROVE BRONZES FROM ANAIMALAI NEAR MADURAI.

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Introduction

Thirteen small beautiful bronzes along with some pooja articles were acquired as treasure trove finds from the foohills of Anaimalai near Madurai in 1992



and added to the bronze collection of the Madurai Museum.

Anaimalai is a beautiful hillock, which resembles a resting elephant, situated about 8 kilometres from Madurai on Madurai - Trichy Road. These treasure-trove bronzes belong to about 17th to 18th centuries A.D. All the thirteen bronzes range from 5cm to 13cm in height and to the Vaishnavite sect. Most of them depict the *Avataras* of Vishnu.

Historical Background of Anaimalai Area

Anaimalai and its surroundings are important both historically and in religious aspects. Anaimalai is one of the major hill abodes of the Jains in the Pandya country. Sangam literatures speak about this. The Jain beds and the Brahmi inscriptions found in the natural caverns of the hillock prove

beyond doubt that there was a *Palli* (Jain School) in this hillock during the first Century A.D. Thirugnana Sambandar (7th Century A.D.) also in his works mentions about the Jains in Anaimalai. The *Vatelluthu* inscriptions found below the Jain sculptures also mention the presence of Jain School here.

Apart from this, Vaishnavism flourished around this area. On the western side of this hillock there is a rock-cut cave shrine called Narasingam Temple in which a huge Yoga Narasimha sculpture is found. This was carved during the Pandya King Parantaka Nedunchadaiyan in 770 A.D. About 5Km from Anaimalai there is a beautiful temple dedicated to Lord Kalameghapperumal at Thirumohur. Thirumohur is said to be one of the 108 Vaishnava Sthalas. Nammalvar, Tirumangai Alvar and Manavalamamuni have sung in praise of the deity here. This temple is said to be built in the middle of the 16th Century A.D.

Description of the Bronzes

The treasure-trove collection of bronzes from Anaimalai includes a Bhuvaraha, 2 Narasimha images, Krishna with consorts, Venugopala with consorts, 3 Navanitakrishna images and a Dhanvantari image. All these bronzes are small ones, perhaps they might have been worshipped in houses centuries back.

Iconography of the Bronzes

Bhuvaraha

The bronze is 6 cm in height. Varaha is the third incarnation of Vishnu. In this incarnation Vishnu is shown with boar face and a human body. Vishnu took the form of a boar to

lift the earth goddess when the entire universe had became one ocean.

In this bronze Varaha is seated in Sukhasana over the Padmasana. His right leg rests upon the hood of the mythical serpent Adisesha. On his folded left leg Bhudevi is sitting and holding the nilotpala flower. The front right hand of Varaha is in Abhaya mudra whereas his front left is thrown round the waist of Bhudevi. The right hand of Bhudevi is thrown round the God. Since Varaha is represented with Bhudevi this figure is aptly called as the Bhuvaraha. He wears a royal headdress, the Krita. The back right hand holds the Chakra and the back left holds the Sankha and Katarimukha pose. The Yajnopavita (Sacred thread) the Udarabandha and the necklaces are seen very clearly. The lower garments hang up to the ankle level.

Narasimha No.1

This bronze is 12 cm in height. Narasimha is the fourth incarnation of Vishnu. In this form Vishnu is represented with lion face and human body. It is said that Vishnu took the manlion incarnation to kill the demon-king Hiranyakasipu because he had condemned his son Prahlada to death for worshipping Vishnu. The Narasimha bronze in this collection is represented in Yoga pose and we can call this as Yoga Narasimha. He is seated on Padmasana in the utkutika posture. The forelegs are maintained in the required position by the Yoga-patta belt going round the figure. His back right hand is raised in the attitude of holding the Chakra but the Chakra is broken while his back left hand holds the sankha in katarimukha pose. The front two hands are stretched forward and supported to the knees in yoga posture. He wears a Karandamakuta. Yajnopavita is absent. But instead of this channavira is seen across the chest suggestive

of a warrior. *Udarabandha* is very clearly seen. On both sides of the *bhadrapitha* two worshippers are seen seated in *anjali* pose.

Narasimha No.2

This bronze is 6 cm in height. This is also represented in yoga posture. All the features are similar to that of the previous Yoga Narasimha bronze except few differences. First, the size is so smaller than the previous one and difference is with reference to the attributes. Unlike the previous one, this smaller Yoga Narasimha holds Chakra on all the four hands in Katarimukha pose. This is a very peculiar character as far as this icon is concerned.

Krishna with Consorts

Krishna

This bronze is 13 cm in height. Krishna is the eighth incarnation of Vishnu and this is the most popular of all the avatars. Krishna is standing in tribhanga pose on the padmasana. He is represented with only one pair of hands. The right one is in the Kataka pose, as if intended to receive the shepherd's stick, while the left one is in the attitude of resting on the shoulders of Sathyabhama. Facial features are sharp. The hair in the head is tied up in an ornamental knot and it is secured by wreaths of flowers. The Patrakundala adorns the ear lobes. The Yajnopavita, Udarabandha and Skandhamala are very prominently seen in this bronze. The draperies are also heavy.

Rukmini

This bronze is 10 cm in height. She is standing on the *Padmasana* in *tribhanga* pose. Like Sridevi her right hand is in *lolahasta* and her left is holding the padma. Her hair is tied up in a fashionable knot. Her ears adorned with *patrakundalas*. She is wearing a breastband. The draperies are heavy hanging from waist upto ankle level. The bodily features are very slim.

Sathyabhama

This bronze is 10 cm in height. She is standing on *Padmasana* in *tribhanga* pose. She is representing Bhudevi in all aspects. She is holding the *nilotpala* flower on her right hand and her left in *lolahasta*. She does not wear the breast band. The draperies are from the waist up to the ankle level. Her headdress is as same as that of Rukmini. Her ear lobes are adorned with *makarakundalas*.

Venugopala with Consorts

Venugopala

This bronze is 13 cm in height. Krishna when represented as a young boy playing flute he is called as the Venugopala. In this bronze Venugopala is standing erect on padmasana. His left leg rests on the Pita while his right leg bent at the knee goes across the left leg so as to touch the pita with the toes. Both his front hands are kept in the attitude of playing the flute. In the back left hand Sankha is carried in katarimukha style while the back right is in the pose of holding the chakra but

the chakra is broken and lost. The head of Venugopala is as same as that of the previous Krishna bronze but the flowers are prominently seen here. The ear lobes have patrakundalas. The draperies are heavy hanging from the waist up to the ankle level.

Rukmini No.2

This bronze is 12 cm in height. All the features are similar to that of the previous Rukmini bronze. But only very few differences are noticed. The main differences are the chubby face, and fat body. The headdress is *karandamakuta* type and not like the knot noticed in the previous Rukmini bronze.

Sathyabhama No.2

This bronze is 12 cm in height. All the features are similar to that of the previous Sathyabhama bronze except the chubby face and fat body contour. The buxom breasts are very prominent. The headdress is *karandamakuta* type and not like the knot, which is noticed in the previous Sathyabhama bronze.

Navanitakrishna Bronzes

Navanitakrishna No.1

In this bronze Krishna is dancing with his left leg resting on the padma pita and his right leg is lifted. His right hand is in abhaya pose while his left hand is stretched out fully. This figure is chubby and fat. His head has curly hair. The ear lobes have patrakundalas. A prominent chhannavira is seen across the chest.

Navanitakrishna No.2

This bronze is 10 cm in height. The attitude of this bronze is similar to the previous one. He is holding a ball of butter in his right hand. His hair is tied up into a knot whereas there is no knot in the previous bronze. This *nritamurti* is somewhat slimmer than the previous one.

Navanitakrishna No.3

This bronze is 10 cm in height. All the features are similar to that of the Navanitakrishna bronze No.2. But this one is slightly chubbier than the previous one. But the facial features are sharp.

Dhanvantiri

This bronze is 5 cm in height. *Dhanvantiri* is the tutelary deity of Hindu medicine. He is represented as sitting on the rectangular *bhadrasana*. He is having only one pair of hands. The right hand holds a vessel of medicine while the left holds a *Kamandalu* (spouted vessel) with which the medicine is to be poured out. His headgear is similar to that of the Buddha. On the backside of this image a metal disc is shown in which a mark of *chakra* and *sankha* are engraved on either sides.

Conclusion

On the basis of style, decorative details and physionomical features we can roughly assign all the thirteen bronzes to about 17th to 18th centuries A.D. Even though they are smaller in size, the decorative details are very clear. Some of them are very slim and beautiful. The bronzes like the smaller Narasimha and the Bhuvaraha are exceptionally beautiful. All

these bronzes reflect the Vaishnavite tradition in this area especially the neighbourhood of Madurai, which flourished in Vaishnavism during the rule of the Nayaks. These bronzes add feathers to the cap of the Government Museum, Madurai.

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ORIGIN OF THE DRAVIDIAN ORDER PILLAR

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Dravidian temple pillars can be divided in to two groups namely, pillars of mandapas and pilasters of garbagriha walls. While the pillars of Mandapas are used to bear the load over them, the pilasters are shown in the walls of garbagriha only for ornamental purpose. Though the shape of pilasters of garbagriha wall is used in the mandapas, the mandapa style pillars were never used in the walls of garbagriha.

The earliest mandapa pillars are called Mahendran style pillars. It is so named because, wherever he scooped mandapas in the rocks he used a typical type of pillars. These pillars were widely used in the Pandiyan country. This type of pillar has two squares, one at the bottom and the other at the top with an octagon in the middle and a Tharanga botika at the top of the pillar.

Pillars with alternative square and octagonal sections are seen in the railings of Sanchi Stupa. The railing is shown as the replica of wooden railing made with horizontal and vertical bars. Hence the Mahendran style pillar could be the stone replica of the wooden pillar, which were still in vogue in his period.

Though in the caves, these pillars did not bear any weight they were simply shown as the replica of their wooden counter parts. But in the subsequent structural temples these pillars were used to bear the load over them. Later this simple Mahendran style pillars witnessed a magnificent development as

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horse pillars, yali pillars and so on in the Vijayanagar and Nayak periods.

On the other hand the pilasters of garbagriha wall did not under go any significant changes. Right from its first appearance in the Mamallapuram Rathas to the present day the basic shape of the pillar remains same. Unlike the Mahendran style pillars originated from the railings of Mauryan period the origin of the pilasters of garbagriha wall cannot be traced from the Buddhist architecture. But it appears to have had its roots from the wall decorations of that period.

The pilasters have the kal, thamam, idaikkattu, kalasam, thadi, kudam, palagai, kandam and bodhigai respectively from the bottom. Since this order is exclusively found in the Dravidian Temple Architecture these are called pillars of Dravidian Order.

In this order the palagai is missing in some of the early rock cut caves like Thiruchi lower rock cut cave. Only the member bodhigai of this order had a series of changes, which even mark the identity of particular style of the dynasty.

While other tangible evidences like Buddhist architecture fail to provide any clue to trace the origin of Dravidian order pillars the Sangam Literatures throw some light in this regard. Sangam Literatures like Agananuru and Natrinai refer to 'Suvar Pavais' made in the walls of houses, temples etc. These pavais were either made of paintings or made in stucco decorated with leaves and pearls. At times these Pavais were also worshipped like other painted gods of the temple walls. Mostly these pavais were the female figurines.

In the course of time while the paintings of Gods were sculptured in three dimensions the 'Suvar Pavais' were made as pilasters in the temple walls. In other words a sculpture was transformed as architecture. In this transformation the contour of the body of a lady is registered as various members of the pilaster. The contour observed while a lady standing sidewise is maintained in the shape of Dravidian order pillars. It is equally interesting to note that even the measurements of each part of a lady figure correspond to the counterpart of the pillar. The entire shaping of the pillar has been arrived by transforming the head as bhodika, the neck as virakanda, breast as kudam, the upper portion of stomach as thadi, the stomach as kalasam, the waist as idaikkattu, the thigh as thamam, the leg as shaft and the foot as Aswa padam. Hence the Dravidian order pillar is conceived in the form of a lady without any changes. The terms used to denote the parts of the pillar like Kandam, Idaikkattu, and kal have been taken from the sculptural terminology. Other parts like kudam, thadi and kalasam have been named after the vessels with specific shapes.

So it can be surmised that the Dravidian order pillar is the architectural representation of a lady figure. And the lady figures represented in the walls of Sangam period structures would have initiated this concept. To prove this theory of origin of Dravidian order pillars beyond doubt, we need three-dimensional evidences of its transformation in different stages. Since the early temples were made of lesser durable materials like wood, mud and brick they have been lost once for all. But while reproducing them for the first time in stone in the form of Rathas of Mamallapuram, Narasimha the first has truthfully copied the fully developed form of pilaster of garbagriha of his period.

Though the Dravidian Temple Architecture has gone in to several modifications under the chief dynasties of Tamilnadu, the outline of the pillar of the Dravidian order remains constant without any significant changes. The reason for this may be that the lively curves of feminine character have been deeply rooted in the minds of Dravidian Architects of unbroken lineage, without knowing its meaning.

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LORIS AS A MEDICINE

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Man, ape, monkey, tarsier and lemur are highly organised forms among the "Mammalia" and they are included under the order "Primate". Primates are high on the evolutionary ladder and can provide insights into human history. At the same time, the lemurs, lorises and some species of monkeys are of comparatively low grade of organisation and are less specialised than some of the species belonging to the other orders of "mammalia".

The slender Loris (Loris tardigradus lydekkerianus) is confined to South India and Sri Lanka. Loris is called "the vangu" in Tamil. It is a tiny primate, its limbs are long and slender presenting a lean and lanky appearance. It is just 25 cm long and lives in thorny forests. It is nocturnal in its habits, and is generally found alone, sometime in pairs and often descending from the trees into bushes to hunt insects at night. It is omnivorous and feeds mainly on berries, lizards and birds' eggs. It has forward-looking eyes that are acutely adapted to night vision. The luminous eyes can be spotted nearly 25 metres away. Its legs and forearms are designed to hold and climb. It can hang upside down and catch its prey. The well-developed index finger has a long claw. Its close relative, the slightly bigger slow Loris (Nycticebus coucang) is found in North Eastern India.

Two races occur in South India, the specimens exhibited in the Mammal Gallery belong to the race lydekkerianus is

distributed in Eastern Ghats; The other race malabaricus is confined to Malabar district, South coorg and Travancore. The variety in Sri Lanka has a mark on its head like the religious symbol *namam* and therefore it is known as "Namathevangu".

The slender Loris is a highly endangered primate, the main reason for the decline in its number is the loss of its habitat, the scrub jungle and traditional belief of its use in medicine. It is believed that each part of Loris possess some medicinal property. The bone of its head in powder form was considered a potent aphrodisiae. If the left leg is eaten, it would cure leprosy and the right leg is an antidote for persistent cough. It is also believed that the coloured ropes touched by the Loris, to be worn around the waist of sick children. A large number was caught for experiments in laboratories.

Recent findings reveal that, near Dindigul, Tuppaki malai or gun hill and its surroundings covered by thorny scrub jungle, a sizable population of slender Loris has been located. It had been declared a rare and endangered animal under schedule I of Wildlife (Protection) Act of 1972. Three male specimens and two articulated skeletons of Loris tardigradus lydekkeriaanus are exhibited in the Mammal Gallery of Government Museum, Chennai.

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ALGAE

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The Economic Botany Gallery is one of the modernised galleries in this Museum. This was modernised in 1986. Both the Systematic and Economic Botany galleries have algal collections.

"All Algae are equal, but some are more equal than others".

The algae as such have a history that is as old as that of other plants. The first references to algae are to be found in early Chinese literature but there are also references in Roman and Greek literatures. The "Greek Word" for algae was 'Phykos' while in 'Roman times', they were called 'Fucus' and were used by matrons for cosmetic purposes. Up to about 1800 AD almost all algae were placed in one of four great genera, i.e. Fucus, Ulva, Conferva and Corallina.

The great French algologist, Thuret produced his monograph on fertilization in 'Fucus' in 1854-55. At the end of the nineteenth century several important life histories were worked out. In 1897-98, Williams described the complete life history of 'Dictyota' and in 1900 Blackman suggested three distinct tendencies in green algae – the Volvocine, Tetraporine and Chlorococcine. In 1915, Laminarian', life cycle was fully established.

Algal Flora:

Studies on Indian algal flora blossomed mainly from the 1920s. M.O.P. Iyengar who began his researches early in the 1920s took the first major step when he summarized our knowledge of Indian algae. In 1928 in his Presidential Address to the Science Congress, gave a report on algal work in India. India took a noteworthy step in 1956, when M.S. Randhawa, a reputed algologist and Vice President of the Indian Agricultural Research, projected the importance of Algae in studying ecosystems as well as soil fertility especially under irrigated conditions.

In general, the algae grow and survive in an extraordinary range of habitat- from scorching hot springs to snowy peaks. The vast majority of algae are aquatic, especially occurring on the surfaces of water and moist habitats. Any moist surface that is exposed to sunlight will support the growth of some algae.

Rockfaces, rock debris, concrete buildings, foot path, cooling towers of power plants, other industrial plants and tree barks are some of the terrestrial habitats colonized by algae. The tropical rice field is one of the most suitable habitat for diverse blue-green algae, which grow luxuriantly in themicroaerobic and reducing conditions in these fields. The algae also grow on submerged plants and animals. In fact ecologically, algae are the most widespread of the photosynthetic plants, constituting the bulk of the carbon assimilating floating microscopic cells in the sea and in the fresh waters. They are the primary producers over three fourths of the earth's surface.

The algae comprise a large, heterogeneous and polyphyletic assemblage of relatively simple plants or

thallophytes which lack roots, stems and leaves, with chlorophyll as their primary photosynthetic pigment.

With the exception of the blue-green algae (cyanophyta) most others can be sharply distinguished from bacteria. All blue green algae are Procaryotic. While most species of the Cyanophyceae resemble the higher green plants in their oxygenic photosynthesis.

With the phenomenal increase in urban population and industrial growth during the past few decades some of the major problems of a basic nature confronting mankind are those of quantity and quality of food, feed, drinking waters and proper conservation of soils and water. Suitably controlled algal growth can provide positive help in tackling these problems. The most promising basis for immediate further increase of micro algae productions are those in which the algae are obtained as by products rather than as main products as, for instance Spirullina as a by product of soda manufacture from carbonate brine in Mexico, or the algal mixtures obtained as by product of soda manufacture from carbonate brine in Mexico, or the algal mixtures obtained as by products of urban sewage treatment processes in Isreal. Some of the algae are often eaten directly as a protein and vitamin-rich vegetable. In coastal areas seaweeds may be used in biogas plants, either separately or mixed with cowdung, to produce methane, "Chlorela", "Synechococcus", "Microcystis", "Scenedesumus". "Oscillatoria" and others produce hydrogen at fairly high rates. The phycocollods extracted from selected species of brown and red seaweeds serve as useful pharmaceutical compounds. Carageenan is used in cough syrups. Thus the algae are put to multivarious uses in the day to day life.

Algae belonging to different divisions such as Ulva, Sargassum, Turbinaria etc., are kept on display both in the

Systematic and Economic Botany Galleries in the form of dry and wet specimens.

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KOOTHAANDAI NOAMBI: A CASE FOR CULTURAL PLURALISM IN TAMIL FOLKLORE

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1. Introduction

Culture is defined as the complex whole which consists of everything we think (i.e., ideas), do (i.e.materials) as members of a particular society. And thus it is evident that several culture traits constitute a culture-complex.

A culture pattern (within a culture-complex) is a characteristic theme, value, or motif, which permeates an entire society. And these culture patterns unite the sub elements of culture, viz., ideas, norms, attitudes, and materials into systems. A value, which clearly stands out in Indian life, is our tolerance for diversity in action and belief.

Occurrence of wide variety of human ideas, behaviour patterns, social institutions, and beliefs within human population leads into cultural pluralism. Consequently India as often been referred to us the nation of cultural pluralism. In such, a cultural pluralistic society many diverse cultures are tolerated. The concern here is not on the culture patterns, which divide us as a people, but on those underlying culture patterns which unite all of us.

As the domain of folklore deals with the culture patterns that permeate folk life, it is quite natural that pluralism of culture is perceptible in it as well.

An attempt is made in this paper to study the phenomenon of cultural pluralism in Tamil Folklore, in the light of 'Koothaandai Noambi' (also known as 'Aravaan Pandhihai'), a folk festival observed in different parts of Tamilnadu.

II. A Note on the Ceremonial Sacrifice of Arayaan: -

In rural Tamilnadu, the impact of the epic Mahabharat is such that we could perceive that once in a year Mahabharat is recited daily in the evening for ten days. After the culmination of the Mahabharat recitation a festival of five days is observed. On these five days, instances such as Kuravanji (soothsayer woman), Maadupidi Sandai (fight for cattle capturing). aravaan kalappali (Sacrifice of Aravaan), sakkara aarakkaottai pidithal (capturing of the fort of sakkara aaram), koondhal mudidhal (tying of hair [by draupathi]) are enacted.

It may be interesting to note that only in Villi Bhaaratham, the Tamil adoption of the epic Mahabharat, there is reference about the ceremonial sacrifice of Aravaan's. And further it may be interesting to note that even the folk performers who are enacting the Mahabharat follow only the Villi Bhaaratham as their reference work.

Of all the works of Bhaaratham, only the villi Bhaaratham mentions about Aravaan Sacrifice. According to it, Aravaan (son of Arjuna and Naga Princess Uloobi) is sacrificed to Kaali, the Goddess of war in order to fetch victory to his parents, namely, the Paandavars. He is worshipped throughout Tamilnadu, popularly as Koothaandai (Lit. Master of dance). Accordingly, the temple dedicated to him is also named as Koothaandai Kaoyil. Sometimes, the image of Aravaan is kept within the Draupathi Amman Temple (which is known popularly as "Pancha Paandavar Koyil") along with the images of Draupathi and Pandavas. A gigantic terracotta head of Aravaan/

Koothaandai is kept in the temple for worship; and this head depicts the beheaded head of Aravaan, the culture hero of Mahabharat who has volunteered himself as the ceremonial 'sacrificial victim'.

As mentioned earlier, Aravaan Kalapali, the ceremonial sacrifice of Aravaan is enacted so reverently once in a year in the villages of Tamilnadu. It is believed that by performing Aravaan Kalappali the village is assured of its prosperity with a good shower of rain and bumper harvest in the field.

Prior to the day of enactment of 'Aravaan Kalappali', an image of Aravaan is prepared in such a way to fit into and removed from the torso of that image so easily. The devotees also perform marriage ceremony to Aravaan, as it is popularly believed that he wanted to get married before yielding himself as the voluntary victim for the proposed ceremonial sacrifice.

III. Cultural Pluralism with reference to Koothaandai Noambi

A voyage into the realm of Tamil Folklore reveals that regional versions are available on the Koothaandai Noambi which centre around the ceremonial sacrifice of Aravaan as their motif. For instance, according to the version that is prevalent in Northern Tamilnadu (i.e., Cuddalore, Vellore districts of Tamilnadu, and the Union Territory of Pondicherry-1, as nobody came forward to be the willing bride for a bridegroom who is to be sacrificed the very next day, Lord Krishna, having assumed the shape of a beautiful bride has married Aravaan and consequently accepts the widowhood by removing all auspicious items adoring the body. This observation is termed 'Annu Katti Annu Arukkradhu' (Lit, tieing that day, and removing that (very) day (itself) and in some places, the pandal or mantap where that marriage is conducted is termed 'Annaruthaan Mandabam'

(Lit.Mantap where (marriage) tie is removed on that (very) day (itself). The eunuchs believe that they are the descendants of Lord Krishna who performed the role of bride by assuming feminine charm and hence they actively and eagerly participate in this 'Koothaandai Noambi/Aravaan Pandihai', by assuming the role of brides and bridegrooms among themselves. The eunuchs all over India assembles here to participate in this folk festival. Kothattai, Devanampattinam (near Cuddalore), Thiruvetkalam (in Annamalainagar), and Pillaiyarkuppam (near Pondicherry) are some places of worth mentioning which observe this folk festival.

Contrary to this, in Western Tamilnadu (i.e., Coimbatore and Erode districts), two caste groups or two sects of a particular caste group² assume the role of bride and bridegroom. Every year, people go in search of the spirit of Koothaandai/Aravaan which is believed to reside in the Aathi (Bauhinia tomentosa) tree. By showing the trembling of particular three leaves, the spirit of Koothaandai/Aravaan is believed to reveal its abode. The devotees, by plucking those three leaves would start preparing the image of Koothaandai/Aravaan out of clay by incorporating those leaves. After the ceremonial sacrifice (of defacing the head) of Aravaan, the local people would try to collect some clay from the defaced head with the belief that it will bring prosperity to their households. Thudiyalur. Singanallur, Vellalur (near Coimbatore) are some places to mention a few where this folk festival is performed.

In contradistinction to Northern and Western Tamilnadu, 'Aravaan Kalappali' is observed as a folk drama (Theru-k-koothu) in Central Tamilnadu, in villages like Melattur, Kodukizhi, Karambai, Ervadi³.

According to this folk drama, Aravaan is sacrificed by his mother Draupathi herself.

IV. Admixture of Native Tradition & Alien Tradition in Koothaandai Noambi:

In Tamilnadu, various folk deities are deified by the rural masses. The pantheon of those folk deities though normally shows 'nativity' at times reveal certain 'alien elements' as well.

The 'native elements' possess a tradition of its own which is practised by adopting uncodified rules and regulations. Owing to its 'simplicity' this folk tradition is termed the 'Native Tradition' (Alternate term introduced for the erstwhile, term 'Great Tradition'). On the other hand, the alien elements originally have a tradition of adopting codified scriptures; And this 'native structure' yields the term the 'Alien Tradition' to it. Due to the impact of the epic Mahabharat an admixture of 'Alien Tradition' (Alternate term introduced for the erstwhile term 'Little Tradition' is perceived within the Koothandai Noambi whose origin is perceived from the 'Little Tradition'.

The belief of the local villagers that observance of the 'Koothaandai Noambi' would fetch at least a shower of rain is a valid proof that this is enacted as a 'rain making charm'. The expressions such as:

"mazheyae peyya maattaengudhu koothaandaiyaavadhu saattakkoodaadhaa".

[There is no rain at all. Why don't we celebrate Koothaandai (festival) atleast].

"koothaandai naombi saattikkaraanga mazhe pathu tuliyaavadhu vandhae theerum".

[As they have celebrated Koothaandai (festival) atleast a little shower of rain is assured].-by the rural folk of Western Tamilnadu ensure the same.

The further belief of the rural folk of Western Tamilnadu that the clay collected from the defaced head of Koothaandai/Aravaan would bring prosperity to their households reveals that it is a remnant of fertility cult.

And these beliefs of the folk people of Western Tamilnadu strengthen the contention that the 'Koothaandai Noambi' derives its origin from the native tradition. However, at this juncture, we are left with one obscurity-i.e., whether 'Koothaandai Noambi' and 'Aravaan Pandihai' refer one and the same festival? In other words, whether 'Koothaandai' and 'Aravaan' denote one and the same culture hero? This query leads us to probe further into the belief system associated with this folk festival.

In Western Tamilnadu, the peasant folk deify a globular stone as Mallaandai⁴ in the threshing floor. And they initiate the harvest only after worshipping this 'Mallaandai-k-kallu'. Further, the first share of the harvested grains is kept in front of this globular stone along with a ceremonial goat sacrifice. It is believed that by observing such a 'thanks-giving ceremony' a bumper yield and thus 'prosperity' is ensured.

The following folk song is sung in Western Tamilnadu area, by the peasant people during festive occasions such as Chitraa Paurnami (Full moon of -Chithirai):

"Aathiyao Koothaandai aavareyao poomaale poomaalaikkul irukkura punniyanethaan thozhudhu kondaadi vara oorukkoru koothaande seyyaonum kalathukkoru mallaande seyyaonum aanu paona pakkam arasapattamaahaonum ponnu paona pakkam pethup peruhaonumaonum ooru sezhikkaonum utha mazhe peyyaonum moongil paola kela kelathu aruthu paola-veeraodi musiyaama(l) naadu sezhikkaonum⁵"

The Aathi (Bauhinia tomentosa) tree is the (abode of) Koothaandai while the Aavarai (Caesalpinea pulcherima) (flowers) form the garland (for him). By worshipping the blessed one residing in garland should prepare each village a Koothaandai (deity) (and) each threshing floor a Mallaandai (deity).

The male offspring should obtain ruling authority.

The female offspring should be blessed with fecundity.

The country should prosper (and) there should be proper rain fall.

Without twindling country should prosper Offshooting like bamboo (and) by spreading root like grass.

expressions 'Oorukkoru Koothaandai' 'Kalathukkoru Mallaandai' of this above folk song reveal clearly that the deity for the prosperity of a village is 'Koothaandai' while the deity for the prosperity of a cultivable Contrary to this presumption, the land is 'Mallaandai'. etymological study of these two words, viz., 'Koothaandai' (<Tamil Koothu '(folk) dance', aandai '(culture) hero' and 'Mallaandai' (<Tamil Mal-'to grow, prosper', aandai '(culture) hero)' reveals that only 'Mallaandai' could be related to the fertility-cult and not 'Koothaandai'. However, the folk belief of the people that the clay collected from the defaced head of Aravaan image would bring prosperity to the people ensures 'Aravaan' a due place in the fertility cult. Still, the query raised earlier (i.e., whether 'Koothaandai' and 'Aravaan' denote one and the same culture hero?) remains unanswered.

However, the 'Institution of Sacrifice' reveals the following useful clues to arrive at a definite inferences on the above issue:

i) Culture heroes offered themselves as ceremonial sacrificial victims; 123

ii) The mortal remains of those ceremonial sacrificial victims are supposed to have magical powers effecting fertility (the prosperity) to the cultivable land or household, concerned.

V. Inferences Arrived at

When we incorporate the above clues, we may get the following inferences regarding the "Koothaandai Noambi', "Aravaan Pandihai':

- 'Koothaandai' could be a culture hero (of those days) who
 offered himself as the cremonial sacrificial victim to ensure
 fertility.
- 2. The popularity of Villi Bhaaratham in rural Tamilnadu might have substituted 'Aravaan', the epic character to the culture hero, 'Koothaandai' in the long run. And that is why, we come across synonymous reference of 'Aravaan Pandihai' for the 'Koothaandai Noambi'.
- 3. The cultural pluralism in Tamilnadu, which brings many diverse regional cultures has effected the folk festival, 'Koothaandai Noambi' with as many folk versions as possible.
- 4. The rural Tamilnadu witnesses many rain making charms through its folk festivals such as 'Theemithi Thiruvizhaa', 'Kaaman Pandihai' and the 'Koothaandai Noambi' is one such folk festival observed in rural Tamilnadu.
- 5. The fertility cult (for fetching rain) of 'Little Tradition' and the ceremonial sacrifice (for fetching victory) of 'Great Tradition' merge together in the merger of 'Koothaandai Noambi' and 'Aravaan Pandiboi'

Foot Notes

- 1. Here, ignoring the political boundary, Pondicherry one of the Union Territories of our Indian subcontinent is also treated as part of Northern Tamilnadu as far as the genres of folklore is concerned.
- 2. Contrary to the Northern Tamilnadu version (where 'Aravaan" is voluntarily married by Lord Krishna who assumes a charming bride), in the Western Tamilnadu version the step-daughter is compelled to marry Aravaan by her step-mother.
- 3. The Thanjavur Saraswathi Mahal Library has published this folk drama in a book form entitled, Aravaan Kalappali-Isai Naadaham in the year 1986 (for details see the Select Bibliography of this paper).
- 4. The globular stone deified as Mallaandai is nothing but the 'Neolithic pestles' (which is popularly referred to as Mallaandai-k-kallu (Lit.Stone of Mallaandai)). At present, the Coimbatore District Museum is in possession of such Neolithic pestles in its reserve collection.
- 5. The belief system associated with the Mallaandai worship is also noted in the work of K.Karunakaran and K.Saroja (1988) (for details see the Select Bibliography of this paper).

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Colophon:

I wish to record my deep sense of gratitude to my beloved Commissioner of Museums, Dr. R. KANNAN, I.A.S., for his kindness and encouragement which enabled me to prepare this paper.

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Museums throughout the world have grown very much. There are competitions between museums all over the world. They organise organisations parallel to the museums to support the museums. Museums as organisations are not able to survive without the support of organisations like Museum Society, Friends of the Museum, Museum Lovers Club, Cultural Forum, Museum Trust, Art Clubs, Neighbourhood Museum, Bal Bhavans, Lalit Kala Academies, Trekking Clubs, Cultural Centres and similar such art and other cultural organisations. These are museum like as well as museum related institutions, often referred as *Paramuseums*. They are becoming very popular because they are relevant to the contemporary needs of communities. The active participation of the members is part of the new relationship with the museum itself. It implies people's participation channels with the people always open.

Museum Society or Trust

The resources of the museums are limited. There fore museums are going for forming museum societies. Government museums also are interested in the formation of museum societies. The National Museum, New Delhi has become a society, i.e. a deemed university. This augments the museums to take immediate steps to undertake many programmes in the museum. The Government Museum, Chennai is also planning to form a museum society in the near future. Private organisations either form a society or a trust. The private museums have

invariably formed trust to run the museums. In the European countries private organisations start museums under the registration of Trusts and avoid tax payment to the Government.

Friends of the Museum

While most of the museums in Europe going for organising the Friends of the Museum Society, some of the museums are reluctant as some of the curators feel that the overenthusiastic friends will be trying to dictate to the management how the museum should be run. There is concern over the amount of professional staff time, which can be absorbed in the management of organisation. The Friends of the Museum can be involved in various activities of the museum viz. Guide services, voluntary services in the collection sections and conservation units. The Chemical Conservation and Research Laboratory of the Government Museum, Chennai has got two volunteers, engaged in the conservation of paintings and conservation of textiles.

The Friends of the Museum Societies are given room for the running of the society in the respective museums. The profit out of the society at times is used for the welfare of the museum staff and other activities. Many museums, particularly in the United States, Australia and Europe, form membership associations in their own localities. The members are generally known as the *Friends of the Museum*, whose subscription and gifts are of great financial help to the museums concerned. The members in return are allowed some privileges, such as free entry, a discount on the museum-publication and reproductions, invitations for special occasion etc. For example the Tate Friends in London enjoy a range of special privileges and contribute towards the purchase of works of art for the Gallery. The concessions to the Friends are,

- 1. Free unlimited entry with guest to exhibitions
- 2. Concession on the purchase of the magazine of the gallery
- 3. Previews, events and art courses
- 4. Late at the Tate exclusive evening openings
- 5. Friends Room
- 6. 10 % discount in the Tate Gallery Shop
- 7. Subscription to Tate Exhibitions and Tate Events.

Museum Pen Friend Club

Museums can encourage starting Pen-friend Clubs in the museums by enrolling members. Pen friends can send publications of their museums to their friends in other states or countries and can exchange with them the publications. This will enrich the habit of collecting picture post cards, pamphlets, books etc., published by the museums and enlarge their mental horizon. The members of such a club should arrange gettogether once a month and exchange their views.

Museum Lovers Club

Many museums have encouraged the Museum Lovers Clubs in the museums. This is also similar to the Friends of the Museum Society. But it varies in its activity. The members of the Club help the museum authorities to collect antiquities, arrange programmes with the museum authorities for educating the mass. They give information about antiquities to the museum authorities so that the museum collection will be augmented. The author of the book organised clubs like this, which helped the curator to collect more objects and information. The club members themselves helped the Curator to go for collection of objects, exploration, etc. Many hundreds of objects were collected and added to the museum collections both in Erode and Vellore.

Cultural Forum

Many museums encourage Cultural Forum in the town/city where museums are located. Like-minded people join together and form this type of forums. Such forums join with the museums and coordinate with the authorities of the museum. In the Government Museum, Chennai the South Indian Archaeological Society functions and the Secretary of the Society is the Curator for Archaeology of the museum. The Madras Coins Club is conducting many programmes in collaboration with the Government Museum, Chennai. The Historical and Cultural Centre at Erode was much helpful for the growth of the Government Museum, Erode. Similar forums are helping museums in various parts of India.

Trekkers Forum

Natural history museums and multipurpose museums can encourage starting Trekkers Forum, Nature Watchers Forum etc., in the museums. The members can meet regularly to go on tours and collect objects for the museum besides learning and enjoying the nature while learning new things about nature. This encourages public to have good relationship with the museum personnel and the museum activities. The author has conducted many programmes both in Erode and Vellore and the museum collections were augmented.

Archaeological Society

Museums should also encourage the public to join in Archaeological Society, which in turn help the museum to build up good relationship with the society. The author had achieved a lot in having forums in the district museums and the members have greatly helped the museum to collect objects for the museum besides enriching their knowledge in the subject. There was a wholehearted involvement in the development of the museum in the service of the public.

Numismatic Society

Now a days many amateur numismatics have come up suddenly because of forums like Numismatic Society of India, Numismatic Society of South India, Madras Coins Society, Kongu Numismatic Society, Thiruchirapalli Numismatic Society, Coimbatore Numismatic Society etc. The Numismatic Societies are bringing out their own publications. All these organisations are working mostly with museums and the work of the museums are augmented through these organisations. They give donation of coins to the museums. They conduct seminars, camps and many hundreds of members are involved in the preservation of coins of India and other countries. The author encouraged many private collectors to have an exhibition of coins at Erode for the first time in Tamil Nadu.

Epigraphical Society of India

The Epigraphical Society of India and the Place Name Society of India are closely working together. Most of the museums are helped by these societies. These societies conduct seminars and the proceedings are published and have brought out many unknown truths to the society.

Conclusion

Now a days there is a scarcity of funds and the museums have to restrict the appointment of staff members in their staff rolls. Paramuseums have to be used in the functioning of the museums. If Paramuseums are not tied up with the working of the museums, the functioning of most of the museums will be dormant. Therefore besides the different types of Paramuseums, new measures should be taken to cope up with the work in the museums when the infrastructure in the museums are insufficient for the routine functioning of the museums.

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