

ARCHAEOLOGICAL SOCIETY OF SOUTH INDIA

Transactions for the year 1956-'57

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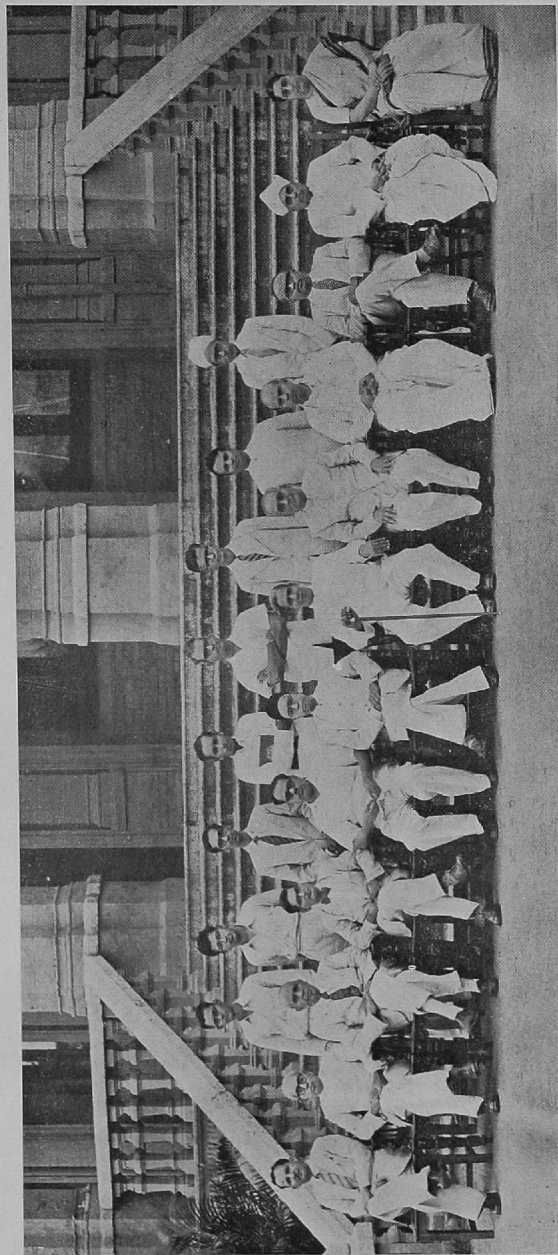
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THE ARCHAEOLOGICAL SOCIETY OF SOUTH INDIA (1956-'57)



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EMBLEM AND MOTTO

The WEALTH, both MATERIAL and CULTURAL, of the PAST, from which has risen the WEALTH of the PRESENT and from which will grow the WEALTH of the FUTURE; is the subject-matter of ARCHAEOLOGY. THE WEALTH of the three Kālas is symbolised as

Ś R Ī

Seated on Purity, the LOTUS, which rises from Plenty, the WATERS, and in the midst of the Hordes of Substances, the NIDHIS, the Treasures,—which, though symbolically nine, are usually mentioned, for clarity, as two, the ŚANKHA (Conch) and the PADMA (Lotus) NIDHIS,—shone upon by the Light given off by the Substances and illustrated by ELEPHANTS who are the Showerers of the WEALTH of the QUARTERS, SHE causes WEALTH to be attained to by EFFORT, without any giving by Her and without any coming by Her to give, She lacking feet that could walk and hands that could give.

VIJNĀNAM BRAHMĀ

KNOWLEDGE IS TRUTH

The ancient injunction is: MEDITATE ON KNOWLEDGE obtained from SPECIAL ENQUIRY, FOR IT IS TRUTH. The Archaeologist, in his specialised ways, seeks Knowledge for Truth.

The SKETCH copies a sculptured piece of about the 9th century A.D., from Kāvērippākkam, near Kāñchīpuram.

The MOTTO, which is taken from the *Taittirīya Upanishad*, being in Samskrīta, is also rendered in the representative languages of the South, and is written in the most ancient characters used for the several languages, as well.

PREFACE

In December 1955, when I wrote the Introduction to Volume I of the *Transactions*, I had expressed the hope that the Society would be publishing a volume of the *Transactions* at least once a year. This hope has not been realised. No volume was published in 1956, and it is only in the middle of 1957 that this volume, slenderer in size than the first, is seeing the light of day. There are three reasons for this. Firstly, we had to be sure of the finances. With the annual subscription purposely kept low, at three rupees per year, and that too often in arrears, we have to depend only on the Madras Government grant and to wait for it before embarking on this costly venture. Our Government has given us an increased grant, of Rs. 1,500 this year as against the previous grant of Rs. 1,000, for which we are deeply grateful. Secondly, an Editorial Sub-Committee had to be appointed for selecting the papers. The selection, I hope, will be found satisfactory. Thirdly, there was some delay due to the change of Secretary (though, happily, we got one good one, Dr. T. V. Mahalingam, for another, Mr. P. R. Srinivasan), and to the selection of a printer, from several, in order to get an efficient and economic press.

Slowly, the Government and the people of India are realising the value of the great monuments and relics of the past for understanding and appreciating our age-long culture. A good rest-house has recently been constructed and opened at Mahabali-puram. Other places of interest are also receiving some little attention, though nothing like what they should.

We are not impressed by some short-sighted critics who ask us not to worry about the past but to concentrate on the present and the future, and to spend every pie on relief to the poor and on production of more food. Man does not live by bread alone, and no country can afford to neglect its past, except at its peril, especially India which has a continuity of civilization since the very dawn of history. History is the philosophy of experience; and past experience of the calamities and conquests which followed disunity and apathy in our country must warn us against such conduct in future. The Hunas who disrupted the powerful Gupta Empire in the North in the fifth century A.D. and the Kalabhras who disrupted the Chola and Pandya kingdoms in the

South earlier ought to warn us not to be too complacent about our unity, security and freedom. Eternal vigilance is a condition precedent to unity and liberty.

It is wrong to say that it is best not to find out the truth about the origins of the Aryans and the Dravidians, the Hunas and the Kalabhras, as they will only supply politicians with materials for sowing disunity and discord. It is ignorance which will be dangerous, and never knowledge. Already, research has shown the myth of a pure race and even the greater myth of intellectual, cultural or moral superiority of any one race over another.

Nor are we impressed by the critics who say that to glory in the past is to indulge in a form of national egotism and that all egotism, all ideas of my and mine, ought to be given up. With the poet Thompson, we say,

"Alack! you tall angels,
I can't think so high,
I can't think what it feels like
Not to be I."

Still less are we impressed by the gloomy pessimists who say,

"Why worry about History?
Lo, as the wind is, so is mortal life,
A moan, a sigh, a sob, a storm, a strife."

We believe in giving life a meaning, instead of asking the meaningless question, "What is the meaning of life?"

We have many problems unsolved, from the race and script of the Indus valley people and the original homes of the Aryans and Dravidians to the identity of the Kalabhras and the secret of their being able to submerge the Cholas and Pandyas. One curious thing is that there were Indian poets who wrote eulogies about the Kalabhra vandal king as there were Indian poets who wrote eulogistic poems about Toramana and Mihirakula, the Huna vandal kings. Historians cannot afford to take the scientific shortcuts adopted by some politicians and dub all Brahmins of South India (differing enormously among themselves) as Aryans and all others (equally composed of very very different elements) as Dravidians. No simple and sensational classification like that is possible for the lover of Truth, who will have to test and test a theory before he can honestly accept it, and who can form no

theory at all when the material is totally inadequate to formulate any.

Mr. Venkatarama Ayyar has given us a new theory about the authors of the Sittannavasal and Kudumiyamalai monuments which deserves the most careful consideration by scholars. He has also written a most interesting article on the Kalabhras. Dr. Arokiaswami has shown how social developments under the Imperial Cholas always originated from below, and were only given the seal of approval by the rulers. Mr. Banerjee has given an interesting factual account of the excavations at Nagda. Dr. Cornelius has given some fascinating theories on the origins of the Dravidians. Dr. Pillay has written an interesting article on a delicate subject, the fascination of the artists for depicting erotic and even lewd themes in temples. Mr. Ramachandran has given an absorbing account of the archaeological wealth of Afghanistan, to which country he recently led a cultural delegation of exploration. Mr. P. R. Srinivasan has given us an original and learned paper on some works of art of the early Chola period. Dr. Subba Rao has dealt illuminatingly with the archaeology of South India. Mr. Subrahmanyam has contributed an instructive paper on scientific methods in Art and Archaeology.

I consider this volume to be stimulating, a bit austere perhaps, but quite healthy and appetising. We need not worry about the fact that there may be other points of view. As long as man is man, there will be at least two different points of view. As the familiar verse says,

Two men looked out of a window,
One saw mud, the other rainbow.

In conclusion, I thank all the speakers and contributors for the speeches and writings, and the members for their co-operation, and the Editorial Sub-Committee for the trouble it took, in selecting the articles, and Dr. T. V. Mahalingam for editing the volume and seeing it through the press.

"Gita," Madras-31,
16-6-'57.

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MAHARANI LAKSHMI BAI OF JHANSI

MAHARANI LAKSHMI BAI OF JHANSI

BY

JUSTICE A. S. P. AYYAR, I.C.S.

In this Centenary Year of India's War of Independence (mis-called the Indian Mutiny), we are very fortunate in being able to reproduce a glorious picture of Maharani Lakshmi Bai of Jhansi, the torch-bearer of India's freedom struggle, who was as brave as she was beautiful and virtuous, and who died young so that India may live. She was born on the 19th of November, 1830, at Benares, in a poor Mahratta Brahmin family. Her father was Moropant Tambe, a follower of Chimnaji Appa, and her mother was Bhagirathi Bai. She was named Manikarnika. Her parents joined the Court of Baji Rao II at Bithur in 1832, on the death of Chimnaji Appa that year. She was married to Gangadhara Rao, the Raja of Jhansi, as his second wife, and was very much younger than he. She was given the name Lakshmi Bai at marriage. She had no children but was very much attached to her husband's adopted son, Damodara Rao. She was of medium build and had a striking figure, beautiful face and piercing eyes. She dressed simply in fine white muslin and wore no ornaments except a pair of gold ear-rings.

Gangadhara Rao died in 1853, nominating her as regent on behalf of his adopted son. But the Governor-General of India, Lord Dalhousie, acting on his doctrine of lapse, annexed Jhansi, and granted Lakshmi Bai a pension. She was deeply hurt by the fact that her protegee was deprived of his principality, refused to receive the pension, and exclaimed indignantly, "I shall not surrender my Jhansi," but was helpless. Then she realised the truth of Chanakya's saying, "There is nothing so horrible as foreign rule. The foreign ruler cares nothing for the feelings or sentiments or happiness of the people he rules."

When the War of Indian Independence spread to Jhansi, in June, 1857, she joined it, but had no hand in the Massacre of Europeans and Christians at Jhansi by the infuriated Indian troops any more than Lord Canning had in the atrocities committed in Jhansi later on by the English troops, who burnt every house and slew men, women and children without

mercy in revenge for that massacre. Rani Lakshmi Bai dressed like a man, and rode a horse with grace and ease like Padmini or Chand Bibi of yore, and fought many a battle against superior odds with undaunted courage, aided by Tantia Topi, the Commander-in-Chief of Nana Saheb. Sir Hugh Rose, the British General who defeated her, called her "the best and bravest of the rebels." Defeats did not quench her unconquerable spirit. Her winning over of the Gwalior army sent against her, and her capture of Gwalior, making the Scindia, and his minister, Dinkar Rao, take to their heels, are remarkable tributes to her personal magnetism, equal to that of Napoleon who won over the troops of Louis XVI sent to fight him on his return to France from Elba.

She commanded loyalty unto death from her subjects and soldiers. When the British soldiers called her a "Jezebel" and clamoured for her being hanged as a felon, and surrounded Jhansi, and bombarded it, in March, 1858, her followers fought from house to house against superior odds and artillery till only a dozen were left alive and they rode off safely with her to Kalpi. That is reminiscent of the loyalty of his troops to the great Sivaji. When fatally wounded by bullets in the battle of *Kota-ki-Serai*, she asked her faithful Muslim lady-in-waiting (seen in the picture behind her on the horse) to see to it that her corpse was burnt at once so that the English troops might not insult her by unstripping her to establish her identity, and her command was obeyed by Rao Saheb, the adopted son of Nana, and Tantia, and the victorious British only saw her charred bones. So died, at the early age of twenty-eight, on the 17th of June, 1858, one of the noblest of India's children. Her bravery was as great in death as in life. The Mahrattas have produced many remarkable women, like Jijabai, Tarabai and Ahalyabai, but none greater or nobler than Lakshmi Bai of Jhansi. May her spirit of courage and sacrifice imbue every citizen of India, making him or her live with liberty and honour, or die in the attempt to defend them. Jai Hind!

SOCIAL DEVELOPMENTS UNDER THE IMPERIAL CŌLAS *

BY

M. AROKIASWAMI

The period of the imperial Cōlas from the middle of the ninth century A.D. roughly to the middle of the thirteenth is, all will agree, one of the greatest epochs in South Indian history. Much research has now been done to put the history of this period on the map of our national history and Prof. K. A. Nilakanta Sastri will ever deserve well of all lovers of history for the great part he has played in resuscitating the history of the Cōlas in a fuller measure than ever was done. The University of Madras, that had given him the opportunity for doing this work and has recently brought out a second edition of Prof. Sāstri's book *The Cōlas*, also deserves our thanks.

Recently looking over the pages of this great book I felt that if the author had given more space to the social history of the period the scholarly world would have indeed benefitted much from the erudition of the author.

In chapter XX of *The Cōlas* there is a section on the *social divisions* of the period of the imperial Cōlas. But it deserves to be amplified to give one a proper idea of the way in which social divisions were getting established during the period. The Śāngam works of an earlier day mention only a few primordial castes which seem to have existed from earliest known times, some among them being the Eyinar or the Vēḍar, the Paratavar or the fishermen, the Kurumbar or the shepherds and the Malavar or the fighters. It is of the last class that the *Agam* beautifully sings :

“Aruvakutirai Maḷavar Ōṭṭiya neḍuvēl Āvi”¹

and yet it is difficult today to trace their descendants. Even the great caste of the Veḷḷālar, so much in the limelight today, are not mentioned in these ancient works, unless one equates the great Vēls of the Śāngam times with the Veḷḷālar of the later day. The caste of Veḷḷālar is a very generic one referring to all engaged in cultivation.

*Paper read before the Archaeological Society of South India on 1-8-1956.

1. *Agam*, 5.

The Brahmans, whose entry into the South has been very much post-dated by Mr. Logan, when he places it in the second century B.C. are there in the Śāṅgam age as in the days of the imperial Cōlas. But the formation and existence of numerous other castes like the Kaikkōlās, the Ceṭṭis, the Kammālas and the Rathākāras not to speak of the numerous *anuloma* and *pratiloma* sections, the Paṭṭinavans and the Paraiahs, the very necessary castes of the barbers, dhobies and the well known Right hand and Left hand castes, each group numbering not less than 98 sects, needs some explanation.

It would appear that in South India unlike what happened in the North, most castes were occupational in origin and remained so in character. Nicholson in his *Manual of Coimbatore District* writes: "Kongan supposed to be one of the sons of the Cera king remained in Karur and married a foreign princess, who, being dissatisfied with the wild nature of the country and its inhabitants, managed to get a colony of Vellālars introduced, by whom the country was brought under cultivation".² Though one cannot be sure of the date to which this event can be referred the fact mentioned therein must be true to a large extent. This probably refers to the period of the Cōla conquest of the Coimbatore region by King Āditya in the ninth century and the foreign princess mentioned as the wife of the Cera prince was a Vellāla. We are thus sure that by this time the Vellālas had occupied the Cōla region in large numbers.

Whatever be the truth about the Cōlas of the Śāṅgam age, the Cōlas of the imperial dynasty were themselves Vellālas as we know them today. There is inscriptional evidence to show that Āditya peopled the region he conquered with his Vellāla castemen. Tradition current in the Coimbatore District speaks of the conflict between the Vēḍar occupants of the District and the Vellāla entrants during this period. We have confirmation on this point in that the Gangas, the earlier rulers of this region, had stationed many men of the Vēḍar caste in the District for the protection of their dominion. This tradition mentions a development of caste system in this region very interesting and revealing. The story goes that the Vēḍars would not allow their barbers to do service to the Vellāla new-comers with the result that the latter agreed among themselves to set apart groups of people of their own caste

2. Legend quoted by Nicholson, *Coimbatore Dt. Manual*, p. 86.

to render them the necessary services of the Barber, Dhoby, grocer and the drum beater, last of whom became in time the man of all kinds of menial services. Thus it is said that the *Pancha-jāti* of the Vellāḷa, Barber, Dhoby, Ceṭṭi and Pariah came into being.

Such is the curious evolution of caste in one part at least of the ancient Cōḷa empire emphasising the general statement that the evolution of castes in South India was largely occupational in character. Neither the student of the *Varṇāśrama dharma* of the time-old four castes nor the student of the ancient history of South India can otherwise explain the evolution of the numerous castes all of which cannot be conveniently classed under the name *Śūdra*. Especially is this the case when we remember that the age of the Śāṅgam does not know any such rigid classification. In all the interesting pen pictures drawn in the poems of this period no great reference is made to the caste of men, and we do not hear references to what we now call low caste men.

“Vēṛṛumai terinda nārpaluḷḷum
Kīḷpāl oruvan karpin
Mēṛpaḷ oruvanum avankatpadume”.

These lines occurring in the *Puram* anthology³ furnish just an example of the numerous like passages occurring in the Śāṅgam classics. The growth of caste rigour is definitely of a later age and this social change is remarkable in the period of the imperial Cōḷas. The great cause for it was the freedom of movement which the unified empire gave the people to move from place to place.

The age of the imperial Cōḷas is thus remarkable for great social changes, not the least among them being the birth of new castes and the consequent vigour laid on existing castes to avoid promiscuous mixing up with others. Though inscriptions help us in leading the way to follow up the history of these social changes, a manuscript of the period, *Cōḷanpūrvapaṭṭaiyam*, recently printed by the Government of Madras in its Oriental Manuscripts series, gives us a detailed picture and shows how these changes were effected. This work, which purports to be the rendering of an old copper plate of the Cōḷa king discovered in Kāñcīpuram, seeks to describe the way in which society and government were organised in certain parts of the empire and mentions in particular the castes of Vellāḷas, Kaikkōḷas and the Ceṭṭis, who were brought by

the Cōla king from regions possibly overpopulated to regions more congenial for their settlement which they were made to colonise under the king's own aegis and special supervision.

If we can fix the Cōla emperor mentioned in this record much useful material may be said to have been gathered for the social history of South India. A stone record from Sangramanallur,⁴ dated in the 45th regnal year of the Cōla king Vira Rājendra mentions an offering made to the local temple by one Kacciyarāyan, leader of the Kaikkōlas who may be possibly identified with Kaccivīran mentioned as the leader of the Kaikkōlas in the *Pūrvapaṭṭaiyam*. This may give a hint to the chronological limit of the events detailed in this record. Further, the great name connected with social changes in Cōla times is that of Kulōttunga III. The mention of the king in the *Pūrvapaṭṭaiyam* as Karikāla does not jettison the possibility of Kulōttunga being the king mentioned in this work, since Kulōttunga often bears that title in his inscriptions. The Government Epigraphist has collected no less than six inscriptions all from the premises of the Pāriyur temple, in which great social changes are recorded⁵ and in which the king is again mentioned by his titles Tribhuvana Viradeva and Tribhuvana Cakravartin Kōnērinmaikoṇḍān, titles also borne by Kulōttunga. More than all this, the *Pūrvapaṭṭaiyam* gives an unmistakable clue to the identification of the ruler with Kulōttunga III in that it mentions along with Kaccivīran two other leaders, Kastūriranga Ceṭṭi and Veṇṇainallūr Śaḍaiyappa Mudali with whom we find king Kulōttunga associated in other records of the time.⁶ Again the *Pūrvapaṭṭaiyam* mentions the Cōla king as proceeding to Kongu from Karur in his work of social reorganisation which is fully corroborated by an inscription of the 16th year of Kulōttunga III found in Karur and many inscriptions of his found in Kāñcīpuram.⁷ The Tamil work *Kulōttungankōvai* also confirms what is stated here.

The numerous fights between the Valangai and the Iḍangai, literally the Right hand and Left hand castes so much spoken of by the inscriptions of the Cōla period, must also be referred to this period since the differentiation of these sects is first heard of in the time of Rājendra I and the king who settled their dispute

4. 136 of 1909.

5. 185-188, 190-191 of 1910.

6. 80 of 1900; 301 of 1897, 240 of 1901, 463 of 1931.

7. 397 of 1925, 18 of 1925, 80 of 1900, etc.

is mentioned again as Karikāla, not certainly the Karikāla of Sāngam times but Kulōttunga III, the only king who bears this title after Rājendra I. It is in an inscription of the period of Kulōttunga III that reference is made to the mythical origins of the Right and Left hand castes and Crole in his *Manual of Chingleput District* says that their dispute was settled at Kāñcīpura in which distinctive flags were assigned to each group.⁸ Well this might have been so, since while Kulōttunga's inscriptions connect him with Kāñcīpura, the *Pūrvapaṭṭaiyam* tells us that Kulōttunga evolved caste distinctions at Kāñcīpura and then proceeded to colonise Kongu.

Thus it comes about that in Kulōttunga III's time, the Vellālas, under the lead of Śadayappa Mudali, the Kaikkōlar under Kaccivīran and a third caste mentioned in the *Pūrvapaṭṭaiyam* as Valangaiyār under the lead of Kastūriranga Ceṭṭi are made to colonise the regions where there was room for colonisation. We find consequently the Valangaiyar oppressing the Iṅangaiyar and the case comes up before the king for adjudication. It is in this context that the Pāriyur inscriptions referred to earlier, and three records from Karur, Pēruṟ and Modakkur respectively attain a meaning. The record from Karur, dated in the 15th regnal year of the king contains the following order addressed to the Kammālar of Vengālanāḍu the area around the modern town of Karur:

"We have ordered from the month of Āḍi of the 15th year of our reign at your marriages and funerals double conches may be blown and drum etc. beaten, that sandals may be worn (on the way) to places which you have to visit and that your houses may be covered with plaster. On the authority of this written order this may be engraved on stone and copper in (all) places desired by you, so as to last as long as the moon and the sun".⁹ The records at Perur and Modakkur are exact copies of this order and thus unmistakably indicate the earnestness of the king in seeing the social conditions of the Kammālar rectified. It must be during this period that the caste of Rathākāras must have arisen as temple architects and makers of sacred images.

The natural consequence of the incoming of new castes was the increase in the number and rigour of castes. The *Pūrvapaṭṭaiyam* indeed mentions numerous caste names which it is not

8. Crole, *Chingleput District Manual*, pp. 33-34.

9. S.I.I., III, No. 46.

possible for us to identify.¹⁰ This process of caste stratification and the hardening of caste rules went on with such speed down the highways and byeways of South Indian society that there was a tendency for self justification and glorification even in the smallest man in the empire. Even the Paraiyah, the last in the social ladder, was forbidden by caste restrictions to beat the drum for certain castes at their functions and we hear of a decision made by the royal officer Gangaiya, who orders that the Paraiyah must beat the *muraṣu* for all people on all occasions, good and bad, in return for a *padakku* of paddy and a fowl. This decision recorded in Ramnad must give the indication as to what was happening in other parts as well. In Kongu the Paraiyah who served the Veḷḷālas in early times became distinct from other men of the same caste and became known as the Kongu-Paraiyah, a caste which subsists to this day still keeping with it the right to fulfil the last rites of the Veḷḷālas — a right which is reserved only to the eldest son of the deceased in the case of other castes. In most cases existing castes fell into numerous sub-divisions or sub-castes in a large measure inexplicable. We get in this way castes like those of the Veḷḷān-Ceṭṭis, who were Veḷḷālas turned into merchants, Veḷḷān-Nāḍārs, Śēndalai Veḷḷālar with reference to the region from which they had emigrated and so on. It is during this period the well known Veḷḷāla caste known as *Mudaliyār* takes its origin. Though the first inscriptional mention of this caste name occurs in a record dated round A.D. 1010 in Bhavāni Kūdal where the benefaction of one Emmadecuttee Mudaliyār is mentioned, the caste comes to the fore in the days of Kulōttunga and we have evidence of it in the many Mudaliyār ruling families in the period of the Pāndyan empire that follows. The Mudaliyārs of Tāramangalam in the days of Pandya Jaṭāvarman Sundara III form an example in point.

A last phase of the social development in Cōḷa times lay in the growth of numerous castes which claimed connection with the Brahmans. The Brahman position during the whole period was unassailed and many men of inferior castes who were reviled by others tried to raise themselves in the eyes of society by claiming connection with the Brahmans. Hence the *agnikunḍa* origin trotted out by the *Iḍangai* sects. The earliest inscriptional account of the mythology is found dated in the reign of Kulōttunga III,

10. See Arokiaswami: *The Kongu Country*, p. 280.

which is again symptomatic of what has been said above about the social importance of his reign.¹¹ It is in this record that their claim of horn, bugle and parasol are mentioned. "The horn and the conch shell shall be sounded in front of us and the bugle blown according to the fashion among the *Idangai* people." This may give one an idea as to how far the process of caste stratification had attained during the days of the imperial Cōlas. It is to be further noted that in most of these social changes the people led the way and royalty only set its seal of approval and the traffic was never in the contrary direction.

11. 489 of 1912; *A.R.E.*, 1913, II, p. 39.

THE EXCAVATIONS AT NAGDA*

BY

N. R. BANERJEE

In pursuit of the problem of bridging the gulf between the end of the Indus civilisation and the beginning of historical times yet another site called Nagda, in Madhya Bharat, was excavated this year by the Excavations Branch of the Department of Archaeology, Government of India, New Delhi. It is well known that the Indus Culture, represented among other sites at Harappa in the Panjab and Mohenjodaro in Sindh, both in Pakistan now, came to an end about 1500 B.C. It is also known from traditional literary accounts that the Aryans entered India through the mountain passes about this time, and gradually spread themselves, their philosophy and way of life extensively over the country. But no archaeological remains of the people have been traced until the times of the Buddha are reached, except for the discovery recently of traces of people of a slightly earlier date at a few sites in North India.

The excavations at Hastināpura, which bears the name of the capital of the Kauravas of the Mahābhārata period, in District Meerut, Uttar Pradesh, in 1951-52 have revealed the early settlement here of a people, who used, among other things, a distinctive ceramic ware called the Painted Grey Ware. Several other places mentioned in the Mahābhārata have since been tentatively identified and all these ancient sites bear the Painted Grey Ware pottery. The users of the Painted Grey Ware pottery have been dated to about 1000 B.C. on grounds which appear to be fairly reasonable. Thus an advance has been made in bridging the gap in archaeological knowledge projecting from the known upper levels backwards, reducing it to a period of about 500 years.

The Indus Valley Culture is now known to have extended beyond the bounds of the Indus valley. Rupar, on the Sutlej, in District Ambala, Panjab, has been discovered to be the eastern-

* Summary of a talk delivered by the author before the Archaeological Society of South India on 9th June, 1956, at Madras. The results of the excavation at Nagda carried out by him in his capacity as Superintendent, Department of Archaeology, Excavations Branch, as embodied in the article are tentative, as the excavated material is still under study.

most known extent of this culture. With the transfer to Pakistan of the entire Indus valley, the hitherto unexplored areas on the border on the Indian side had to be examined with a view to tracing the possible expansion of the Indus culture in those regions. Excavations undertaken for the purpose have led to the discovery of several sites in Bikaner in the valleys of the undercurrents of the Sarasvatī and the Ghaggar, and also in Saurashtra. The search is still on and many more sites bearing traces of Harappan occupation are likely to come to light. Sites containing evidences of the Harappan culture and later cultures together in continuous sequence would indeed help solve the problem but no such site has yet been found.

The co-existence of Harappan culture and Painted Grey Ware culture at Rupa, and in the Bikaner region had indeed raised new hopes. But excavations have shown that the two cultures do not overlap and, therefore, the two successive cultures cannot really be connected yet. Fresh hope has once again been created by the discovery of a far-flung Chalcolithic culture in the river valleys of western, central and south India such as Bahal on the river Girna, District East Khandesh, Nasik on the Godāvarī, District Nasik, Jorwe and Nevasa on the Pravara a tributary of the Godāvarī, District Ahmadnagar, Prakash on the confluence of the Tapti and the Gomai, District west Khandesh, all in the Bombay State, Maski, District Raichur, Sanganakallu, District Belary, Brahmagiri, District Chitaldrug, Mysore, and last is Nagda on the Chambal, District Ujjain, Madhya Bharat. This culture is characterised broadly by a distinctive type of painted pottery called generally black on red, tiny tools of stone called microliths and objects of copper. This culture is designated Chalcolithic because though the use of copper came to be known the use of stone tools was not given up.

The material objects of this culture that occur below the levels of the well known N.B.P. were dated to circa 600 B.C.-200 B.C. Excavations have helped date the Chalcolithic culture on this basis to about 1000 B.C. tentatively. This culture is apparently contemporaneous, therefore, with the Painted Grey Ware culture of North India. Though the dating itself of the Chalcolithic culture is tentative, it is based on the presumption that it is later than the Indus Culture.

Nagda is situated midway between Delhi and Bombay, on the Western Railway, 35 miles north-east of Ujjain. The ancient mound

risers to a height of 90 ft. above the surrounding plains and the river bed of the Chambal which flows past it along its western flank. Of this 32ft. is occupational strata, the rest being natural soil.

The excavations have revealed three periods of occupation here called respectively Periods I to III. Period I is characterized by the remains of a Chalcolithic culture consisting broadly of microliths, copper objects and an abundant quantity of painted pottery. The microliths are mostly blades with parallel sides, about an inch to 2½ inches long. These were possibly hafted on some wooden handle for effective use as knives or blades for cutting fruits, vegetables, or scraping flesh from animal bodies. Though copper was known, casting was not perhaps familiar, and its use was extremely limited. The accompanying objects included sling stones or balls of stone of different sizes for use as weapons of attack. The occurrence of large sized terracotta spindle whorls suggests spinning and weaving of textiles. Pottery vessels were distinguished by a ware of cream or red colour, painted in different designs usually with a black pigment. The accompanying pottery wares included a painted black-and-cream ware produced by the process of inverted firing, a proto-type of the black-and-red megalithic ware of South India, a thick grey ware, and several other distinct types. The number and variety of painted designs suggest that the people had a rich imagination, ample leisure and enjoyed prosperity. The people of this period lived in mud brick or mud houses having several rooms. The existence of four large ovens in a rather large structure suggests the practice of either a joint family or community living. The presence of charred bones near the ovens points to the people having been non-vegetarians. The use of mud or mud bricks do suggest paucity of rainfall, but the people do not seem to have been free entirely from the attack of either extraneous enemies or floods of the river. To save the city from destruction a mud and mud brick rampart seems to have been built of which possibly a bastion alone has been exposed. Of course no weapons of offence or defence, recognisable as such, have been found. The excavations at Ujjain on the Sipra, a tributary of the Chambal, carried out simultaneously with the excavations at Nagda, has shown clearly that that river had been in spate frequently to have necessitated the construction of a rampart. Though kiln burnt bricks were not entirely unknown, they do not appear to have been used in the construction of structures at this period.

Though no trace of disposal of the dead, the oldest problem of mankind, has been found on this site, the evidence at Nevasa, on the Pravara, excavated by the Deccan College Post-Graduate and Research Institute, Poona, has shown that the Chalcolithic people buried their adults in fully extended position and their infants, fragmentarily in burial urns.

Period II was in fact a continuation of Period I, with the only difference that this period marks the emergence of the Black-and-Red ware and disappearance of the Black-and-Cream ware. The other features of the earlier period, however, continue. Together these two periods represent 22ft. of the 32ft. occupational strata.

Period III is characterized by the well known N.B.P. ware of fairly certain date, namely, circa 600 B.C. to 200 B.C., as stated before and associated ceramic wares, objects of iron and copper which were used fairly considerably, of bone and ivory, polished stone discs and their terracotta proto types, mud brick houses, cobbled roads and the like. Though kiln burnt bricks came to be known they were not used extensively, and the houses had the same alignment, along the cardinal directions, as in the earliest period. The later phase of this culture is dated with the help of an inscribed sherd and inscribed terracotta ball, bearing Brahmi letters of the 2nd century B.C. It was about this time that the site was finally abandoned. Period III, which can be dated to circa 600-200 B.C., is represented by a deposit of about 10 ft. and these factors point to the fairly early date of Periods I and II which have a much thicker deposit, namely, nearly 22ft.

This year's excavation at Nagda has for the first time pointed to the nature of houses of the Chalcolithic people, and about the measures adopted by them for defence against floods and enemies. The Chalcolithic culture of Western, Central and South India is indeed poorer in content than the advanced Indus culture, yet they belong to the same order of Chalcolithic culture. Though these two cultures are so far unconnected, the contemporaneity of newly discovered Chalcolithic culture with the Painted Grey Ware culture, which is dated about 1000 B.C., on the basis of their common occurrence immediately below the N.B.P. levels in their respective isolated regions has been tentatively established. This makes the Chalcolithic culture of Western India later chronologically than the Indus culture. The possibility of a later or derived culture being poorer than its parent or predecessor culture is not altogether ruled out, because passage of time does not necessarily

stand for progress. Though burial is common to both the Indus Valley and Central, Western and South Indian cultures, not much reliance can normally be placed on this for tracing their inter-relationship as disposal of the dead by burial is one of the oldest experiences of man. The mud brick rampart is indeed another common feature, and coupled with the approximate dating of 1000 B.C., for the Chalcolithic culture the connexion between the two can perhaps be endeavoured to be established. Nevertheless the fact remains that the gulf has not been bridged.

The desideratum now, as always, of course, is to find a site with traces of both these cultures, in continuous sequence to set the seal on the question. The search is on for just such a site.

ARCHAEOLOGICAL EVIDENCES FOR DRAVIDIAN ORIGINS*

BY

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Regarding Bhuta worship in Western India, M. J. Walhouse states, "In villages and very generally in towns there is in every house a wooden cot or cradle placed on the ground or suspended by ropes or chains and dedicated to the Bhuta of the spot: on these are placed, a bell, a knife or sword and a pot filled with water, all are called the Bhandava of the Bhuta. The idea seems to be of placating the spirit that haunts the spot, by making a sort of abode for it. In this connection I would draw attention to a tree from which are hung a large number of toy cradles near mottagopuram in the Madura temple.

1(a) "The Tambila ceremony is performed once a year in April. First a fire is lit on the spot where the cot and paraphernalia stand to make it clean, then fried rice, mixed with sugar and grated coconut kernel is heaped on two plantain leaves which are placed on the cot. A ball is then formed of boiled rice coloured yellow with turmeric and laid on a piece of plantain leaf on a small stool which is placed before the cot and lighted torch stuck on it. A fowl is held above the rice ball and torch, its throat cut and blood let drop on the ball; some perfume is burnt and the ceremony ends."¹ The central object of worship in the Tambila ceremony is the cot or the cradle suspended by ropes or chains which is dedicated to the Bhuta. To understand this strange ritual we have to go back to the Sky religion of the Libyans or the ancient Egyptians.

Maspero writes, "The ancient Egyptians imagined the whole universe to be a large box nearly rectangular in form whose greatest diameter was from South to North and its least from East to West. The Earth with its alternate continents and seas formed the bottom of the box.... The sky stretched over it like

* Paper read before the Archaeological Society of South India on 25-2-1956.

1. M. J. Walhouse—*Journal of Anthropological Institute*, Vol. V—1876, "On the belief of Bhutas", pp. 411-412.

an iron ceiling flat according to some; vaulted according to others Since the ceiling could not remain in midair without support they invented four columns or rather four forked trees to up-hold it. But it was doubtless feared lest some tempest should overturn them for they were suspended by four lofty peaks resting at the four cardinal points and connected by a chain of mountains."² (Fig. 1).

In a foot-note, Maspero states that the ancient Egyptians believed that the sky was of iron or steel. So well established was the belief in a sky ceiling of iron that it was preserved in common speech by means of the name given to the metal itself—viz. "Bai-ni-pit" and in another footnote to the same quotation he states that the words designating hurricanes, storms or any cataclysm whatsoever are followed by the sign —Y—Y—Y—Y— which represents the sky as detached and falling from the four supporting pillars. Magicians sometimes threaten to overthrow the four pillars, if the Gods would not obey their orders, and certain stelae are surmounted by the hieroglyphic given above. Only in this case it is curved to represent the vaulted sky.

Rene Basset mentions that according to Berbers of North Africa, God was "He who supports the Heavens (Sky)."³ Indeed the cap-stone which is flat in the dolmen represents the "Sky" (Fig. 2), and the 'Kavadi' which is arched 'vaulted' (Fig. 3) and forms the 'portable shrine' of the Tamils and the Stupa represent the vaulted sky (Fig. 4) as pictured in their ancient ideology so graphically described by G. Maspero. I would suggest that the cot on four legs or the suspended cradle stands for the supported "Sky" as also the tumulus or vault for the "peaks" supporting the sky according to the Sky Religion of the Libyans, as in the case of the mottagopuram in the Madura temple.

Both the Dolmen and the Stupa are not only represented in the megalithic tombs of South India but form the two essential components of Hindu temple architecture in South India as described by A. H. Longhurst.⁴ This would also account for the prejudice of Bakudas and Koragas against carrying a four legged

2. *The Dawn of Civilization*, by G. Maspero, 1894, pp. 16 and 17.

3. *Encyclopaedia of Religion and Ethics*, Vol. II, Article on Berbers of North Africa, by Rene Basset.

4. *Annual Report of Arch. Dept., S. Circle*, 1915-16, Pt. II, p. 28-35, "The Origin of Typical Temple of S. India, A. H. Longhurst,

chair or cot as recorded by E. Thurston.⁵ The term Tambila is suggestive of the term Tamila or Tamil as the dolmen and the Stupa are the village shrines of the Tamils in South India. (Figs. 2 and 4). This ceremony represents Dolmen worship of the ancient Tamils.

I(b). *Kolla ceremony* (Kambarlu): M. J. Walhouse writes: There is no fixed time for this but the village priest determines an auspicious day. This being settled, a tall pole is fixed up-right in the ground before the Bhutastan and a flag that is always hoisted upon it. The Bhuts Bhandara and the images are brought out and cleaned and a large fire kindled to purify the spot. The pujari takes the Bhuta sword and bell in his hands and whirls round and round imitating the supposed gestures of the demons...

Over his head and tied to his back, there is a sort of an arch termed 'Ani' made of green cocoa tree leaves with their ends radiating out.⁶ The Bhuta with sword and bell is Kala-Bairava (see Fig. 5) and the arched Ani is the primitive 'Kavadi' representing the vaulted sky. The Kolla ceremony is the ritual connected with the black-smith, deriving its name from Kollan (Tamil) meaning black-smith and their God Karuppannasami (Kala-Bairava) whose shrine is at the Eastern tower of Madura temple and whose name is derived from Karumbon (கரும்பொன்) meaning iron.

Bhutastans. According to Walhouse⁷ these are commonly a small plain structure, four or five yards deep by 2' or 3' wide with a door at one end covered by a portico supported on two pillars with a thatched roof and windowless. In front of it there are usually three or four T shaped pillars, the use of which is not clear. (Fig. 6). They are said to denote that the building is a Bhutastan and flowers are placed and cocoanuts are broken on them at ceremonies. Walhouse adds, it may be worth noticing that pillars of exactly the same shape are found accompanying the mysterious Balearic Talyots, the purpose of which has hitherto baffled antiquaries. Inside the Bhutastan there is usually a number of images, roughly made in brass in human shape or resembling animals such as pigs, tiger, fowls, etc. These are brought out and worshipped as symbols of the Bhutas on various cere-

5. E. Thurston: *Castes and Tribes of South India*, Vol. III, p. 438.

6. *Op. cit.*, p. 413.

7. *Ibid*, p. 412.

monial occasions. Brass basins, bells, a peculiarly shaped sword and some other articles used at ablutions are also kept within. In a foot-note, Walhouse mentions that in the British Museum there are some marble images of swine, sacred to Persephone found in the temenos of the temple of Demeter at Cnidos which may have been offerings like these Indian ones of brass.

It is interesting to note that the T. pillar cult of Western India is identical with that in Balearic Isles. This establishes a link between Western India and Western Mediterranean. T—is a symbol for the Dolmen indicating the flat cap-stone supported by a pillar. Longhurst writing on the origin of the typical Hindu temple quoted above states that the old Dolmens are usually found intermingled with cairns, Kistvaens of the usual type and appear to have been erected as a special abode for the ghosts. The dolmen at a later period was converted into a Hero-shrine and at a still later stage by setting up an image of Siva made it the proto-type of ordinary Dravidian Hindu temple. The Dolmen, Longhurst has shown forms the 'sanctum' of every Hindu Temple in South India.

The T. Pillar cult is thus enshrined in South India which is the emblem of Bhutastan or Dolmen shrine. The Stupa is built above the flat roof over the sanctum as demonstrated by Longhurst. The Bhutas or spirits of Bhutastan are Kala-Bairava as the sword is his emblem kept in the Bhutastan. The Bell stands for Durga (Fig. 8, 1) and Peacock for Kaumari, the mother goddess (Jumadi). The pig (Fig. 7) is sacred to Seth (Panjurli, (Fig. 8) Aiyanar) of the Libyans, and cock Kala-Bai-ra-va the god of war who may be equated with Skanda-Subramanyam of the Palni hills. The territory round these hills has been known as Panri-nadu in ancient times or pig-country for this reason, and the flag for Vayu, the God of Winds. (Fig. 5) (Todakinar)—There are also two Bhutas referred to by Walhouse as Bobbaraya and Kalkatti or the stone-cutter in the Bhutastan called Dharmastal.⁸

These evidences point unmistakably to the Western Mediterranean as the ancient abode of the Tamils, which is the ancient country of the Dolmens, and of the Bhuta and pillar cult, and sky-religion.

II(a). Burnell describes another ceremony totally different from 'cot' worship described by Walhouse above. This ceremony is performed at Illachchida-nema festival. He describes it as follows: "This festival occurs once in fifteen to twenty years on fulfilment of some previous vow. The festival belongs to one family. Two castes take part in it, the Bilva and the Pombada. The altar used is called tiruvayana. The five images are called together Bhandara (Sahilya) and are named (1) Jarandaya (Horse), (2) Sara-Jumadi (Ox), (3) Katanatri-Jumadi (Cock), (4) Marlu-Junadi (Buffalo), (5) Panjurli (Pig)—Beiderlu, the giant.⁹ (Fig. 7).

I have equated the animal totems of five clans or tribes on the basis of the plate (Fig. 7 given in Burnell's extracts, page 11 of *Indian Antiquary*, Vol. XXIII). About 6 ft. in front of this is a common wooden tripod about 2 ft. high; on this is a square frame formed of cocoa leaves (really of some part of the trunk of plantain) and in it a pyramid of boiled rice and turmeric into which a three branched iron lamp is stuck.

In front of this are placed the offerings, fowls and goats are decapitated and the warm blood drunk by the officiating priest. A Billava priest kills the fowl and then gives it to a Pombada, who bites it at once and then gives it to his fellow caste people who eat it. The Billava resigns charge of the ceremony to the Pombada who commences dancing and ringing the bell. Flowers are thrown as a means of transferring the Bhuta from one person to another."¹⁰

This ceremony is obviously the "Fire" cult of the Dravidians as the Tripod stands for the oven and also the three branched iron-lamp stuck on pyramids of rice. The idea here seems to be of placating the spirit of Fire and the Iron Lamp and Pyramid representing a volcano; Canary Isles and Sicily were of volcanic origin, the ancient habitats of these people and which gave rise to volcano worship in Rome. The stupa in the South Indian temple and the Tumulus stand for the volcano.

This form of fire-worship seems to be the peculiar custom of the clan known as Pombada totally different from the 'cot' worship in Tambila and Kolla ceremony previously described repre-

9. *Indian Antiquary*, Burnell's Extracts, Vol. XXIII, p. 10 and 11.

10. *Indian Antiquary*, Vol. XXIII, p. 10 and 11.

senting mountain-worship as 'sky-supports' in terms of the sky-religion of the Libyans.

With reference to the plate, Fig. 7, Burnell observes that on every public temple is painted a horseman with flowing garments while close by the Hog (pig), the Buffalo, the Tiger—and adds that it is very significant that the proud war-like cock is the chief live offering brought to the Bhutas.

II (b) Burnell describes a second ceremony performed at the festival called Kalli-yat in Mangalore. He writes: "There is in Mangalore, and not far from the place where 'Tiruvayana' worship is carried out, a ceremony conducted before a stone called Guttyamma once in 60 years. The stone is said to tremble sympathetically with the medium as he dances. Both II (a) & (b) ceremonies are largely attended by Bants and even by Brahmins. The stone Guttyamma placed between two temples which are situated near one another belongs to Malayalam speaking Billavars in Mangalore. Oil is poured over the stone."¹¹

This worship seems to be a form of simple 'stone worship' as 'stone' played a very important role, in archaic civilization before the age of metals. It is possible that the Phallic Cult of Lingam worship originated from this primitive form of 'stone worship.' The original material out of which images and idols were made were of wood which became translated into stone images and idols later in this country. The block of stone represents Munisvara in South India known also as Mundan.

P. R. Srinivasan has recently described in his article "The antiquities of Tululand" an important shrine at Barkur¹² which seems to be also one of the earlier pre-Aryan shrines of early Dravidian settlers on the Western coast. Here also the pig, the tiger, cock, ox and buffalo are found to be totem animals of the five clans present in the worship at Bhutastan. These totem animals will prove of great value in identifying the Dravidian clans as they are totemic. The aim of the ceremonies described by Walhouse and Burnell is to bring about a union of the clans by transferring the Bhutas of one clan to another. Similarly the hyphenation of

11. *Indian Antiquary*, Vol. XXIII, Burnell's Extracts, pp. 11 and 12.

12. P. R. Srinivasan, *Transactions of Archaeological Society of South India*, Vol. I, 1955, "Some interesting Antiquities of Tulunad", pp. 83, 93 and 95; Figs. 13, 14 and 15.

totem animals which is a subsequent development shows the confederation of the clans as is evident from Nandi-Kona figures and Pancamukha-eka-urddhavasringi with five heads and one body, one horn on its head pointing up-wards. We meet with the union of animals into groups or to combine them with human figures in Egyptian stone palettes and in Elamite seals. The significance of the Nandi-Kona consists in its totemic animal representation of the union of the ox-tribe (horn) with the Buffalo-calf (kona) clan. When all the five tribes are united we get the Panca-muka type of Nandi-Konas. Such is the case also with Prajapati or Asvamedha Horse referred to by T. G. Aravamuthan. Another instance which I would mention in this connection is Heramba-Ganapati form of Ganapathi. H. K. Sastri refers to a fine bronze image of Heramba-Ganapati from Nagapattinam mentioned in Mudugalapurana. This figure has five elephant faces, the fifth of which is represented at the top. The Bhuta Baiderlu (Fig. 7) and Panjurli (Fig. 8) are similar combinations resulting in giant human forms combined with animal or human heads. Such hyphenations are symbols of confederation of the Tribes. M. Rostovtzeff states that the only analogy to this mixture of realism and of primitive schematization is presented by the oldest monuments of Elam and Egypt.¹³

Archaeological evidences for the origin of the Dravidians are found in the Dolmen, T. Pillar cult, sky religion and the pig, of the Libyans or western ancient Egyptians. The fire-worship, the trident the Triangle or Tripod cult and the worship of the Tumulus, Stone and stone circles, and horse, point to Eastern Delta, Asia Minor, and S. W. Arabia. This form of religion was peculiar to the Eastern Mediterranean clans. Dravidians therefore have a dual origin in the Western and the Eastern Mediterranean lands and their social organisation is therefore dyarchical, made up of a confederacy of five clans.

I must conclude by stating that the five Dravidian clans and tribes are typified by the Totem animals as represented by Burnell in his illustration (Fig. 7) offered as animal sacrifices in Bhuta worship or the worship of village deities in India.

1. Pig symbolises the Iron clan who conceived the sky as made of iron ceiling because of their acquaintance with meteoric

13. *Iranian and Greeks in Southern Russia*, by M. Rostovtzeff (1922), p. 24.

iron. This may be designated as the Dolmen clan of the Western Mediterranean lands such as Balearic Isles, Sardinia, Spain, Portugal, Canary Islands and Libya.

2. Cock stands for the warrior tribe of the Iron clan.
3. Bull with the rider represents the sea clan of pearl-fishers whose ancient habitat was the Persian-Gulf, Bahrien, Asia Minor and Sicily.
4. The Buffalo is the totem of the 'Copper' clan representative of the Eastern Mediterranean lands of Cyprus and Crete, the megalithic builders of rock-cut cave tombs, of Eastern Delta of Egypt.
5. The 'Horse' is representative of the 'Gold' smith tribe of the clan of the land of Punt, S. W. Arabia and Elam as gold-mining was one of the chief occupations of the bearers of archaic civilization,¹⁴ and the name Jarandaya is derived from Persian zari-gold. The Giant Beiderlu represents the confederacy or union of the five Dravidian clans and tribes.

We are therefore justified on grounds of tradition and archaeology in regarding the Dravidians as ancient Mediterraneans of Libyan-Eastern Deltaic-Puntite-Bahreinean origin. Their civilization was based upon their quest for Iron, Copper, Pearls and Gold in South India, as in the other parts of the world.

14. W. J. Perry, *Children of the Sun*, 1922.

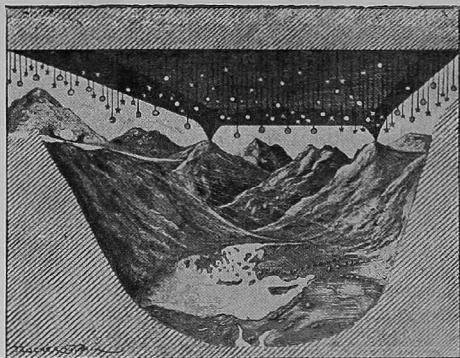


Fig. 1. An attempt to represent the Egyptian Universe.



Fig. 2. Shrine of Poleramma.



Fig. 3. A Palni pilgrim with his kavadi.



Fig. 4. Interior of a shrine with stones and symbols of the deities.

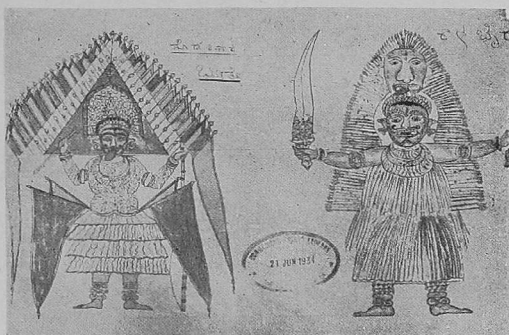


Fig. 5. The Devil worship of the Tuluvas.
1. Todakinar. 2. Mudader (Kala Bhairava).

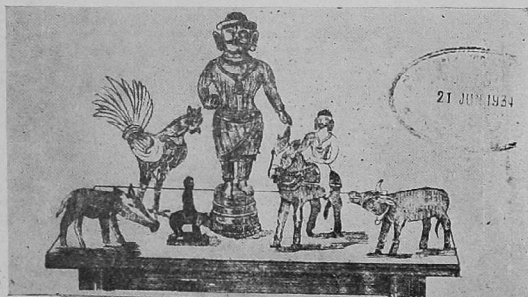


Fig. 7. A village God.



Fig. 6a. Bhutastan in South Canara.

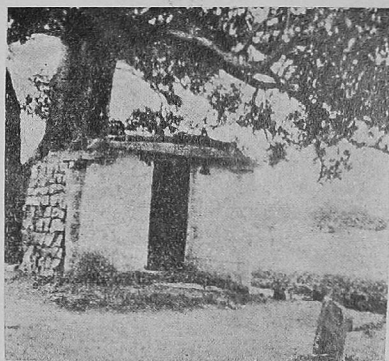


Fig. 6b. Typical shrine of Grāma Devata.



Fig. 8. The Devil Worship of the Tuluvas.
1. Jumādi. 2. Panjarli.

THE MITHUNA IN INDIAN ART*

BY

DR. K. K. PILLAY

It is a mystery why places of worship in India present erotic sculptures and paintings. Some of them directly, and others indirectly, are suggestive of sexual affinity. The simplest form is the representation of figures in partial or complete nudity. More positively erotic are the sculptures of amorous couples depicted in close proximity. These are of numerous varieties, including those where the male passes one arm around the neck of the spouse while the other hand toys with her chin, or where the lover softly presses the feet of his beloved. Love sports of endless patterns are depicted in temple cars. Certain sculptures of North India depict gay people engaged in drinking bouts. Voluptuous embraces and kisses apart, the more flagrant types of erotic sculptures include representations of male and female figures engaged in different poses of sexual act. Lastly, there are grotesque manifestations of sexual frenzy exhibiting obscene and abnormal sexual freaks. A brief historical survey of this motif may throw light on the purpose with which it was introduced into temples.

Chronologically, apart from the nude figures seen among the sculptures of Mohenjodaro and Harappa, perhaps the earliest clear specimen of the *mithuna* motif is found in the jamb of a *tōraṇa*, now preserved in the Lucknow Museum. It contains the carving of a man and a woman, obviously a loving couple, standing close to each other. It is not definitely known where this *tōraṇa* was originally found, though tradition traces it to an old Jain site at Mathura. On the basis of its architectural style O. C. Gangoly thinks that it is assignable to the 3rd or 2nd century B.C.¹

The next specimen obtained is the 'man and woman' medallion found on one of the railings of Bodh Gaya, belonging to the

*Paper read before the Archaeological Society of South India on 20-3-1957.

1. *Rupam*, 1925, p. 55. Some early Avanti coins appear to present the *mithuna* motif are assignable to the 3rd or 2nd century B.C. (Proceedings of the Indian History Congress, Session 4, (1940), pp. 57-8.)

Sunga period (185-73 B.C.). There is another panel in Bodhi Gaya showing a prince with his arm on the neck of a lady by his side and his other hand touching the face of another lady. Probably the Sanchi stupa, too, contains some representations of the *mithuna* motif, but the features are not clear enough to warrant a positive assertion about them, though Marshall and Foucher are inclined to identify one carving at Sanchi as depicting *mithuna*.²

The bas-reliefs in the old caves at Karle and Kanheri have certain clear specimens of the *mithuna* motif. Of the couples carved on the door ways of the shrines in these caves, the woman is invariably represented as encircling the man with her left arm. Besides, each of the pillars in the Karle caves shows an embracing couple seated on an elephant.

The Gandhara sculptures, traceable to the Graeco-Roman influence, which can be assigned to the dawn of the Christian Era, contain several examples of the *mithuna* motif. Here the erotic suggestion is distinctly noticeable. For one thing, nudity is a marked feature of the couples depicted here. Secondly, they are sculptured as groups enjoying drinking bouts. A piece belonging to this group, now preserved in the Lahore Museum, shows a woman offering a cup to her companion. The monuments of Mathura reveal several such Bacchanalian groups representing drinking bouts in which nude men and women participate.

Bharhut, Amaravati and Nagarjunakonda have various representations of the *mithuna* motif. At Amaravati, a prince is depicted in the gay company of women, apparently belonging to the harem, the principal members being seated on either side of him. In Nagarjunakonda there is an expressive sculpture of a Naga couple splendidly executed, the lady's face beaming with intense emotion.

The frescoes at Ajanta present *mithuna* couples in conventional poses; in several of them, the woman is found offering drink to her mate. The caves of Nasik show *mithuna* sculptures on the door jambs of shrines. Beginning from the Gupta period, however, a change is noticed in respect of the places in the temple where such themes were carved. Besides the door jambs, the facades of temples came to be used for this purpose as is evident

2. Marshall and Foucher: *The Monuments of Sanchi*, Plate LXXVII 20(a).

from a temple at Sarnath. Moreover, it was from the Gupta times onwards that the *mithuna* theme, instead of being restricted to human couples, was extended to Apsaras and Gandharvas.

The Aihole temples of the 6th century A.D. provide striking examples of the later development of the *mithuna* motif. The figures assume a markedly erotic tone, almost bordering on obscenity. The Durgā temple at Aihole contains *mithuna* couples of flying Apsaras, as well as couples of men and women, one of whom carries a wine cup. Another sculpture of the same place shows a lover excited with emotion and softly pressing a foot of his beloved. The temple of Pattadakal repeats many of the earlier features, and besides, furnishes for the first time representations of *nāgi mithunas* or serpent couples, which figure prominently at Konarak and other places later. The intense love of the *nāgas* (serpents) is depicted by the intertwining coils binding them together in warm affection. In fact, beginning from about the 7th century A.D., there appear sculptures frequently depicting the *mithuna* motif among animals and birds. They are found, for instance, on the huge sculptured rock at Mahābalipuram which is believed to portray Arjuna's penance. On the base of this rock there occurs the representation of a doe watching the stag as it rubs its hoof on the partner's nose. Among the panels depicting the story of the *Rāmāyaṇa* at Prambanam, in Java, there occurs an interesting piece of carving which shows Rāma and Sitā having a gay time at Citrakūṭa. On the roof of the happy cottage are shown birds in pairs, one of which indicates both the birds having their beaks together, rubbing their bills and apparently cooing in expression of intense love.

Ellora has several series of human *mithunas* in the conventional poses similar to those found in the frescoes at Ajanta. A splendid piece of art at Ellora presents two lovers embracing each other with deep affection, probably after long separation, as the emaciated bodies and the tear-stained eyes suggest. Then, there appear the sculptures in the Badami caves, among which are seen a series of pairs of '*maithunas*', two of which hold wine cups. The Badami specimens are pronouncedly erotic. The top of a pillar lovers in enthralling embrace.

But, unquestionably the most outstanding types of *mithuna* sculptures are found in Konarak and Khajuraho. The numerous patterns at these places are all sculptured in a rabidly voluptuous tone, and the artists seem to have given free vent to their imagi-

nation and skill. There appear also the enchanting love scenes of Kṛṣṇa and Rādhā. The temples of Bhuvanēśvar and Pūri share the characteristics of the Orissan temples. Although in numberless temples of the later periods all over India the *mithuna* themes appear ubiquitously, nowhere do they reach the level of the grotesquely obscene patterns furnished by Orissa. In fairness it must be added that these Orissan sculptures have all been executed with extra-ordinary skill and dexterity.

How and when this theme appeared for the first time in the Indian temples are questions of keen interest for the student of religion and art. Did it appear on the basis of any religious code or was it merely the product of a fortuitous and casual freak of human ingenuity? A few scholars who have addressed themselves to this question have quoted certain texts from the Purāṇas and Śilpasastras which seem to justify the *mithuna* sculptures in temples. O. C. Gangoly who makes a genuine, though not a totally successful attempt,³ quotes a passage from the *Agni Purāṇa* which enjoins the prescription that "the doorway (of shrines) should be decorated with *mithunas*" (*mithunair bibhuṣayēd*). But the date of the *Agni Purāṇa* cannot be determined beyond doubt. The probability is that it appeared later than the 6th century A.D. Even if it is assumed that this prescription furnished the authority for the *mithuna* sculptures of the mediaeval times it is idle to contend that the *Agni Purāṇa* provided the original authority for the *mithuna* motif.

The same author quotes another text from the *Agni Purāṇa* in respect of the choice of a site for a temple which states that the best site is one where loving couples, human or animal, have lived, loved and bred and reared a family. Gangoly advances a hypothesis that in the absence of such sites, temple builders might have tried to make amends for the desideratum by resorting to the *mithuna* sculptures. Apart from the question of the late date of the *Agni Purāṇa* which could not be deemed to have provided the basis for the earlier appearance of this motif, Gangoly's postulate demands far too much of a stretching of the imagination.⁴

3. *Rupam*, 1925, p. 60.

4. *Ibid.*, p. 61. It has been suggested that the passage in the *Agni Purāṇa* codifies the earlier practice. If that were the case, we are not nearer the solution, for the question still remains as to how the earlier practice originated.

Gangoly, as well as Bhattacharya who have made further attempts at discovering the probable textual authorities,⁵ hold that the *Agni Purāṇa* merely records the religious sanction for a practice which had been in vogue from a much earlier time. But Gangoly seems to admit his own doubt regarding the real value of the concerned texts from the *Agni Purāṇa* when he states that "the archaeological evidence clearly points to an injunction somewhere in the early literature as an auspicious precedent to be followed by all temple builders." Bhattacharya proceeds to show that the earlier basis for concerned texts in the *Agni Purāṇa* was the *Hayaśirṣa Pañcarātra*. But the date of the latter work is equally indefinite. Varāhamihira's *Bṛihatsaṃhita*, belonging to the middle of the 6th century A.D., prescribes that 'the door jambs should be decorated with auspicious birds, svastika designs, vessels, *mithunas*, leaves, creepers and so on. It is significant to observe that Varāhamihira admits that he derived these prescriptions from Manu and others. But, not even a faint clue to this practice, much less the prescription concerning it, is traceable in the writings ascribed to Manu. Nor do we have any indication in the Vedas justifying this practice.⁶

The inhibitory injunction in the *Māyāmatam* and *Silparatna* that legends about Gods and Asuras, nude figures or the amorous sports of ascetics should not be sculptured or painted in the houses of people, has been construed to justify these in temples. At best, this deduction is negative. Incidentally, the reference to *Tapasvīlīla* or the amorous sport of ascetic raises interesting questions.

A prescription in the *Suprabhēdāgama* (30th Patala) specifically lays down: "Particularly (one should make) the figures of Śiva's sport (Śivakrīḍā), of Hari's sport (Harikrīḍā) and sport of the ascetics (Tapakrīḍā).⁷ In fact, it is a striking feature that in many of the temples in Orissa, Bengal and South India the male figures sculptured in connection with erotic scenes represent ascetics. The Brihadīśvara temple at Tanjavur, and the Sthānu-nāthasvāmi temple at Suchindram to mention but a few, present

5. *Rupam*, 1926, pp. 22-4.

6. The mere reference to couple (*dāmpatī*) in the Rig Veda, can be hardly taken to throw light on *mithuna* concept.

7. Bhattacharya states that this is found in the 30th Patala of the *Suprabhēdāgama*. But Stella Kramrisch (*The Hindu Temple*, Vol. II, p. 347, n. 158) says that this is not found in the Tanjore Manuscript of the *Suprabhēdāgama*.

this particular feature in connection with ascetics. Some of the later works like the *Tattvaparakāśa* and *Prāṇatoṣiṇi* are said to prescribe sexual exercises as one of the means for the redemption of the yōgi and the attainment of divine 'bi-unity' and supreme knowledge.⁸ It has been stated that in order to regain the primordial wholeness (*Brahmajñāna*) the yōgi practises bodily, mental and intellectual exercises and that the devotee observes these rites including *mithuna* as his means of accomplishing his final release. Apart from the principle underlying the prescription, it still passes one's understanding why there should be *mithuna* representations of ascetics and of others in the sacred places of worship where people of all levels of mental and spiritual attainment gather. On the whole, it has to be admitted that a clear solution has not been furnished explaining the adoption of the *mithuna* motif in temples. Religious texts or philosophical explanations seem to be more in the nature of justifications of practices which had already come into vogue rather than prescriptions for the early practices.

Several popular explanations have been offered. It has been suggested, for example, (1) that the *mithuna* motif is a device adopted for the warding off of the evil eye, (2) that it serves to emphasize the ephemeral nature of the sensuous pleasures of the body in order to impress on the visitors the more lasting pleasures of the attainment of god-head; (3) that it serves to attract the voluptuous to the temple and thereby ultimately to a religious life; and (4) that it tends to warn the worshippers against the snares and pitfalls which haunt the seeker after truth. These, and other similar attempts seem to be little more than ingenious guesses, and consequently they do not deserve serious consideration.

Nor do the philosophical explanations, learned though they seem to be, furnish the specific authority for this apparently inexplicable feature in places of worship. It is stated that the *mithuna* motif serves to emphasize the unity of all dualities, the union of the *Puruṣa* and the *Prakṛiti* (Spirit and Matter) and that it shows how the male and the female powers of creation mingle converging into the cosmic centre of the great Brahman the eternal spirit and source of all cosmic activity. The Upaniṣad is pressed into service in order to emphasize the divine force in the

8. Stella Kramrisch: *The Hindu Temple*, Vol. II, p. 346.

creation of mankind. Attention is drawn to the story of God, to relieve whose sickness of loneliness, He is said to have divided his own body into two parts, one part representing man and the other representing woman and to have merged himself in a sexual act and created human beings.

Another philosophical line of approach claims that *Prakriti*, as Supreme Śakti, is within God Himself, hidden in His own qualities and that within Him, by means of His mind, He entered into union (*mithuna*) with the unspoken word (*Vāk*).⁹ Obviously, these are justifications based on belief. They do not explain, for example, why the temples of the Jains and Buddhists also present the *mithuna* motif.

A special application of the belief in the Unity of God, as emphasized by the Chandōgya Upaniṣad in order to justify the *mithuna* motif, is interesting. There is a belief in Orissa that *mithuna* figures in a building prevent it from being struck by lightning. It is held that in lightning there is seen the union of the immanent spirit of man and the transcendent spirit. "The person seen in lightning—I am He; I indeed am He".¹⁰ Therefore, it is believed that no lightning will strike the building where this motif is sculptured. Whatever the truth underlying this idea, the belief, operating on the fear psychosis of people must have popularized the practice in later times; but it does not seem to provide a satisfactory explanation for the origin of the motif in other parts of India in earlier times.

Nor can all the descriptions of erotic emotions in literature be taken to provide the basic authorities for the corresponding sculptural carvings. C. Sivaramamurti has in a recent paper contributed to a Memoirs of the Archaeological Survey (No. 73) made a strenuous attempt at showing how the exquisitely fine descriptions of love scenes furnished by the illustrious Kālidāsa in his *Mēghadūta*, *Raghuvamśa* and other poems are portrayed accurately in many of the *mithuna* carvings. Perhaps a few of them are traceable to the poems, but certainly not all. In a laboured attempt at correlating the flights of imagination of the poet and of the sculptor, Sivaramamurti seems to call for a wide stretching of the imagination of the normal reader. On the other hand, it

9. Svetasvara Upaniṣad, IV, 10.

10. Chandogya Upaniṣad, IV, 13.

is true that where a continuous array of these erotic sculptures is found, the treatises of Vātsyāyana and other sexologists like Koka Paṇḍita and Kalyāṇamala appear to have exerted a great influence. The sculptures at Bhuvanēśvar constitute a complete set of illustrations of the Kāmasūtra.¹¹ But, neither the early *mithuna* sculptures nor the vast majority of the later ones indicate clear traces of the treatises like the Kāmasūtra.

The real explanation of the origin and early development of this motif in temples has to be traced to a variety of sources. In the first place, sex-worship appears to have been common in some form or other in all early religions. From time immemorial man has realized a mystic connection between sex life and all generative phenomena. Sometimes it led to the worship of symbols of sex. The belief gained ground that sexual attributes in any object of worship helped to confer the blessings of fertility and plenty. The Indus civilization, belonging to the Chalcolithic Age, appears to have adopted phallic worship. Phallic symbols have been and are still used in the undercurrents of Shintoism in Japan. In the East Indian Archipelago ithyphallic statues are found in considerable numbers. Among the primitive Nuforesees of New Guinea sex worship is common. On the eastern and western sides of their temple as well as outside it, there are found two pairs of wooden statues, each in the conjugal act. In Celebes, on the posts of houses raised in honour of fallen heroes, there appear representations of women's breasts and sexual organs. The existence of temples at Langgadopi, where the organs of both sexes in sexual union are carved, is significant. The worship of Mother Goddess either in the symbolic or personified form is found ramified among many of the Semitic cults. Serpent symbolism also is supposed to typify sex. In later Rome women carried phallic emblems in their religious processions. It is interesting to learn that the indigenous phallic God of Rome was called *Mutunus*.¹²

Emotion, once excited in any direction, is often diverted into another. The very strength of sexual passion renders it particularly liable to get commingled with religious fervour. Fothergill seems to assess properly the connection between the two when he writes: "We find that all religions have engaged and concerned themselves with the sexual passion; from the times of Phallic worship through

11. V. A. Smith: *History of Indian Art*, (1930), p. 124.

12. *Encyclopaedia of Religion and Ethics*, Vol. IX, p. 815.

Romish celibacy down to Mormonism, theology has linked itself with man's reproductive instinct."¹³

How did this feature emerge in India? The phallic worship, in spite of all the ingenious constructions put upon it, is in fact traceable to the tendency noticed above. The Indus Valley people were līṅga worshippers, if the līṅga-like stone cylinders are not to be interpreted otherwise. There is little evidence to show that the Rig Vedic Aryans were phallic worshippers. Indeed, they have made contemptuous references to the Dasyus as Śiśna-worshippers. But it is significant that, by the age of the Mahābhārata, the worship of the Līṅgam and Yōni came to be recognized as sacred. Apparently, the change is to be explained by the fusion of the Āryan and non-Āryan religious practices which should have occurred during the interval. This amalgamation is perhaps the basic foothold for the rise of the *mithuna* motif.

Secondly, the Gandhara art, with its Graeco-Roman elements seems to have exercised an influence in the development of certain features of the *mithuna* motif. There is clear evidence to show that from the 4th century B.C., Greek art became distinctly human and individual. Praxiteles, the great Greek artist of the epoch has represented Aphrodite in her nudity; her nudity is not natural and unconscious like that of male figures in Greek art, but a motive for the strange feature is supplied in her preparation for her bath. The painters of the 4th century B.C. in Greece also chose dramatic or sensational objects and their power of rendering individual character and passion was probably connected with the features adopted by the contemporary sculptors. It is important to observe that the successors of these artists in the next generation carried the traditions of Hellenic art to the East which eventually trickled down to India.¹⁴ The representation of figures associated with drinking bouts which are carved in Indian temples is probably traceable to the Bacchanalian themes portrayed in the Gandhara sculpture. Nudity, as well as the *mithuna* motif, is also ascribable to the same source as is found on a Greek golden ornament of the 2nd century B.C., which was discovered in Sind.¹⁵ It may be recalled here that Bacchanalian scenes have been found in the decorative friezes among the ruins of stūpās and saṅgha-rāmas in the ancient provinces of Gāndhāra and Udyāna. Several

13. *Ibid.*, Vol. I, p. 871.

14. *Ibid.*, p. 869.

15. *Journal of the Asiatic Society of Bengal*, Vol. VIII, (1912), pp 283-86.

specimens of almost the same pattern were discovered by Sir Alexander Cunningham and presented by him to the Indian Museum in 1872-73.

Perhaps, the Buddhists who imbibed these ideas of art developed them further in their later and degenerate days; some of these voluptuous ideas of their modified religion received an impetus when monasteries degenerated into dens of vice. What is more, Tantric cults found high favour with certain Mahāyanist sects. The aim of Tantra was to acquire control over the spirits by the practice of austerities and elaborate mystic rites, and then to use their supernatural power for the gratification of the senses, the production of potent medicines by magic, as well as salvation for the soul.¹⁶ The Mahāyana practices of later days were responsible for developing the Tantric rituals of the Vajrayāna sect, which came to be reflected in the cult of Bengal, Nepal and Tibet.

Tantric Buddhism developed markedly erotic tendencies which were reflected in literature, sculpture and iconography.¹⁷ The temples of Nepal and Tibet as well as the terracottas preserved in many of the wooden temples of Bengal, as well as the paintings and rathas in the Vaishnavite temples of Bengal still present these features. The new fangled practices and modes of worship of the decadent Buddhism were absorbed and assimilated by the Hindus, particularly of Eastern India. The gods and goddesses of Tantric Buddhism became the deities of the Śaiva form of Hinduism. Thus, for example, the Buddhist Tārā was identified as the *Śakti* or female energy of Śiva. By the 9th century A.D. the erotic element, which had reached great heights at the hands of Tāntric Buddhism, crept into the Hindu system.¹⁸

16. 'Tāntrikism' came to be developed by Mahāyanism in order to convert the primitive Mongolians in Tibet, Central Asia and China, where pure ethics and subtle philosophy were of no use. So the Buddhist preachers in these new lands adopted the prevailing animism or spirit worship and merely superimposed the Buddhist pantheon on it. This Tantric worship gradually developed an iconography of its own in Tibet and East Bengal.

17. In the sacred book of the Buddhist Tantrics which deals with their "Guhya Samaja", the secret congregation, the Buddha is represented in acts of continuous debauchery with angels. The 'Sāadhanās' advocated by Mahāyanism for the attainment of salvation were nothing but sexual practices in different forms. Proceedings of Indian History Congress, Ninth Session, (1946), pp. 172-3.

18. Proceedings of the Indian History Congress, Eighth Session, (1945), pp. 94-7. Zimmer: *The Art of Indian Asia*, Vol. I, pp. 129-30,

Meanwhile, Hindu writers like Vātsyāyana and Kālidāsa exercised an indirect but potent influence, and the cumulative effect of it all was the free and diversified adoption of the *mithuna* motif. Besides, *Purāṇas* like the *Agni Purāṇa* and works like the *Hayaśīrṣa Pañcarātra* appeared which accorded sanction to the adoption of the *mithuna* motif which had already found its way. Under the cumulative influence of all these circumstances, the epoch of the 9th and 10th centuries A.D. in India which witnessed gross degeneracy in all spheres of life, afforded temptation for the artists to give free vent to their imagination, and the consequence was that there appeared the obscene products of art in the Orissan temples. In due course this caught the fancy of the artists in other parts of India and numberless temples all over the country present this motif in the sculptures, paintings and wood carvings in the temples and the cars attached to the temples. Frequently, too, artists in other parts of India have surpassed even the Orissan sculptors in allowing their perverted imagination to run riot, and consequently certain abominable specimens have found their way into the sacred places of worship.

THE ARCHAEOLOGICAL WEALTH OF AFGHANISTAN*

BY

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Afghanistan, though landlocked, has been the lodestone for archaeological explorations, conducted for over 30 years mostly by French Archaeological Missions and recently by the First Afghan Expedition of the American Museum of National History. Foucher, Hackin, Ghirshman, Schlumberger and Casal of the French Archaeological Mission have by their excavations shed considerable light on a number of rich Buddhist centres such as Bamiyan, Begram, Hadda and Haibak. Schlumberger's work at Lashkari Bazaar in South West Afghanistan has brought out much interesting data regarding the life, customs and techniques of the Ghaznavid period. His work at Surkh Kotal near Pul-e-khumri sheds interesting light on the activities of the Kushana kings on the side of architecture and art as well as religion and faith. Apart from the work on the Buddhist and Islamic sites the French Mission has added useful researches at Balkh, Kunduz, Ghazni and Ghirshman at Nad-i-Ali in Seistan. And quite recently the discovery by Casal of a prehistoric site in the Kandahar area called Mundigak has helped to confirm what leading Archaeologists including Wheeler, Piggott and Stein have emphasized, viz., that in important respects the prehistory, and history of Afghanistan and India form an indivisible unit and that in prehistoric times the cultural development of Baluchistan, Seistan, Southern Afghanistan and of the neighbouring Indus Valley could not be considered except as a single complex. Supplementing the work of the French have been surveys by Elliott Barger in Afghan Turkestan, Beatrice de Cardi in Southern Afghanistan and the trip of the First Afghan Expedition of the American Museum of Natural History. Of great value for the study of Afghan Archaeology in relation to India are the travel accounts of the Chinese pilgrims,

* Substance of a talk given under the auspices of the Archaeological Society of South India, on 11th August, 1956.

and of travellers in the Afghan areas, such as Ferrier, Fox, Tate, etc. The recovery of coin hoards such as those of Gardez and Kunduz and the find of stucco sculptures at Hadda, Kunduz and elsewhere tend to bring ancient Afghanistan and ancient India together.

Geography helps us to divide Afghanistan culturally into the following five —

1. Afghan Turkestan plain.
2. Hari Rud Valley.
3. Seistan Basin.
4. The Arghandab-Helmand River Area around Kandahar.
5. Upland valleys, like Kabul, Charikar, Ghorband, Bamiyan, Haibak and Ghazni.

These five ethnically varied areas present influences of Central Asia, Iran and India, the traditional homelands for many of these groups. The ethno-geographical features of Afghanistan vary from strong acculturation to extreme isolation. This is borne out by its archaeological material. The historic links between India and Afghanistan are familiar. According to Wheeler who surveyed Afghanistan in 1946, "to the Indus civilization materials, the early cultures of Afghanistan probably contributed and that ancient Taxila, as the Indian terminus of the great trade route from Balkh was in some respects anciently almost as much Afghan as an Indian city". Evidence is ample in Indo-Afghan history to show that there was interchange of materials, arts, crafts, scholars and theologians on both sides.

Indian History cannot be considered apart from the history of Asia from which peninsular India derived stimulus, nor can the cultural history of Asia be considered without reference to the influence of India. Though the Himalayas appear to give India geographical exclusiveness, in reality, they did not. In the second millennium B.C. the Aryan migrations swept across Afghanistan from Central Asia to the plains of India. Coming down the ages, we come next to Alexander who led his army in the 4th century B.C. up the valley of the Helmand and won victories in Central Asia after crossing the Hindukush range into Bactria (Balkh). This conqueror again crossed the mountains and marched into the Indus Valley, where he won victories in the Punjab. Still further down the ages, we come to yet another great conqueror, the Moghul Babar who conquered Kabul and founded the Moghul Empire in India in the 16th century A.D. He and his successors

maintained Afghanistan and India; Kabul and Kandahar were regarded by them as the keys of India.

There were routes from Turkistan to Kashmir used by Chinese pilgrims who visited the places in India associated with the life of the Buddha, or who came to study at one or other of the great Buddhist Universities of ancient India such as Nalanda, Taxila, etc. These routes were effective channels for the spread of Buddhism and Buddhist art from India, the place of Buddha's birth, into Asia.

In the early centuries of the Christian era, North-Western India and Afghanistan formed a single cultural Province, nay, the very centre of a flourishing Buddhist art represented by sculptures of clay and stucco such as those discovered at Hadda near Jalalabad and at Kunduz on the Oxus Plain. Stucco Buddhas and Bodhisattvas or potential Buddhas found here present stylistic affinity with Buddhist finds from Taxila in North Punjab. As a result of cultural contacts between India and the Graeco-Roman West in the early centuries A.D. were introduced in North-West India elements from Graeco-Roman Art which became part of the composite Buddhist art of the period. The relevant remains of this art are grouped into two phases: an earlier phase represented mostly by stone sculpture and known as "Gandhara art" from the ancient name of the frontier-region which centred upon the site of modern Peshawar, and a later phase, represented mostly by sculptures in clay and stucco, which has been called the 'Afghan School' from the fact that its geographical centre of dispersion lies in the neighbourhood of Jalalabad in Eastern Afghanistan. The two phases betray an admixture of Western features with an art which was essentially Indian. The Western element is particularly evident in the 'Apolline' rendering of the hair, in the toga-like drapery, and in the use of *atlantes*, *putti* and festoons of Hellenistic type. Occasionally the foreign element is uppermost, but the Western features are subordinated to Oriental spiritual ideas of expression which are remote from those of the classical world.

Probably no site in Afghanistan surpasses Balkh, ancient Bactria, the 'mother of cities' in its appeal. Here the main ancient trade routes met, one from Central Asia and China which Chinese pilgrims including Yuan Chwang adopted in their peregrinations to India and back, one from the Mediterranean and one from India. Commerce was carried through Balkh to Taxila and beyond. Here ruled the Graeco-Bactrian kings including Demetrius, and the

Buddhist convert Menander (Milinda of *Milinda-panha* fame) whose coins, strictly Bactrian in origin and Attic in standard influenced the ancient coinage of India for well nigh two centuries (second century and first centuries B.C.). Bilingual legends were substituted for the Bactrian Greek (e.g. Greek and Kharoshti, and subsequently Kharoshti and Brahmi) and gradually other Attic qualities of the Bactrian coins faded, Indian elements being introduced, as the tribal coins of India show. New invaders from Mongolia called the Yueh-chi by the Chinese, but Kushans in India, settled briefly in Bactria and the Oxus valley and spread in the Indus country. Under Kanishka (2nd century A.D.) their empire included Afghanistan, Turkistan and North India. The great period of the early Mahayana and of the Buddha images of Mathura and Gandhara was that of these Kushan monarchs.

The hoard of metal work, glass and ivories found at Begram, 48 miles north of Kabul range in date from the 1st to 3rd centuries A.D., while its origins include Alexandria and India. In some specific instances the influences are both ways and in some apparently Bactrian and Kushan. The large collection of ivories, comparable with Kushan work of the Mathura region is the most extensive series of ancient Indian ivory-carvings in existence essential for any study of Indian Art of the early centuries. The importance of the 'Ivory find' of Begram to *Indo-Afghan* studies at once places Afghanistan high on the altar of culture. Similar are the stucco Buddhist sculptures of Hadda, Kunduz, etc., which add materially to our knowledge of Gandhara or Indo-Afghan Art at Taxila and other Buddhist sites of N. W. India. The hoards of ivory and metal works found at Begram containing a mass of Indian craftsmanship and the Mediterranean glass and metal-work and a dozen examples of the bent-bar punch-marked currency (*Kārshāpanas*) as was known to North-West Indian when Alexander invaded her throw light upon the significance of Kabul (the *Kabha* of the *Rig Veda*) in the human geography of the region from the 4th century B.C. to the 3rd century A.D.

Finally, a hoard of coins discovered in a spring at Mir Zakah near Gardez sheds significant light on further Indian links with Afghanistan. This collection includes coins of almost all the ancient periods of Indian history such as Punch-marked, Indo-Bactrian, Indo-Parthian, Indo-Scythian, Kushan and Shahi Kings, the last, who started their rule in Kabul and moved away slowly in the 9th century to Gardez and then to Chind near Attock,

IMPORTANT WORKS OF ART OF THE EARLY CHŌĻA PERIOD FROM NEAR TANJORE *

BY

P. R. SRINIVASAN

During the last week of January, 1956, I happened to visit Tanjore on official work which necessitated my stay there for over ten days. While the photographers of the Museum who accompanied me in this tour, were doing their work at the Tanjore Art Gallery, I could snatch some time and visit some of the nearby villages as well as the various outlying hamlets of Tanjore itself with a view to examine if these places contained any antiquities and works of art of importance from the points of view of history, art, architecture and iconography. The inducement for this investigation of mine was my belief that Tanjore which was the capital of the famous Chōḷas should contain works of art belonging to periods earlier than the time of Rājarāja the great (985-1014 A.D.) although the various arts and crafts reached a high level of development under Rājarāja I due to the prosperity of the time and the great impetus the king himself gave to the workers in these fields. The fact that the rulers of Tanjore, should first of all try to encourage the activities of the people of the rich and fertile villages that are situated near the city before extending their patronage to far off towns and villages of their vast kingdom, was also another reason. Besides this, I was also prompted by the fact that during my visit to Tanjore in 1953, I had a hurried look round some of the streets on the outskirts of Tanjore where I found beautiful specimens of sculpture lying uncared for in the precincts of insignificant temples dedicated to village deities, some of which have subsequently been removed to the Tanjore Art Gallery. The places that I visited during my 1956 trip are the following:—Karuntaṭṭāṅguḍi and two or three streets beyond the eastern gateway of the fort at Tanjore, Kaṇḍiyūr, Tiruppūndurutti, Tiru-ālampōḷi, Kumbhakōṇam and Śivapuram.

* This is only a part of the paper a gist of which was read at the meeting of the Society on 22-3-56,

1. *Pallava Sculptures in Tanjore.*

In the eastern extension of Tanjore are two temples both of them dedicated to the goddess Kālī. One of them is called *Vaḍabhadrakālī* and the other *Ugramākālī* (Skt. *Ugra-Mahā-Kālī*). Though the structures of these shrines are apparently insignificant, on examination, they are found to contain specimens of sculptures which are at once magnificent and interesting in more than one respect.

Of these the *Vaḍabhadrakālī* temple which faces north, enshrines an almost life-size stone slab on which is carved in bas-relief the figure of an eight-handed goddess. It has now a very thick coating of oil and dust which makes a study of its details difficult. Nevertheless a close examination of the figure will reveal that it is a representation of goddess *Chāmuṇḍā* in one of her most terrific aspects. The *Chāmuṇḍā* images of South India are usually shown as other aspects of Kālī but with this difference that here the figure will wear a *muṇḍa-mālā* (garland of skulls) and its hair shown flying on either side, in a schematic manner. And the *Chāmuṇḍā* figures of South India, unlike those from Kalinga and some other parts of India, are not shown in a skeleton-like form. But the image in question represents the goddess as a skeleton. Apart from this peculiarity, the figure is seen seated and trampling on five male figures. From the description, namely *pañcha pretā-sanāsīnā*, *pañcha brahmendra madhyamā* (seated on the pedestal composed of the five corpses, etc.) occurring in the *Lalitā Sahasranāmā*, an aspect of the Goddess *Lalitā*, it is evident that representations of this aspect of the goddess should have been made and used for worship. But so far no specimen of this kind other than the image in question seems to have been found in Tamilnad. The rarity and the consequent importance of this figure is therefore obvious.

The sculpture gains additional significance when its date and artistic qualities are known.

A brief digression on the technique of the art of sculpture of ancient times may not be out of place here. It is well known that a great majority of examples of sculpture of India dating from the earliest historical times to about the 4th-5th centuries A.D., are in bas-relief, e.g., the sculptures of *Bhārḥūt*, *Śāñchi*, *Amarāvati* and *Nāgārjunakoṇḍa*. There were also produced during this period a few free standing sculptures such as the *Yaksha* figures from

Pārkhām and Mathura; Yakshinī figure from Didarganj and the Buddha figures from Mathura, Amarāvati and Nagārjunakonda. Though they appear to be in the round, they are in fact only examples of unsuccessful attempts at the technique of carving sculptures in the round; because if these are examined closely, they will show that they are flat, although not so much in front as in the back. The reason for the almost universal practice of the bas-relief technique in early periods was perhaps that it lent itself admirably for the carving of compositions and scenes of the various religious stories in a continuous narrative form. It may be remembered that almost all the early sculptures of India, whether Buddhist, Jain or Hindu, are of the narrative variety, intended to inculcate in the minds of the followers of these religions their ideals and doctrines in a telling manner.

The technique of bas-relief was continued also during the subsequent period, i.e. 5th to the 8th century, as exemplified by the famous sculptures of Deogarh, Mahabalipuram, Ellora, etc. But in these sculptures the method is seen to have attained the zenith of its development. It was also during this period that the technique of carving individual figures in very high relief became well established and a number of sculptures of classical quality were produced in this way, the famous examples being the standing Buddha from Mathura, the seated Buddha from Sārnāth, the Buddha figures of the early Pāla period, and the Śiva, Viṣṇu and other figures of the Pallava period in South India. From these specimens it is known that the technique of carving figures completely in the round did not yet become the rule with the sculptors. In North India most of the sculptures of the subsequent period were also done in the same alto-relievo method as exemplified by the majority of the Pāla sculptures, such as the famous sculptures of Padmapāni and Simhanāda from Mahoba, and the rare dancing Śiva figure from the Rajshahi district, although they give the impression of being in the round. In South India, on the other hand, this technique was perfected during the period when the Chōḷas were supreme. Magnificent sculptures done in this method may be found in the various temples belonging to this period as well as in the Madras Museum.

Returning now to the Chāmuṇḍā figure of Tanjore, it is in the characteristic bas-relief technique which was largely employed by the later Pallava *sthapatis*. Not only is the technique of it highly suggestive of its antiquity but its workmanship is also unmistakably akin to that of the sculptures of that period. Un-

fortunately there is no definite inscriptional evidence to prove this beyond a shadow of doubt. In spite of this difficulty the early date of this sculpture seems to get support by its association with a few equally early or probably earlier sculptures.

By the side of this Kālī temple is a Śiva temple. Though it is bigger than the former, it appears to have been renovated in recent time. Perhaps there are no endowments for its maintenance. It is now, therefore, in an extremely neglected condition. It seems that only once or twice a day worship is offered here. In spite of all these, that this temple should have been there for centuries is proved by a very early Dakṣiṇāmūrti sculpture which is also carved in bas-relief and which is now found in one of the dark cells to the north of the sanctum. It is a beautiful representation of the *yogic* form of the deity. This figure too is thickly coated with oil and dust, and hence its details are not easily seen. But in view of the fact that it is almost a duplicate of a sculpture from Satyamangalam, North Arcot-District, now in the Madras Museum (which is illustrated here in Fig. 1) its iconographical details can be made out. They are as follows:

Dakṣiṇāmūrti is seated with both the legs kept erect by means of the upper garment which goes round them and the waist like a *yogapaṭṭa*. He wears a huge *jaṭābhāra*, *kuṇḍalas*, a single *hāra*, armlets and wristlets. The waist-band is shown falling between the legs in a graceful loop. Of the four hands the two upper ones hold the *paraśu* and the *mṛiga* (?); and the two lower arms are thrown over the knees. As regards the workmanship of the sculpture, it is in the style of sculptures belonging to about 750 A.D. The face is square and chubby, the limbs are slender and beautiful, the shoulders are broad and powerful and the torso is exquisitely carved. The fine modelling, the beautiful proportions, the supremely tranquil countenance, the great spiritual powers of the Lord suggested in a highly subtle manner and the excellent poise, coupled with the rarity of similar representations during later periods may be taken as proof positive for dating the figure to the beginning of the late Pallava period, if not earlier.

Apart from this Dakṣiṇāmūrti image another sculpture was also found just near the Kālī temple itself. It is not seen in full because it is buried almost completely. Its top-most part alone is projecting above the ground level. Perhaps the people who reside there and those who visit the temple have never noticed it to be

the head of a sculpture. When I was entering the *mandapa* of the Kālī temple I too passed by it; but a little later noticing that the stone was tapering above, I went and closely examined. To my joy I found it to be the head of a sculpture. On close examination, the head could be identified as that of a *Jyeshthā* sculpture. Though unfortunately, it was not possible to excavate it and see, from the details of the head, it was easy to imagine the other qualities of the sculpture, which are characteristic of *Jyeshthā* images of the Pallava times. It looked to me that this figure was perhaps slightly earlier than even the Dakshināmūrti noticed above.

If this date of the sculpture is acceptable, then the existence of it quite near the Chāmuṇḍā sculpture clinches the issue that there was a temple to a goddess in this particular place dating from the early Pallava times and that when the temple of *Jyeshthā* fell in ruins, the people of the locality arranged for the building of the small shrine where they installed the Chāmuṇḍā image and began to offer worship to it.¹

Thus the significance of the above sculptures is very great because they serve as pieces of evidence of high authenticity to show that the art of sculpture had been flourishing in Tanjore itself from at least the Pallava times.

2. Early Chōla Sculptures in Tanjore

Nisumbhasūdanī, probably of Vijayālaya Chōla's time: Beyond the above temple, about a furlong's distance to the east, is the Ugramākālī temple which is also quite unpretentious in its form. Here were found by me in 1953 half a dozen or more beautiful pieces of sculpture, including the one representing the goddess Nisumbhasūdanī which turned out to be a very important image historically as will be shown below. Three or four of them from here were removed subsequently to the Tanjore Art Gallery, in the building adjacent to the Sarasvatī Mahal Library in the Palace area.

On a careful study of these sculptures, it was found that the Nisumbhasūdanī figure (Fig. 2) on grounds of style, was earlier in point of time than the rest. Its description is as follows:

1. Mr. J. M. Somasundaram, in his *Cholar Koil Panigal*, in Tamil, p. 6, says that this figure may represent Nisumbhasūdanī, said to have been installed by Vijayālaya Chōla. In the light of our discussion, his ascription does not seem to be correct.

Together with the pedestal the height of the figure is about $4\frac{1}{2}'$. It is seated with the right leg bent and kept on the pedestal and the left leg hanging down. Below it is found a demon facing us and on the front side of the pedestal is another demon facing up, who is trampled by the left leg of the goddess. The latter demon holds a sword in his right hand and a shield in his left hand. The hair of the goddess is arranged in *jaṭābhāra* fashion and is decorated with flowers, etc. There is only one *hāra* on her neck, which is worked beautifully with tassels. A *nāga* serves as the *kucabandha*. A *muṇḍamālā* (garland of skulls) is worn in the *yajñopavīta* fashion. The figure wears upper garment on the waist, with a *simhamukha* knot in front and with gracefully curling bows on either side. *Pādasaras* are present in the ankles. Of the four hands, the upper right hand holds a trident in the attitude of piercing the demon below. The other hands are broken. The figure itself is broken into two at the waist.

The rendering of the various details of the figure is powerful. The expression is not awe-inspiring as is usually expected of such representations, and a subtle smile beams through the round face. It may be mentioned here that to invest the images representing the terrific aspects of gods and goddesses with pleasing countenance is characteristic of Indian art; and this method is resorted to for emphasising the fact of the transcendental divine character of the deities who revel when they are engaged in benign actions as well as when they have to perform the equally important destructive deeds. Especially noteworthy is the modelling which is superb and hardly excelled by that of any sculpture of its kind belonging to other periods. The excellence of its workmanship is enhanced by the tasteful decorative details which are kept under restraint which is another characteristic of the early Chōla sculpture.

Thus the sculpture was in all probability the product of a master hand; and that the master sculptor was prompted to do this not only because it was but natural for him to do so, but also because he wanted to please the person, who commissioned him to do so and whose encouragement of the sculptor was so personal and moving. The qualities of the sculpture are so distinct from those of the sculptures found along with it in the same temple, and from those of the sculptures of the time of Parāntaka I, Rāja Rāja I and his successors, that they clearly suggest a date, definitely earlier than 900 A.D. for the image.

It is known that prior to Parāntaka I the Tanjore region was under the rule of two great Chōla monarchs namely Vijayālaya and his son Āditya I both of whom were responsible for laying firmly the foundation of the vast and famous Chōla empire to be. It is also known that both of them like all other kings of the dynasty, were ardent devotees of Śiva. Of the two kings, Āditya I is said to have studded the banks of the Kāvērī with temples to Śiva, while no such claim seems to have been made in the case of Vijayālaya, although there is evidence to show that temples were built during his time by his feudatories, e.g., the temple in Melamalai, at Nārtāmalai, in Pudukkottai, which is significantly enough called Vijayālayachōlēśvara after the king. As Vijayālaya's own undertakings in this regard, we know from the Tiruvālaṅgāḍu copper-plate grant of Rājendra I, that one of the first deeds of piety of Vijayālaya, after gaining Tanjore from the Muttaraiyars and establishing his capital there, was to build a temple for the goddess Nisumbhasūdanī. It is true that this fact is known only from the 11th century inscription, it having not been attested to by any earlier document. But considering the meticulous manner in which the various details of the grant are drafted and the consequent importance of it for the history of the early Chōlas, it may be safely assumed that the record about Vijayālaya's founding a Nisumbhasūdanī temple was also not without basis. The question that arises is where was that temple and where was the image of the goddess which was made and installed therein during that king's time. No attempt seems to have been made so far, to trace them out, except for that of Mr. J. M. Somasundaram. But he surmised that the Chāmuṇḍa figure mentioned above was perhaps the Nisumbhasūdanī of Vijayālaya's time, which as we have said above, cannot be regarded as correct on grounds of style and iconographic variation as well as on other circumstantial evidence. In view of the various significant details of the Nisumbhasūdanī image of the Ugramahākālī temple, we propose to identify it as the one which in all probability was made under the orders of the great Vijayālaya Chōla.

It has been noted above that the images in and around the Vaḍabhadrakālī temple bear features characteristic of late Palava sculptures, and that the temple might have been in existence since then. On the other hand, the earliest sculpture in the temple of Ugramahākālī is the Nisumbhasūdanī which is earlier in date than the remaining ones found with it but later than those of the previous temple. It shows that the Ugramahākālī temple started

with the Nisumbhaśūdanī figure. This fact too seems to support our identification because it is quite likely that Vijayālaya founded a new temple as stated in the copper-plate charter mentioned above, dedicated it to the goddess of his heart and that too, at a place not far removed from the one where existed another temple dedicated to the goddess Chāmuṇḍa who was one of the favourites not only of the people but also of the rulers belonging to the earlier period. It is but natural that the conqueror, in order to prove his worth and usefulness to the people who had become his subjects, founded such a temple, at such a place. This is another significant circumstance which we can hardly ignore while evaluating the sculpture under discussion, and which was responsible for influencing the composer of the Tiruvālaṅgāḍu charter to record it.

Now that all the facts mentioned above go to strengthen that the image of Nisumbhaśūdanī belongs to Vijayālaya's time we may say that it is one of the very early specimens of sculpture of the beginnings of the imperial Chōla period.

Other sculptures in the Ugramahākālī temple: These include a Durgā, Mohinī, Gaṇēśa, and Gaṅgādhara, all badly mutilated. The last is now in the Tanjore Art Gallery. This group of sculptures belonged definitely not to the small temple of the goddess mentioned above but to a comparatively large temple to Siva which originally stood in the neighbourhood. But no vestiges of this temple are found now there.

Durgā. The figure (Fig. 3) is carved in high relief on a granite slab. The goddess stands in the graceful *ābhanga* pose on a buffalo head which, although much of it is broken now, is depicted in a naturalistic manner. Hair is arranged in a frizzling fashion (but broken now) with curls falling on the shoulders, two or three necklaces adorn the neck. *Channavīra* is found on the chest. *Keyūras* and *valayas* on the hands, lower garment is worn as shorts; the upper garment is tied to the waist with its ends forming beautiful bows and hanging down on either side, and with a central loop shown between the legs. There is also the beautifully worked knot in the waist-band. *Pādasaras* are present. The figure is shown as usual with eight hands. Of the four right hands, the front one is broken and missing, the other three hold the following, in the order from above, namely, a conch, a long bow, and a shield. That the goddess is an archer who could discharge arrows with both hands (like Arjuna) is beautifully suggested by the sculptor by depicting a quiver behind each shoulder. Sur-

rounding the head of the figure is an elongated oval *prabhā* fringed with three-pronged flames, the form of the halo being characteristic of the early Chōla times. On either side of this halo is found a *chauri* worked in the usually fine manner like the *chauris* that are depicted on the seals of the copper-plate grants of the early Chōla kings.

Unfortunately the breasts and the face of the figure are also broken; but the attempted restoration of them by means of cement has spoiled the beauty that can be found in such sculptures even when mutilated. Nevertheless the exquisite workmanship of the figure is apparent. Its classical qualities are easily seen from its fine proportions, slenderness of modelling and delicate but restrained decorative details. Only on these stylistic grounds it has been said above that this and the other figures may be later than the Nisumbhasūdanī image.

Mohinī. It is similar to the above sculpture in workmanship although iconographically there is a lot of difference between them. In this sculpture, there are only two hands and the hair is arranged in the beautiful *dhammilla* fashion. As an example in nude study, this may be said to be a fine one.

Gaṅgādhara. The sculpture (Fig. 4) is in alto-relievo and shows Śiva in company with his consort Pārvatī, both standing. He is represented in the attitude of pacifying Pārvatī. The reason for this attitude of Pārvatī was that she attributed to Śiva the motive of entertaining Gaṅgā, wantonly on his locks of hair although the reason for Śiva doing it was to quell the pride of Gaṅgā. It is well known that when Gaṅgā was descending to the earth from heaven, in order to wash away the ashes of the sons of Sagarā and to emancipate their fallen souls, she was so haughty as to entertain the idea of washing away the entire world, in the process. Knowing her mind Brahmā advised Bhagīratha to pray to Śiva to come to the rescue of the world which was granted by the Lord. Hence Śiva bore Gaṅgā on his matted hair where she was lost. To release her from there, Bhagīratha had to perform penance once again. It is this aspect of Śiva that is represented in this sculpture, but with the difference that here the story is depicted according to its developed form where Śiva was suspected of misdemeanour to her by Pārvatī. Consequently he had to pacify her. This is what is shown here.

Śiva is standing with a slight bend to the left suggesting that he is turning to Pārvatī who is shown on his left. He wears a

high *jaṭāmakūṭa* with a depression at its bottom, a feature usually met with in early sculptures. Above the forehead is a beautiful *paṭṭa*. The third eye is seen on the forehead; *patrakuṇḍala* in the left ear and *makarakuṇḍala* in the right ear are found. *Keyūras* and *valayas* are seen on the arms and wrists. There is a broad necklace and a long garland of beads on his chest. It may be mentioned that this garland may represent the *rudrākṣhamālā* which is invariably met with in all the representations of Śiva. Three-stranded *yajñopavīta* with a prominent knot on the left chest is also found. Elaborately worked waist-band with the characteristic *simhamukha* clasp is beautifully carved on the waist. The *uttarīya* is shown going round the waist twice, gracefully looping in front. The lower garment consists only of shorts. Of the four hands the two left ones are broken and missing. The upper right hand is held in the posture of holding aloft a strand or two of matted hair suggesting the reception of Gaṅgā on them. Hence this gesture has become a characteristic of Gaṅgādhara icons. Above the hand is seen a mermaid in *añjali* who is none else than Gaṅgā herself. The lower right hand is also unfortunately broken. But the scar, if we may call it so, left behind by the mutilation is nevertheless enough to show the sculptor's mastery in depicting the gesture of Śiva's pacifying Pārvatī, by turning gently her chin to himself and whispering to her the truth about the affair involving Gaṅgā.

Pārvatī is represented according to the requirements of *Silpa* texts, with height which reaches to Śiva's shoulder. Her hair is dressed in the form of *koṇḍai*. There are *patrakuṇḍalas* in the ears, broad *hāra* on the neck, beautifully swaying sacred thread on the torso, *keyūras* etc., on the arms and a finely carved band on the waist. The upper garment is tied also to the waist, one of its ends being shown tucked in a realistic manner. The lower garment is so fine that it clings to the legs. It shows tassels just below the ribbon-like *uttarīya*. *Pādasaras* are present. There are two hands; the left hand is bent at the elbow and shown touching the left shoulder. The right hand is shown as if taken away from coming into contact with Śiva. This, coupled with the subtle bend at the waist is highly suggestive of the strained *bhāva* (feeling) of Pārvatī due to her wrong presumption. But that her anger vanished, like mist before the sun, immediately after Śiva's whispering to her the truth of the matter is also suggested in a subtle manner by means of the gracefully smiling expression on the face which is, as if accentuating this, tilted just a little towards

Śiva. Here is found the proof positive for the dexterity of the sculptor who could effectively show in his masterpiece two states of mind simultaneously, a thing which cannot be expected in life itself. The expression in the face of Śiva is also one of smiling which can be interpreted as indicating his happiness over the appeasement of Pārvatī's wrath. Thus this sculpture is, from all points of view, an extremely interesting one.

When examining this sculpture, a few words about the representations of the theme in South Indian art during different periods may not be out of place. The earliest extant representation of this theme is the famous Gaṅgādhara sculpture occurring in the upper cave at Trichinopoly, attributed in the "royal artist" Pallava Mahendravarma I. In this panel, however, the scene of Śiva's receiving the divine river is given prominence and not his act of pacifying the angry Pārvatī. But from about the early Chōla period, the latter story seems to have caught the imagination of the people and consequently the Sthapatis and Śilpins began to give greater importance to this story, relegating the former scene to the background. Since then it becomes a mere symbol. This was continued with added vigour in the subsequent periods also and the theme in the modified form came to be represented frequently in stone sculpture and bronze as well as in painting. A remarkable representation of the theme occurs amongst the early Vijayanagar frescoes at Lepakshi, in Anantapur District.

3. *Sculptures at Karuntattāṅguḍi*

Karuntattāṅguḍi, popularly known as Karandai is situated at a distance of about a mile and a half to the north of Tanjore on the Tanjore-Tiruvaiyār road. It is an ancient village. The most important of temples there is the Śiva temple dedicated to Vasishtheśvara. It is interesting not only for its architectural details but also for a series of sculptures that adorn the outside of the walls of the sanctum.

The central shrine containing the *svayambhu liṅga* is the oldest structure of the temple complex. It is surrounded by a wall on the inside of which is a verandah all round. The wall has an opening on the eastern side facing the temple tank, and another on the southern side, facing the village proper. In front of the central shrine and facing the southern entrance is the shrine of the goddess. This and the *prākāra* mentioned above are later additions, and they are therefore not of any consequence for us.

The main shrine consists of, as usual, of the *garbhagriha* and the *ardhamandapa*. The superstructure above the sanctum has a storey topped by a bulbous capital. Hence it is a specimen of an *ekatalaprāsāda*. The style of this structure is very simple, which is characteristic of a great majority of the temples belonging to the early Chōla period.

On the walls of this shrine are found very interesting sculptures, which are noteworthy both as specimens of the art and as examples of iconography. Amongst them are found two, representing two of the four important Śaivite saints. These seem to be of great historical interest too. As these are fitted against the walls they are not carved completely in the round but only in high relief.

Naṭeśa. Of these, *Naṭeśa* (Fig. 5) is a beautiful specimen of its kind. It is also important because, occurring as it does in the temple which may be taken to belong to about the middle of the 10th century, it is one of the earliest representations of *Naṭeśa* in the *bhujangatrāsita karaṇa*, also called *ānanda tāṇḍava Naṭeśa*. Every one of the details of this figure is of interest and has been done in an exquisite manner. Unfortunately its nose, left hand and left leg are mutilated. Its description is as follows:

It has a round face with eyes, eyebrows, the third eye on the forehead, the lips and the chin and the ear lobes are worked very beautifully. There is a naturalistically carved thick garland of flowers going round the head. The hair is shown spread out in eleven strands of *jaṭās* on either side of the head. The beauty of the swaying rythm of the *jaṭās*, is enhanced by the fine curls shown at the end of each of them. On the head are shown the head of Gaṅgā (?) in the left, a grinning skull in the centre and the *Dātura* flower on the left. It may be noted here that Gaṅgā in the form of a mermaid is introduced on the *jaṭās* in images of later times. Above, there are shown peacock feathers which are delicately carved, a feature not commonly met with in figures of this kind. The crescent moon is not visible. Another interesting detail found on the head is the knot of a strip of cloth probably employed to tie the garland of flowers mentioned above. The manner of its carving is so nice as to show its ends and bow fluttering gently about. There are two *hāras* of beads on the neck. The arms are adorned with crossed bead garlands held together by a fine clasp. This is also a peculiarity which is to be found only in some images of the period to which group this *Naṭeśa* belongs. On the wrists are

kañkaṇas and the fingers are beautified with rings. Of the four hands the upper right hand holds gracefully between its thumb and middle finger a kettledrum executed in an extremely fine manner. The lower right hand is in the usual *abhaya* pose. The upper left hand is shown carrying a flame, which is in the form of a beautiful little conch, resting gently on its top. This feature changes as time passed. The lower left hand is broken, as mentioned above. But there is no doubt that it was held in the *kari-hasta* pose, pointing to the raised left foot. Here, however, is joined an interesting detail introduced by the ingenious sculptor. On this arm is found a thick wavy line which is nothing but the tail of a serpent. As the fore-arm is broken the other parts of the serpent are not to be seen. But fortunately for us, the hood of the serpent is preserved beyond the knee of the raised left leg. As the lower left hand extended to about this knee, it is likely that the serpent was also carved on the hand, its head hanging below as in the examples of Nāṭeśa from Ellora and Aihole. This came to be shown in the right hand in *abhaya*, only in later images. Hence this detail too confirms the early dating of this figure. There is a thick stomach-band and the loin-cloth carved distinctly and there are dots on it suggesting probably that it is of the hide of a tiger in accordance with the *Śilpa* texts and the *Devaram* hymns (cf. பொன்னூர் மேனியனே புலித்தோலை அரைக்கிசைத்து). The upper garment is tied on the waist in the form of two belts and its two ends are fluttering beyond, charmingly. There is a *pādasara* on the ankles of the right foot which is planted on the Apasmāra Puruṣa who is shown here as a beautifully worked dwarf crouching under the weight of the Lord. The dwarf is holding in his left hand the other serpent which is said to have fallen from the hand of Nāṭeśa. As regards the artistic qualities of this figure, the modelling may be somewhat plump but its lines, the light-and-shadow effect displayed here and the highly restrained but tasteful decorative details are such as to make the figure a superb specimen.

At the bottom of the panel on either side of the planted right leg are carved in miniature a few interesting figures. Four of them are on the right side of Nāṭeśa and two on the left side. As the raised left foot is broken the figure carved just below it is not preserved completely. But enough remains to show that the figure represented was that of Nandi. Below this is found a two-handed figure seated cross-legged, keeping between the legs an interesting three-faced pot-drum, a variety of Tamilian drum

called *kudamulā* which is being played upon by the figure. In the description of the dance of Śiva, Viṣṇu is mentioned as having played the role of a drummer. As the figure in question has only two hands and no marks of Viṣṇu are to be found associated with it, it is difficult to identify it. But it may be possible that it actually represents Viṣṇu, without his attributes, simply as any ordinary drummer. To the left of this drummer is carved the figure of a goddess in skeleton-like form probably Kālī as may be identified from the *jaṭāmaṇḍala*. She has four hands: the upper right hand holds something which is not clear, the lower one is held in *abhaya* pose; the upper left hand is in *daṇḍa hasta* pose while the lower left is held in the *varada* pose. There is present *kuchabandha* and other ornaments and garments. The goddess dances the *lalita* mode of dance the charm of which has been effectively brought out by the disposition of the legs.

There is, on the corresponding opposite side, another skeleton-like figure of a goddess, probably also of Kālī. She has the *jaṭābhāra* etc., and four hands, and is performing the *bhujāngatrāsita karaṇa* like the Lord himself, but with this difference that while the Lord holds a flame in the upper left hand, the goddess holds her upper left hand in the *daṇḍa hasta* fashion. This figure is rather disproportionately carved compared to the other figure. The occurrence in this composition of two figures of Kālī in two different modes of dancing is puzzling. It is reasonable to expect a single figure of dancing Kālī as it was due to her challenge that Śiva entered into a dancing contest with her. Probably both the figures represent one and the same deity in different stations displaying two different modes of dancing. This method of depicting a person twice in a composition is called synoptic method. It was extensively employed by sculptors of ancient times. Numerous examples of this method can be cited from the sculptures of Bhārṇāt, Śāñchī, Amarāvati and Barabudur. If this identification is accepted, it is of interest to note the persistence of ancient artistic traditions through centuries, although slowly they were modified beyond recognition. Conversely this feature gives a clue to the date of the entire composition; the earlier a figure is, the greater is its affinity, in technique and details to definitely known ancient sculptures. It may be mentioned that there is significance in showing these two figures in the back-ground. May be this device has been adopted by the sculptor in order to show the defeat of Kālī and the triumph of Śiva. If so, the genius of the sculptor is indeed marvellous as the significance of Śiva's victory

cannot be depicted in plastic form better than in this way. In view of the fact that the period to which this figure is assigned was also the period when the grammar of the *dhvani* school of rhetoricians was perfected, there is no wonder that the Śilpāchārya has caught the spirit behind the *dhvani* type of *kāvyas* and has made use of it in his immortal work, naively and effectively.

Below the second Kālī and carved prominently in the foreground is a kneeling woman with skeleton-like form. Her hair is dishavelled and breasts loosely hanging. These suggest the emaciated condition of the person depicted. The person represented here is apparently the famous woman saint of Tamilnad namely Kāraikkāl Ammaiṃyār who is frequently referred to in the *Devaram* hymns as one who by her extreme penance and devotion to the Lord had the rare privilege of witnessing the Lord's dance in person. Owing to this fact, her figure is found, as a rule, depicted both in sculptural and pictorial compositions of the dance of Śiva only in the early examples, the figure of Kāraikkāl Ammaiṃyār having been dropped from such compositions belonging to later times.

There is one more figure to be noticed. It is that of the dwarf carved between the seated drummer and the Apasmāra Puruṣa. The dwarf is shown seated. He wears a thick ribbon-like *yajñopavīta* (probably *vastrayajñopavīta*) and is playing on a flute. In the Nāṭeśa panels a dwarf of this kind is usually introduced; and it is said to represent Taṇḍu the famous Rishi who was responsible for the propagation of the Nāṭyaśāstra. The figure in question may be taken as a representation of the sage.

A word about the composition of the panel. Great prominence is given to the figure of the Lord while the other figures are carved so very small in size that they do not attract the attention of the beholder. But in spite of their small size, each one of these figures is executed with a consummate skill. In the case of Nāṭeśas from Bādāmi, Aihoḷe, Ellora and Kāñchīpuram, there are more subsidiary figures, all of which are carved more prominently. The reason for this feature is that since they are nearer in date to the more ancient schools of sculpture which specialised in bas-relief works where equal prominence is given to all the persons in a composition or scene they also preserve to some extent the ancient traditions although by their time the ideas of iconography had developed so much as to compel the sculptors to give prominence to the hero of a scene and to relegate the others, taking part in it, to the back-ground. The Nāṭeśa

figure in question being later than those from Bādāmi etc., is still further removed from the ancient schools and their traditions. Hence here the rest of the figures are greatly subdued. Nevertheless depiction of these figures within the frame of the panel itself is an indication of the persistence of traditions of art of more ancient times. In the later examples some of the figures usually associated with a particular scene are dropped out and the rest shown not in the panel itself but outside of it as, for instance, in the Naṭeśa from the Big temple at Tanjore. This was the culminating point at which attention was bestowed only on the central icons. In still later times, the subsidiary figures came to be omitted altogether. Now the relative chronological position of the Naṭeśa under discussion will become apparent.

Bhikshāṭana. To the right of the Naṭeśa figure, in another niche is found a sculpture group representing Bhikshāṭana (Fig. 6) going about for alms and a woman, probably a Rishipatnī, giving alms. The perfection of treatment and modelling of these figures is evident in each of their limbs, and their magnificence becomes apparent even at a glance. No doubt the details of workmanship clearly show that it is also the work of the same *sthapati* who did the Naṭeśa figure. But there appears to be a slight difference between these two in so far as their modelling and the treatment of the flexions are concerned. In the Naṭeśa figure, the modelling, as we have said above, is slightly plump; and the *bhargas* are a bit strained. These are probably due to the fact that *sthapati* had gone wrong, to a small extent, in planning slightly a larger figure than he could carve out of the slab successfully without the defects. In the case of the Bhikshāṭana group the sculptor had apparently overcome the temptation to carve a larger figure and had planned to suit the size of the slab perfectly. The freedom that he had now in this figure had brought about all the difference between these two figures, and the Bhikshāṭana, therefore, throbs with life and movement, and may have to be considered on that account as a greater masterpiece than the Naṭeśa. Fortunately this is not mutilated except in its nose.

The figure of Bhikshāṭana is shown in a slight *bhanga* with the face carved in more than three-quarters profile. The beautiful rhythm of the slow motion of Bhikshāṭana is suggested by the sculptor, in a masterly and brilliant manner, by the slight bend of the head to the left, by the forward thrust of the hip and the charn

ing flexion introduced at the knee of the right leg, which necessitated the lifting of the back of the right foot slightly. This is easily seen by the line running from the tip of the crown to the end of the raised right foot. The grace of this curving line is beautifully emphasised by the gently undulating sway of the ribbon-like *yajñopavīta*, a clever and apt device that can be conceived and executed only by a master sculptor.

On the head of Bhikshāṭana there is a bejewelled *jaṭāmakūṭa*, studded with the usual skull, *Dātura* and crescent moon. In the case of late images of the deity, a *jaṭābhāra* is usually seen. The *jaṭāmakūṭa* of this figure is an indication of its early date. The features of the face are executed with dexterity and skill. It is noteworthy that there is no *kuṇḍala* present in the ears although in the representations of the various aspects of Śiva, a *patrakūṇḍala* is invariably found in one of the ears, more frequently in the left ear. A long garland of beads gracefully adorns the neck; armlet and *kaṅkaṇas*, similar to those seen in the Nāṭeśa, a ribbon-like *yajñopavīta* (*vastrayajñopavīta?*). The shoulders and chest are deftly executed so as to bring out at once the great qualities of the Lord namely supreme power and transcendental majesty. As if to subdue the overwhelming effect that might be produced if the shoulders are left bare, the intelligent sculptor has introduced a gently curling strand of hair on each shoulder. The modelling of the sides and the stomach is indeed superb. Of the four hands the upper right hand holds the small drum and the rendering of this is obviously realistic. The lower right hand is in *lola hasta* pose and is engaged in fondling the young gazelle that is shown gracefully jumping to lick the fingers of the Lord. The upper left hand is engaged in holding an exquisitely worked *chāmara*. The lower left hand holds the alms-bowl. To this forearm clings a serpent the hood of which is hanging down in a beautiful hook. He wears a loin-cloth which has beautiful floral and leaf patterns on it which are probably introduced to suggest that the garment is of tiger-skin. Although Bhikshāṭana figures are more often shown as nude, here is shown another variety of the same icon. Another serpent serves as the waist-band for the Lord. The skilful manner of tucking the tail-end and the beautiful sway of the rope-like portions of the serpent are interesting studies. There is a *pādasara* composed of *kiṅkiṇis* (small bells) on each ankle. The foot-wear called *pādaraksha* is also artistically designed, and is probably made of *svaṛṇa*. It may be mentioned in passing that copper-gilt *pādarakshas* almost similar to these have been obtained

from treasure-trove finds and are preserved in the Madras Museum. By the side of the left leg of the Lord a dwarf is shown. He carries on his head a big bowl probably intended to keep the surplus alms collected by the Lord. With the bowl on his head the height of the dwarf is only upto the Lord's knee. He wears big *patrakuṇḍalas* in his ears, a thick *kaṇṭhī* and a broad *yajñopavīta*. The most interesting feature of this figure is the demon's face carved on his belly (Fig. 7) which makes the figure a beautiful and interesting example of Gaṇas of the *udare mukha* variety. It must be noted that representations of this class of Gaṇas have always been few even amongst sculptures from such places as Amarāvati, Sāñchi, Bādāmi and Bhārḥūt. They become very rare after about 1100 A.D. The occurrence of this type of Gaṇa here is therefore significant as it shows unmistakably that the sculptor who did this was perpetuating ancient traditions as he was nearer to the age when they were very popular.

On the right stands a woman. She is only half of the size of Bhikshāṭana. She wears her hair in the manner of a *koṇḍai* which is here shown artistically on the left side. Moreover, her head-dress is adorned with flower garlands carved beautifully. There are *ratna kuṇḍalas* in her ears, a series of *hāras* on the neck, *chanavīra* in the body, *keyūras* on the arms and *valayas* on the finely chiselled and the carving of the hanging ends of it is tasteful. There are waist-bands or *ratnas*. The *uttariya* too is wound round the waist with a charming curve in the middle. A *pādasara* of *kiṅkiṇis* is found on each foot. With her projected right hand which holds a spoon(?) she is offering alms to the Lord who has taken the rôle of a mendicant. Her left hand is hanging down in the *lola* pose. The facial features of the figure are obviously expressive of *vismaya* (wonder) at the sight of the *divya manohara vigraha* (resplendent and lovely figure) of the Lord. Her feeling naturally makes her bashful; and she therefore shrinks a bit as is characteristic of family women. The genius of the artist has indeed been remarkable as he could conceive of this subtle and significantly characteristic feeling of women on such occasions and delineate it so effectively by means of the slight forward bend of the torso. His figure, as stated above, most probably represents a *Ṛshipatnī*. It will now be evident what a remarkable piece of sculpture it is, in spite of the fact that it is primarily of interest iconographically.

Liṅgodbhava. In the central niche of the back wall of shrine, is found a *Liṅgodbhavamūrti* in the characteristic early Chōla style.

Kaṅkālamūrti. On the north wall of the shrine there are three interesting sculptures, namely, *Kaṅkālamūrti*, *Kālārimūrti* and *Durgā*. As the image of *Durgā* is of the usual type, it is left out and the rest are noticed below.

Of these, *Kaṅkālamūrti* (Fig. 8) is fixed in a niche which appears to have been specially scooped out to receive it, whereas the other sculptures, occurring in this temple, are fixed flush with the wall. He has a high *jaṭāmakūṭa* with the usual emblems, with an additional detail of serpent on it. The fillet on the forehead consists of circular jewels. A *patrakunḍala* on the left ear and a *makarakunḍala* on the right ear are seen. A big *kaṇṭhī* with a large jewel in its centre and a loosely hanging garland of beads adorn the neck. The *yajñopavīta* is bejewelled and bears a clasp from which two ends of the strands hang. There are *nāgas* winding round the arms and a *valaya* of beads instead of *keyūras*; and *kaṅkaṇas* are found on the wrists. There are four hands of which the upper right hand holds a *ḍamaru*, the lower one is held in the posture of touching the waist-band; the upper left hand is holding a single-hooded serpent while the lower left hand is shown holding a staff topped by a corpse-like figure. The loin cloth has a free end which is shown as flat in front and falling between the legs. The two waist-bands are also of jewels with a tassel hanging from the centre of the lower one. There is an anklet on each ankle. The figure wears *pādarakshas* which are worked differently from those of *Bhikṣhāṭana*.

It will be seen that the details of decoration of this figure differ considerably from those of the two figures discussed above. Besides, the figure is apparently a little disproportionate. Though the *jaṭāmakūṭa* on the heads of *Śiva* figures may be conspicuous, here it is very much exaggerated. The modelling of the torso and the limb is also not upto the mark. On these grounds of stylistic differences and on the ground of its being found in a niche, perhaps specially made for it, it may be said that this figure is later than the previous ones, although not very much later. Nevertheless, there are present in this figure, the qualities such as restraint in embellishment and expressive facial features, of early *Chōla* sculptures. The fact of its being made and introduced later may indicate that either there was a figure already here, although it is not known what it represented, but perhaps, a *Kaṅkālamūrti* for which the present one is a substitute, or it was newly put in in order to satisfy the desire of a powerful person, probably, a king who

wanted to fill up the blank spaces on the walls with sculptures representing some more aspects of the Lord.

Kālārimūrti. The next sculpture (Fig. 9) represents Śiva as Kālārimūrti. This is also of fr̥quent occurrence among Chōla sculptures, as those described above. But as specimens of sculpture belonging to various periods and different localities, each is of importance in that, though the subject matter is the same, its conception and execution differ according to the genius and capacity of the sthapatis who actually produced them.

The figure wears a high *jaṭāmakūṭa* with the usual emblems on it. There is a more ornate fillet round the head. *Makara kuṇḍala* and *Patra kuṇḍala* are present in the ears. The face is almost square in form and has features suggesting an ironical smile. A thick cluster of necklace adorns the neck. The *yajñopavīta*, unlike in the above mentioned figures, is in three strands and has a more elaborately worked clasp. The *udarabandha* is also ornate. On the arms are *nāgavalayas* which are different from those of Kaṅkālāmūrti in that here the hood portions have been worked as leaf designs. *Valayas* are seen on the wrists. Of the four hands, the upper right hand, which is kept low here, holds the trident (*triśūla*) the prongs of which show certain details which are characteristic of the tridents of Pallava times. The lower right hand is held up and is engaged in brandishing the *paraśu* in the posture of striking at the figure of Kāla or Yama shown below. The upper left hand is perhaps in the *vismaya* posture, the Lord wondering at the audacity of Kāla who, forgetting for the moment that the Lord is Kālakāla (supreme Kāla) put his noose around Lord's *chinha* of *liṅga* also. The lower left hand is in *sūcī hasta* pointing down to Kāla beneath. The usual loin-cloth and simple waist-band are present. Legs are kept wide apart with a bend at knee portions suggesting violent action. Kāla (Yama) is carved on the pedestal, in the posture of having fallen on his left side and facing us. His hair is shown as if flying. The posture of his right hand held pointing to the Lord above, and the dismayed expression of the face are clearly indicative of his acceptance of utter defeat and helplessness before the Lord. It may be of interest to refer to a similar oft-repeated Buddhist theme namely Māra's defeat at the hands of the Buddha where too exactly similar situations occur and feelings come to play. To the right of Kālāri is a miniature panel showing the teen-aged Rishi Mārkaṇḍeya firmly clinging to a Śiva-liṅga. Though the panel is small and the

figure of the Rishi is not quite distinct yet the sculptor was careful in delineating the feeling of complete surrender to the Lord of the boy-sage by means of calm facial features. While discussing the Naṭeśa sculpture, we have referred to the tendency to relegate completely to the background such panels as the one under discussion or to dispense with them altogether, from the time attention had begun to be bestowed more and more on iconography where the images of the Lord alone predominate than on the depiction of stories in a continuous narrative form. Here it is more in evidence than in the Naṭeśa composition.

This feature coupled with the fact that the details of this figure are more developed than even those of Kaṅkālamūrti is proof positive that the sculpture is later than the Kaṅkālamūrti. That the size of this figure is small compared to that of the previous three figures may be an additional point in dating it to a later period, because if it was coeval either with the Kaṅkālamūrti or the other two, then the *sthapatis* who did them would have made this also of similar proportions. Besides these, its style itself is akin to that of the sculptures found in the Big temple at Tanjore rather than to that of the three sculptures discussed above. Notwithstanding this fact the workmanship of the figure, especially above the waist, but for the slightly over-tilting of the *jaṭāmakūṭa*, is exceedingly fine and the dynamic movement which should be inherent in such figures is remarkably brought out by the sword-brandishing-hand and the legs kept in the posture of running.

This sculpture too presents a problem namely, if this is later than others, why and how it was introduced here. A solution to this is not easy. Perhaps there was no figure at all at the place where this is found; or there was a figure of Kālārimūrti here which was broken and mutilated necessitating its replacement by the present one. The latter of the two reasons seems more probable.

Nānasambanda and *Appar*. Besides the above mentioned sculptures, there are in the temple, representations of these two important Śaivite saints. These are also carved in high relief and introduced in spaces formed by pilasters, to the left of the Naṭeśa figure, on the southern wall of the shrine.

The figure of Sambanda (Fig. 10) is done in the three-quarter profile with the right side facing the spectator. Hence only partly the left side of the figure is visible, the left hand and shoulder being almost out of the picture. The head seems to be shaven except for the suggestion of a small tuft in its centre which is shown

in front. The face is oval. It is tilted a bit to the right and hence it looks up a little. The eyes and lips are expressive of solemnity rather than joy. There is a garland of beads round the neck, an armlet on the arm and a *valaya* on the wrist. The hands are engaged in playing on cymbals which are a characteristic attribute of Sambanda. The gesture of playing on them taken in conjunction with the tilted head is significantly suggestive of the great event in the life of the saint namely his having begun to sing, immediately after Pārvatī had suckled him, his immortal *Devarams*, couched in elegant and sweet Tamil, in praise of the ultimate one in the form of eternal couple. There is a waistband of two strands the ends of which are carved realistically, as falling on the right thigh. Just a piece of cloth (*kaupīna*) is worn by him to cover his private part. The legs and feet are simple in workmanship.

Appar is represented frontally (Fig. 11). Here too, the head is shaven but a garland of beads is carved on it. The face is oval and its features suggest seriousness. Here also, as in Sambandar, a long garland of beads, *valayas* etc., are found. But here Appar holds a spud, his characteristic attribute, in his left hand. The right hand is held in the *chinmudrā* pose, which, viewed together with the seriousness of the face, clearly indicates the spiritual self-analysis in which the saint was engaged since he became a convert to Śaivism from his early faith of Jainism. The nipple is prominently seen and it is a characteristic feature of early sculpture. There is only a single-strand waist-band intended for tucking in the small piece of cloth called *kaupīna*. The knee-joints are distinctly worked here unlike in Sambandar. Compared to the Sambandar figure, workmanship of this figure is bolder. The clean-cut face, the broad and well-shaped shoulders, the beautifully modelled torso and thighs are intended most probably to suggest that the saint was aged. On his left thigh is a representation of a *liṅga* probably located under a tree of which the branches are seen to the left of the head of Appar. The Sambandar figure is, on the other hand, suggestive of his boy-hood. In other details both of them agree. Their style is unmistakably the same as that of the Nāṭeśa and the Bhikshāṇa sculptures.

When these figures are accepted to be contemporary with the shrine itself they become important in more respects than one. Though representations of Chaṇḍikeśvara, one of the Śaivite saints, are known from the Pallava times, figures of other saints do not appear to have been carved on the walls of early temples and

therefore the present figures are probably the earliest known examples of this practice. Subsequently from the inscriptions of Rājarāja I, it is known that the practice of making metal images of the most important Śaivite saints was in vogue in his time. Secondly at the time when these figures were made, the practice of the *sthapatis* was to carve them draped only with a *kaupīna*. During subsequent periods there was vacillation between this practice and the practice of showing the saints draped from the waist to knees. A number of examples, in the latter fashion are known. A few of them in metal may be found in the Madras Museum. Thirdly the gestures of the two figures are also noteworthy. The *sthapati* of these, while delineating their gestures, might have been guided by the traditions relating to them which were current then and which, not being far removed from the time when the saints lived, were more dependable and authentic. The later-day examples of these figures are done in a variety of gestures.

The most interesting and important thing about these figures is their bearing on the question of the date of Sundaramūrti-nāyanār the third member of the famous Dēvāram Triad. Controversies were raging over the date of Sundaramūrti. Recently an eminent Tamil scholar has assigned him to the first quarter of the 9th century. If this is accepted then, after this date till we come to the inscriptions of Rājarāja I, referring to the donations of metal images of the saints made to temples, and the paintings of the Brihadiśvara temple where scenes from the story of Sundaramūrti are depicted, there is a long period during which no figures of Sundaramūrti, either in sculpture or in painting, seem to have been made. On the outside of the plinth portion of the innermost gopura of the Tiruvannamalai temple, belonging to about the last quarter of the 11th century A.D. there are figures, of all the three saints, two of them carved on the right side and the third on the left side, of the entrance. From this it is clear that by the eleventh century the practice of carving figures of these saints on temple walls had become common. When, therefore, there are the bold representations of only Sambandar and Appar in this temple dated about the middle of the 10th century A.D., and situated at the capital of the Chōlas, who were ardent devotees of Śiva, and who had great respect for the saints, should we take that Sundaramūrti, whose figure is conspicuous by its absence here, had not become famous then? Or was Sundaramūrti then alive? Or would that be that he lived only after the building of this

temple? We have said above that probably these sculptures of Sambandar and Appar are amongst the earliest examples of their kind. If so, the time that had elapsed between their date and the date of their representations in sculpture here is very considerable. But that their fame was widespread even from their life-time itself is corroborated by such literary references as the one referring to Sambandar occurring amongst the writings of the great Śankarāchārya. On this analogy, the absence of the figure of Sundara from this temple, should not be taken to prove that either he was contemporary with the building or that he was born after it was built. But it is to be taken as proving the fact that at that time, popular feeling which permitted the carving of the images of the two other saints who were dead and gone centuries earlier, was against the introduction of a figure of Sundara who, inspite of his learning and saintliness, was only a man of yesterday, i.e. who lived about a century or so back. Later on, after about a century, his figure too was carved along with those of the other two, on the temple walls.

From the foregoing examination of the sculptures in the temple, its importance is clearly known. It is more or less a small gallery of sculptures where specimens of the art of more than one school are found side by side. It admirably aids a comparative study of them. And the existence of the figures of the two saints brings out clearly the fact of the comparative obscurity of Sundara-mūrti at the time when this temple was built.

Not far from this temple, on the bank of the canal, was found a sculpture representing Brahmā.² It (Fig. 12) is nearly life-size and is now in the Tanjore Art Gallery. In fact the Gallery came into being only on account of this image. It is not known how it happened to be at the place where it was found. There are no vestiges of any shrine. Most probably it was originally in the precincts of the Śiva temple noticed above, just as in the case of Brahmā images of Kaṇḍiyūr.

Brahmā is seated on a beautiful *kamalāsana* in the *sukhāsana* posture. There are four heads with a common *jaṭāmakuṭa*. The features of the face are suggestive of profound meditation. Gem-set *makarakuṇḍalas* are seen in the ears. There are a gem-set *kanthī* and a *muktāhāra*. The *yajñopavīta* is also of pearls and is

2. For other similar Brahmā images see *Rupam* Nos. 35-36 July, Oct. 1928, pp. 29-30.

worked delicately, showing clasp and tassels in a beautiful manner. A gem-set broad *udarabandha* is also found. Of the four hands the upper right hand is broken and it is not therefore known what was there. Perhaps there was the *charu*. The lower right hand should have held a lotus bud which is broken. The upper left hand carries an *akshamālā* while the lower one which is in *varada* pose is placed on the thigh. The florid *keyūras* and the jewelled *kañkaṇas* on the arms are noteworthy. The lower garment is worked only upto the knee. There is the *uttarīya* shown with beautiful loop which is shown on the pedestal. A very fine *simhamukha* clasp is also seen here. A *pādasara* adorns each foot. The back view of the figure (Fig. 13) shows certain interesting details. No doubt the back is also as beautifully done as the front, and the tucking in of the end of the *kaccha* of cloth is also fine. Some attention seems to have been bestowed on the *yajñopavīta* too. But the rest of the details are not so carefully worked out as on the front side. It is quite evident in the *udara-bandha*. Though this kind of treatment of the back-side of sculptures is characteristic of specimens of modern period (i.e. after 1600), from this Brahmā image, it is seen that it is an old practice.

It is apparent that as a work of art it is a wonderful specimen except for the slightly defective proportions of the left fore-arm and generally of the part below the waist, although the *padmāsana* is elegantly done. It may be mentioned here that in a good many early examples of sculpture the tendency to concentrate attention on the bust has been marked; and here it is justified because the portion that really matters in such seated figures is that from the head to the waist. From the close affinity of the style of this figure with that of the Niśumbhasūdanī, discussed above, this may be said to belong to the latter half of the 9th century, if not earlier. The existence of this image of Brahmā here and two similar ones at Kaṇḍiyur which are remarkable for their size and style of workmanship, may not be without significance. Such large images in the round, were made to serve as *mūlaberas*. It is not known whether in the present instance, these images were installed in separate shrines or in subsidiary shrines which formed part of large temple complex like the Vijayālayachōḷeśvara. Anyway one thing seems to be clear that worship of Brahmā was in vogue in and around Tanjore at the time of the foundation of the Chōḷa empire, it having fallen into disuse later on.



Fig. 1. Dakṣiṇāmūrti.

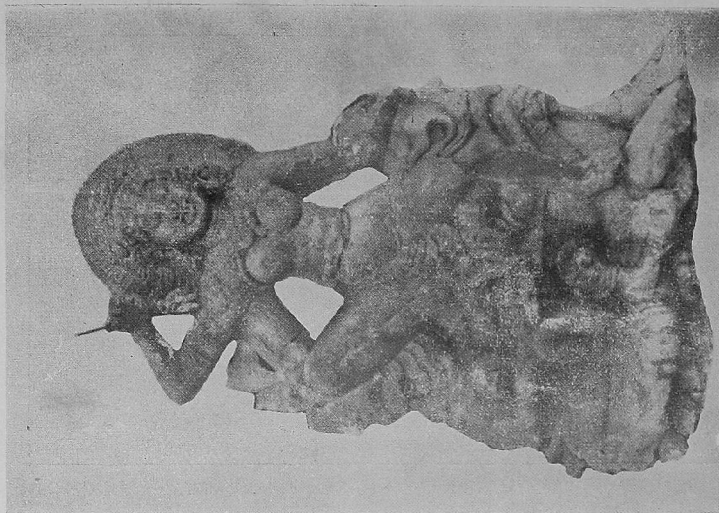


Fig. 2. Nisumbasūdanī.

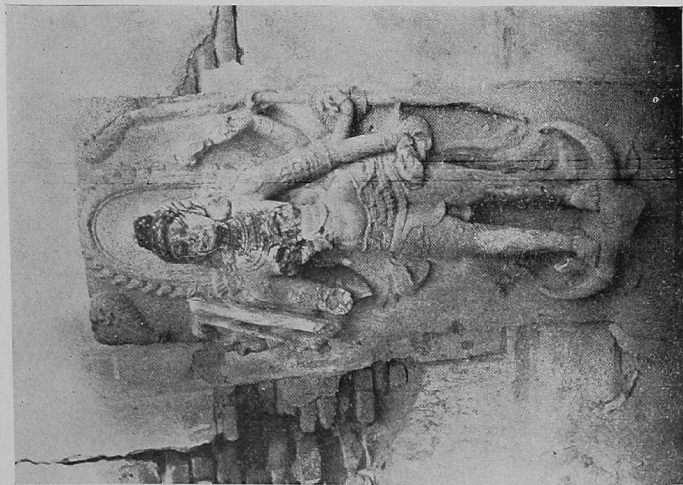


Fig. 3. Durgā.



Fig. 4. Gangādhara



Fig. 5. Natesa.

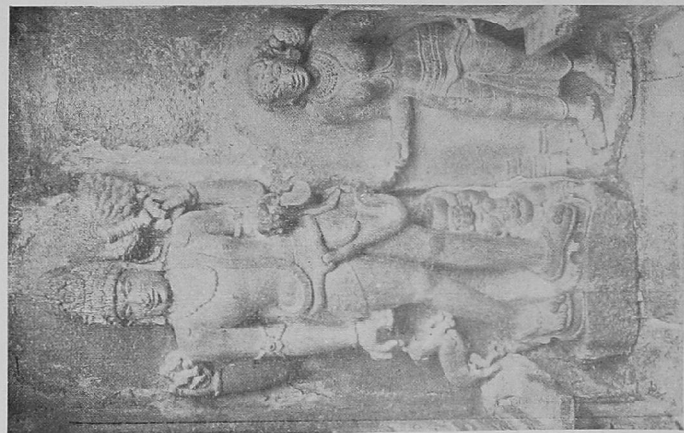


Fig. 6. Bhikshāṇa.



Fig. 7. Dwarf by the side of Bhikshāṇa.

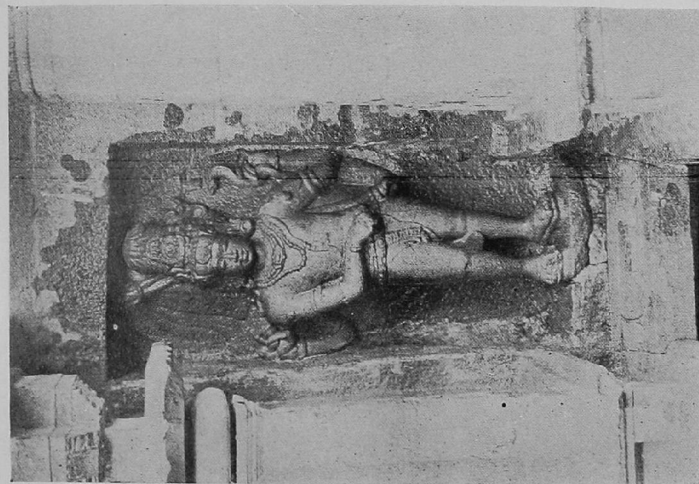


Fig. 8. Kankalamurti.



Fig. 9. Kalarimurti.

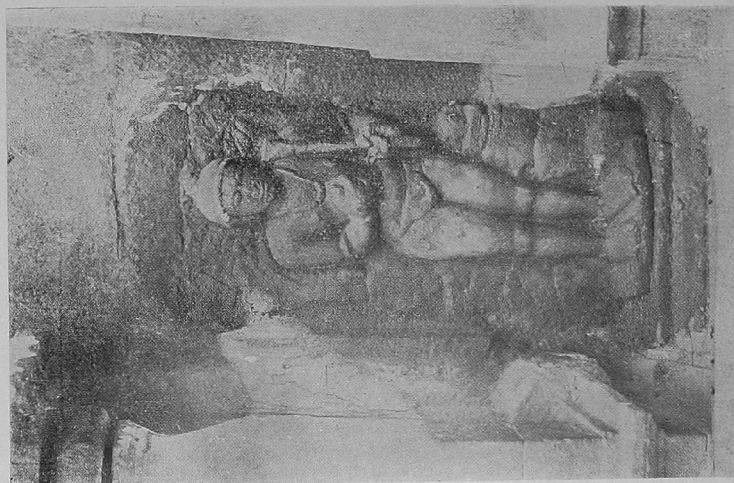


Fig. 11. Appar.



Fig. 10. Sambanda.



Fig. 12. Brahṃā, Front view.



Fig. 13. Brahṃā, Back view.

4. Conclusion

In the foregoing pages, we have tried to draw attention of scholars to the following facts.

First, the existence of sculptures in Pallava style at Tanjore itself shows that even prior to the time of the imperial Chōlas, there was here an active school of sculpture. In this connection it will be useful to remember the examples of architecture and sculpture of Mahendravarman I's time at Tiruchirapalli which is only about 30 miles west of Tanjore, as well as inscriptions of late Pallava kings namely Tellāreṇḍa Nandipottaraiyar³ and Ko-Vijaya-Nṛpatuṅgavikramavarman,⁴ at Tillaisthānam and Kaṇḍiyūr respectively, places which are situated at about 5 or 6 miles to the west of Tanjore.

Secondly, the rare and very early image of Nisumbhasūdani found at Tanjore has been taken to be most probably, the image of the goddess for whom, Vijayālaya, the first king of the imperial Chōla dynasty, is said to have erected a shrine, soon after his becoming the king of Tanjore. If this is accepted one more landmark becomes known of the time of Vijayālaya.

The architecture of the temple of Vasishṭheśvara at Karuntaṭ-tānguḍi is interesting as it is earlier than the Big temple at Tanjore. The sculptures of this place are extremely interesting. For instance the Naṭeśa, Brahmā and Bhikshāṇa are superb specimens of their kind. But the most interesting sculptures are those representing Sambandar and Appar. They are probably the earliest representations of the saints. The absence of Sundaramūrti from this group raises the interesting problem of his date. We have come to the conclusion that Sundaramūrti must have lived more than a century before the time (i.e. about the middle of the 10th century A.D.) when the representations of Sambandar and Appar were allowed to be included on the walls of the temple.

That there were people specially devoted to Brahmā is taken to be known from the magnificent representation of the God, now removed to the Tanjore Art Gallery. This view may be said to get support from the existence of similar Brahmā images at Kaṇḍiyūr and Tiruvaiyāru.*

3. M. E. R. No. 52 of 1895.

4. M. E. R. No. 17 of 1895.

*I am extremely grateful to Dr. A. Aiyappan, Superintendent, Government Museum, Madras, for his encouragement and kind help in the preparation of this article.

SOME PROBLEMS IN THE ARCHAEOLOGY OF SOUTH INDIA *

BY

DR. BENDAPUDI SUBBARAO

Introduction: Importance of regional studies — Recent developments in Indian archaeology with special reference to Central India and Maharashtra — Prehistoric and Protohistoric sequence in South India — The Early Historic period and the problem of the megalithic remains.

India is a vast sub-continent with varying physical and physiographic features. While the whole Indo-Pakistan sub-continent has its physical frame firmly separated from the rest of Eurasia, within the country however, there are ridges of hills and forests running across and marking off compact river basins, which have become the focii of the various linguistic and cultural units of India. As Sunitikumar Chatterjee has pointed out, "..... the economic milieu, and the special training which the minds and the emotions receive in an organized or corporate body of men, create a framework of civilization or ordered life which commonly finds expression in the language of that body of men: and hence we are more justified in speaking of *language cultures* than of racial cultures"¹ The recent work in Indian archaeology has driven home the need to understand the true significance of these linguistic and cultural units, each of them with a distinct geographic personality. The archaeological evidence has been used by the writer elsewhere to show that the cultural milieu of the first large scale agricultural communities in each of these regions was different and these and other sub-cultural phenomena affected the further development in these regions.²

When we recognize the insignificance, the necessity to study the cultural sequence in each of these zones needs no emphasis.

* Substance of a lecture delivered before the Archaeological Society of South India on 24-12-1955.

1. Majumdar and Pusalkar: *The Vedic Age*, Bombay, 1952 p. 145.

2. B. Subbarao: *The Personality of India*, M. S. University Archaeology Series, 3, Baroda, 1956 (*Personality*).

When the history of these individual regions is studied and analysed to differentiate their sub-cultural phenomena from the intrusive elements that have gone into their make-up, we will ultimately be able to map out the exact course of the development of material culture vertically in each of the regions and the various horizontal movements that influenced the local cultures. It is the inter-action of these centripetal and centrifugal forces that has given rise to the commonly accepted concept of unity in diversity to this sub-continent. Hence the greatest desideratum today is the intensive exploration of the nuclear areas of South India like the lower reaches of the Krishna-Godavari basins, Kāvērī basin in Tamilnad, Kerala and the Mysore region.

Within the last five years, Western India, — (Gujarat and Maharashtra) and Central India have been subjected to a fairly intensive exploration and excavation by the Deccan College Research Institute under the guidance of Dr. H. D. Sankalia and the M. S. University of Baroda under the guidance of the writer, besides the important excavations and explorations of Shri S. R. Rao and P. P. Pandya in Kathiawad. In the winter of 1953 the ancient city of Māhishmati on the river Narmadā, located along the famous highway linking Paithan on the Godavari with Vaisali in the heart of ancient Magadha, was excavated jointly by the Deccan College and the Baroda University. The results of this excavation, which will be dealt with in greater detail, revealed the existence of a wide spread Chalcolithic culture in the Malwa plateau succeeded by the Early Historic Period with extensive contact with the Gangetic basin indicated by the occurrence of the Northern Black Polished ware. The association at this site of the usual "Megalithic" or Red-and-Black pottery, as it is called, with the Chalcolithic levels, and profusely in the subsequent Early Historic period, for the first time showed this pottery in a non-megalithic context and gave rise to a lively controversy about the inter-relation of these ceramic groups in Northern and Southern India, or to be very specific, megalithic and non-megalithic zones. This problem has been complicated still further by the known association of similar pottery in the "Late Harappan" cultures, Painted Grey ware culture and the "Kathiawad Harappan" from its earliest levels. This problem gives rise to great questions like the Megalithic problem.

Secondly this Chalcolithic culture (particularly of Nevasa) also showed certain affinities to Wheeler's Chalcolithic Polished-

axe Culture of Brahmagiri, with which all of us are familiar from 1947. The study of the highly specialized technique of long-blades associated with it, also confirmed the inter-relation of these various Proto-historic Chalcolithic cultures of Western, Central and Southern India. Hence in the course of this paper, it is proposed to concentrate mainly on these two problems: (1) Proto-historic culture sequence of South India and (2) Megalithic problem, within the frame work of a general survey to give a proper perspective to the picture.

Excavation at Maheshvar³

Central India and the Narmadā basin have justly fulfilled their function as a corridor for the migration of cultures between the Indo-Gangetic basin and the Deccan peninsula. Here we have a widely distributed culture characterized by the use of black paintings on red and cream wares with a highly specialized Blade-technique employing the crested guiding ridges for mass production of long parallel sided flakes.⁴ There is definite, but some what scanty evidence of copper—like a rod, fish hook etc. But the most interesting associated ware is the Red-and-Black ware with an occasional painting on it. This ware occurs with the Gangetic Valley Painted Grey Wares in Bikaner and the lowest levels of the "Harappan" in Kathiawad at Lothal.⁵ Thus it links up almost all the late and Post-Harappan Proto-historic cultures of India. Its relative chronology in relation to the N.B.P. shows again the lower limit of these chalcolithic cultures to be about 500 B.C.

In the next period we see the appearance of iron tools—sickles, arrowheads, hoe with turned in sides, spearhead, nails etc. The dominant ceramic of this phase is the Red-and-Black pottery in a variety of forms and shapes reminiscent of the 'megalithic ware'. At Maheshvar we have nearly 31 feet deposits of this period with N.B.P. and square and round punch-marked coins.

The third period extends well into the Christian Era and shows contact with Western India and the Gangetic basin with

3. Sankalia, Subbarao and Deo: "Culture Sequence in Central India" *Southern Journal of Anthropology*, IX, New Mexico, 1953.

4. Subbarao: "Chalcolithic Blade Industry of Maheshvar—A Note on the History of the Technique." *Bulletin of the Deccan College Research Institute*, XVII, 1955.

5. I am obliged to Shri S. R. Rao for this information.

large quantities of Red Polished Ware, with a close affinity in technique to the Roman Samian and other red wares of the Mediterranean region.

Excavations at Prakasha, Bahal and Nevasa

Moving further southwards in the Tapti basin, at the sites of Prakasha⁶ on the main Tapti river and Bahal on the Girna,⁷ its tributary, we have an allied Chalcolithic culture at the base associated again with the same highly specialized technique of the blade. These two sites south of the Vindhyas show some slight variations in pottery decorations, thus suggesting a slight regional difference, but within a wide allied culture-complex. Bahal, however, is very important from the point of view of South Indian archaeology. In the burials found at the site, a large number of Red-and-Black pottery forms and one painted jar were found in simple pit burials and these pots show a very close affinity to those found under the cists V and VI at Brahmagiri in 1947.⁸ (Fig. 1).

In the Godāvāri basin, Jorwe and Nevasa represent another variant of these proto-historic Chalcolithic cultures with similarities and resemblances, but bound together by the common Black-on-Red painted pottery and the specialized blade technique. But in the next phase characterized by the N.B.P., Red-and-Black pottery and iron, it fits into the general picture of South and Central India.

About the affinities of this Chalcolithic culture, Nevasa shows a remarkable evidence. It combines the usual traits of the Proto-historic cultures of Central India and Tapti basins with polished axes of trap and the coarse grey ware urns, immediately reminding us of the Brahmagiri Chalcolithic culture. We discuss the exact implications of these features a little further.

South Indian sequence and problems

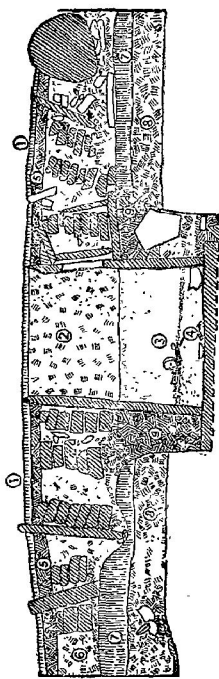
Before we take up some of the chief problems, let us have a rapid survey of the pre-historic culture sequence. As for Pre-history, the only area where we have a reasonably definite stratigraphic picture is the Madras area. Here we have an "Abbevillo-Acheulean" lower Palaeolithic Industry tending to show in the

6. *Archaeology in India*, 1954-55.

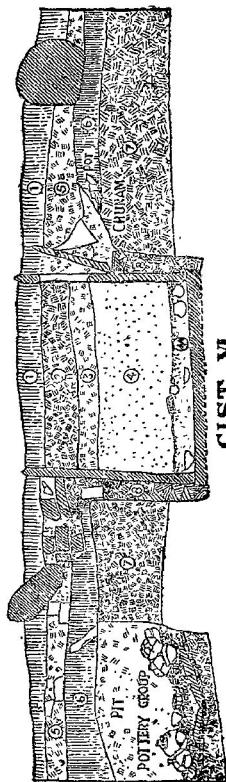
7. I am obliged to Shri M. N. Deshpande for this information.

8. See *Personality* p. 52 and Fig. 20,

BRAHMAGIRI - CEMETERY AREA **PITS WITH POTTERY OUTSIDE THE CISTS**



CIST V



CIST VI

Fig. 1.

later stages a "Levallois" technique. For the rest we have to depend on the 4-fold typological sequence suggested by Cammiade and Burkitt in the Andhra area.⁹ Beginning with a typical Abbevillo-Acheulean industry (I and II series), we have a lighter industry of blade, scraper and burii (III) and ending in a typical geometric Microlithic Industry (IV). The writer has elsewhere suggested the use of the terms "Early, Middle, Late" for these series; I and II constituting "Early", III constituting "Middle" and IV constituting "Late".¹⁰ Since we have very little fresh stratigraphic studies, we have not made any fresh advance in this direction. The most interesting study being that of Prof. Zeuner and Bridget Allchin on the Late Stone Age Microlithic industry of the Teris in the Tinnevely District. There is no doubt about the considerable antiquity of this industry. Its only distinctive feature is the occurrence of bi-facial points, which are rare or even absent in the general Indian Microlithic industries. Dr. Seshadri has published his systematic studies of Mysore Microlithic industries.¹¹

The next period, the Neolithic, is very interesting and for the first time shows a differential distribution (Fig. 2). At present it is confined to the gneissic and metamorphic areas of Karnatak, Andhra and Tamilnad north of the river Kāvērī. From the point of view of stratigraphy, we have to go back to Brahmagiri excavated by Wheeler¹² and Sanganakallu¹³ excavated by the writer. At Sanganakallu, we have a true Neolithic culture succeeded by a Chalcolithic one characterized by the presence of the painted pottery and blade industry. This latter culture corresponds to Wheeler's Brahmagiri I (A and B). The recent excavations at Maski conducted by B. K. Thapar have also confirmed this position. In view of the occurrence of the coarse grey ware urns and polished axes at Nevasa, we probably have a better evidence of definite contact and movements in either direction from north to south and *vice-versa*. Thus we can describe the sequence in Bellary-North Mysore region as one of a true Neolithic culture succeeded by a Chalcolithic one moving down from Maharashtra.

9. See *Ancient India*, No. 3.

10. See *Personality*, p. 12.

11. M. Seshadri: *The Stone Using Cultures of Prehistoric and Proto-historic Mysore*. London, 1956.

12. Wheeler: *Ancient India*, No. 4.

13. Subbarao: *The Stone Age Cultures of Bellary*, Poona, 1948, (Bellary).

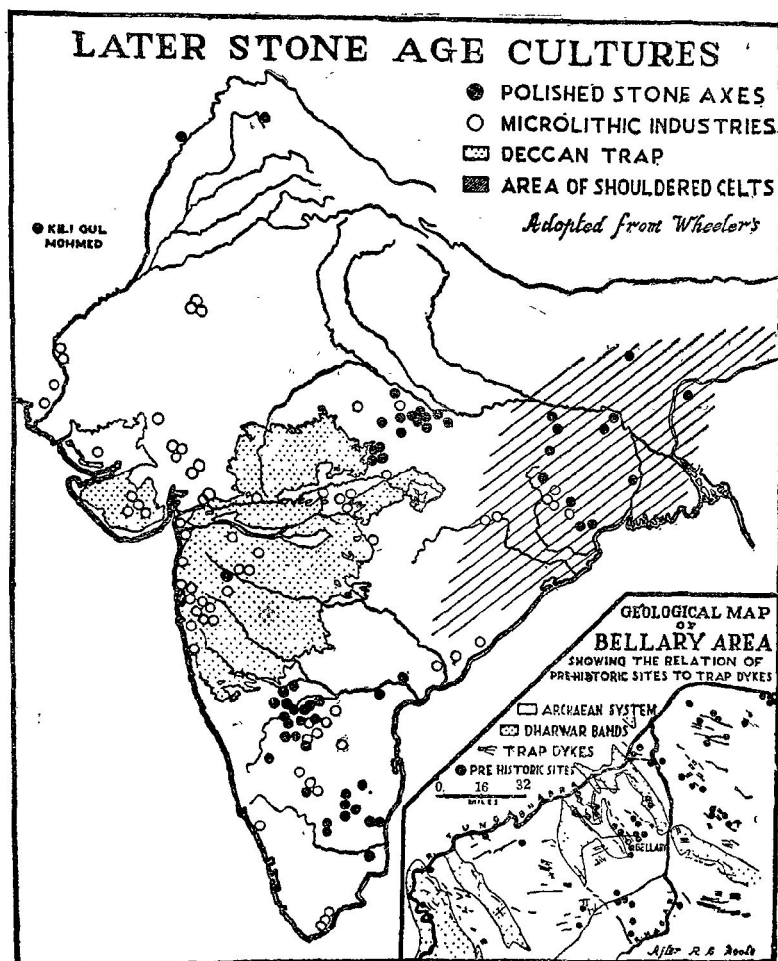


Fig. 2.

Here again, the widespread distribution of the crested guiding ridge technique and the blades confirm the widespread and mutual influences between the Western, Central and South India. (See Fig. 3).

This problem has been clarified by the recent work in Maharashtra. In view of this, the small excavation conducted by the writer at Sanganakallu assumes greater importance now when we can isolate the indigenous and imported elements that went into the make up of this Chalcolithic culture of Northern Mysore. Hence the most urgent problem is a large scale excavation at Sanganakallu and trial diggings at a few Neolithic sites. This tentative position is very important in that it shows very interesting possibilities for the future. (Fig. 4).

The most remarkable feature about the distribution of the Polished axes is their coincidence with the distribution of Trap dykes of the Cheyār series of the Cuddapah system spread over Salem, Chingleput, South Arcot, Coimbatore Nilgiris, Bellary, Anantapur and Raichur Districts.¹⁴ Hence it is very significant that no polished axes have been reported south of the river Kāvērī. Their widespread occurrence in Karnatak and Andhra is already known from the great index collections of Foote. Tamilnad, however, is more or less left unexplored for this culture, but for the sites noted by Foote in the Salem District and a few in Madurai District. The occurrence of these axes on the Kāvērī near its junction with Kapini in the Mysore State,¹⁵ certainly gives us hope of its occurrence downstream in Tamilnad. Thus the Kāvērī basin in its lower reaches should be thoroughly explored as it is the nuclear focus of Tamilnad. We have noticed that copper and bronze were introduced into a purely Neolithic population in South India. But whether these elements moved further east into the lower basin of Krishna and Godāvari and south into Tamilnad is yet a matter of conjecture. But the probabilities are of a very high order.

The Early Historic Period and the Megalithic Problem

As already stated, the occurrence of the Red-and-Black ware in the so-called non-megalithic areas of Western and Central India

14. Edwin Pascos: *Manual of the Geology of India*, Vol. I, 1950, pp. 469-83.

15. Seshadri: *op. cit.*, pl. 3.

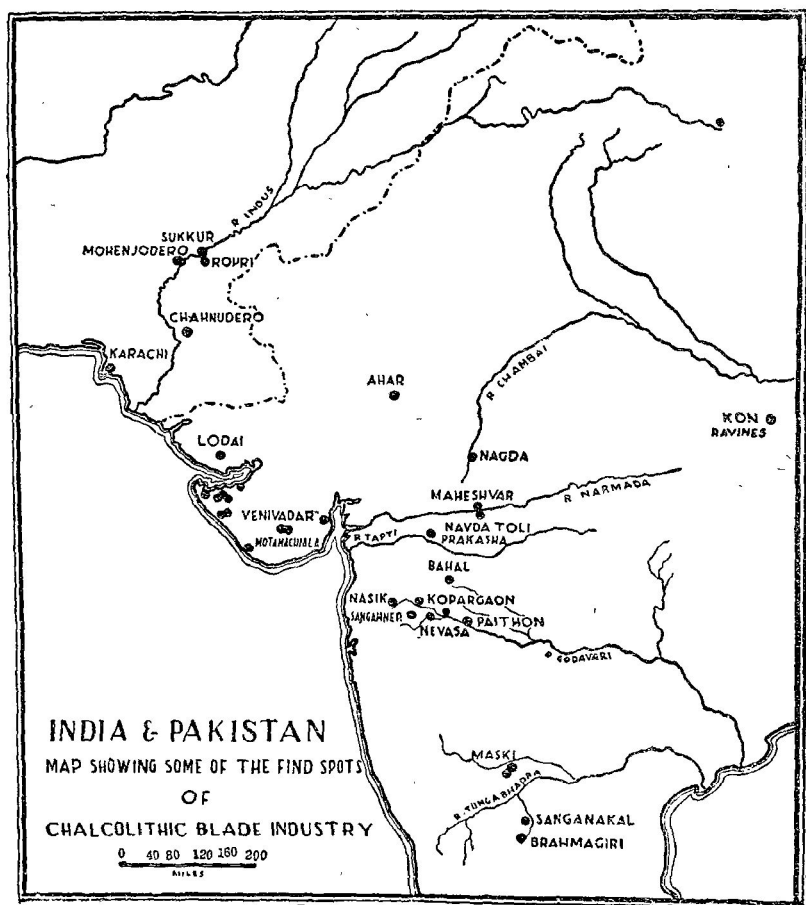


Fig 3

CULTURE SEQUENCE IN CENTRAL DECCAN

	<p>EARLY HISTORIC II (SATVAHANA)</p>	<p>RUSSET COATED CRISS-CROSS WARE, SATVAHANA AND ROMAN COINS ROULETTED WARE</p>
	<p>EARLY HISTORIC I (MEGALITHIC)</p>	<p>RED-AND-BLACK WARE IN ASSOCIA- TION WITH IRON AND MEGALITHIC BURIAL COMPLEX</p>
	<p>PROTO HISTORIC CHALCOLITHIC PERIOD</p>	<p>SLOW INFILTRATION OF PAINTED POTTERY AND COPPER AND BRONZE INTO NEOLITHIC COMMUNITIES</p>
	<p>NEOLITHIC</p>	<p>AGE OF POLISHED STONE AXES AND EARLY AGRICULTURAL AND PASTORAL COMMUNITIES.</p>
	<p>LATE STONE AGE</p>	<p>GEOMETRIC AND NON GEOMETRIC MICROLITHIC INDUSTRIES CAMMADE SERIES IV</p>
	<p>MIDDLE STONE AGE</p>	<p>BLADE, SCRAPER AND BURIN INDUSTRIES CAMMADE SERIES III</p>
	<p>EARLY STONE AGE</p>	<p>HAND AXES AND CLEAVERS OF ABBEVILLE-ACHEUL TECHNIQUE CAMMADE SERIES I & II</p>

Fig. 4.

has high-lighted this problem, which upto now was complacently taken as pertaining only to South India. But a slight treatment of this problem in its historical aspect is not superfluous. Firstly South India has been hunting ground for these so-called 'scythic' or 'Druidal' remains for well over a century and till 1947, no attempt was made to fix up a relative chronology and relate these burials to the people who built them and their material culture. Hence we cannot complain against the older writers who described them as pre-historic. Secondly the history of Southern India, based on literary sources cannot take us to a period earlier than the Mauryan at any rate, and is mostly better documented from about the Christian Era. Hence the cultural history of the preceding periods and particularly the Megalithic phase depends to a greater extent on archaeology. Hence this lopsided development has to be compensated by large scale excavations at the habitation sites of these Megalithic folk. Thirdly a lively controversy was started by Prof. Haimendorf when he identified the Dravidians with the Megalith builders. The writer does not claim any startling new discoveries leading us to the problem of the Megalithic culture, Dravidians etc., but an attempt is made in the following pages to remove a few misconceptions and clear the decks for any intensive attack on this complex problem, in the light of certain new developments in Indian archaeology. The basic facts about this culture may be stated as follows:

1. In India, particularly in the South, we have, what one may call a burial-complex varying from simple pit and urn burials upto the most elaborate cists and circles orthostats and clinostats. Dr. Aiyappan had counted nearly thirty types and V. D. Krishnaswamy has proposed a system of classification and terminology.
2. There are certain basic structural affinities with those of Europe, Mediterranean and the Caucasus region. But in the present state of our knowledge, the Indian group is very late when compared to them.

The excavations at Brahmagiri gave a tremendous impetus to the study of these problems. While Haimendorf propounded a theory that the megalith builders were Dravidians, because of their coincidence with the present day distribution of Dravidian languages,¹⁶ D. H. Gordon has discussed the archaeological impli-

16. Haimendorf: "New aspects of the Dravidian Problem", *Tamil Culture*, II, 2, 1953.

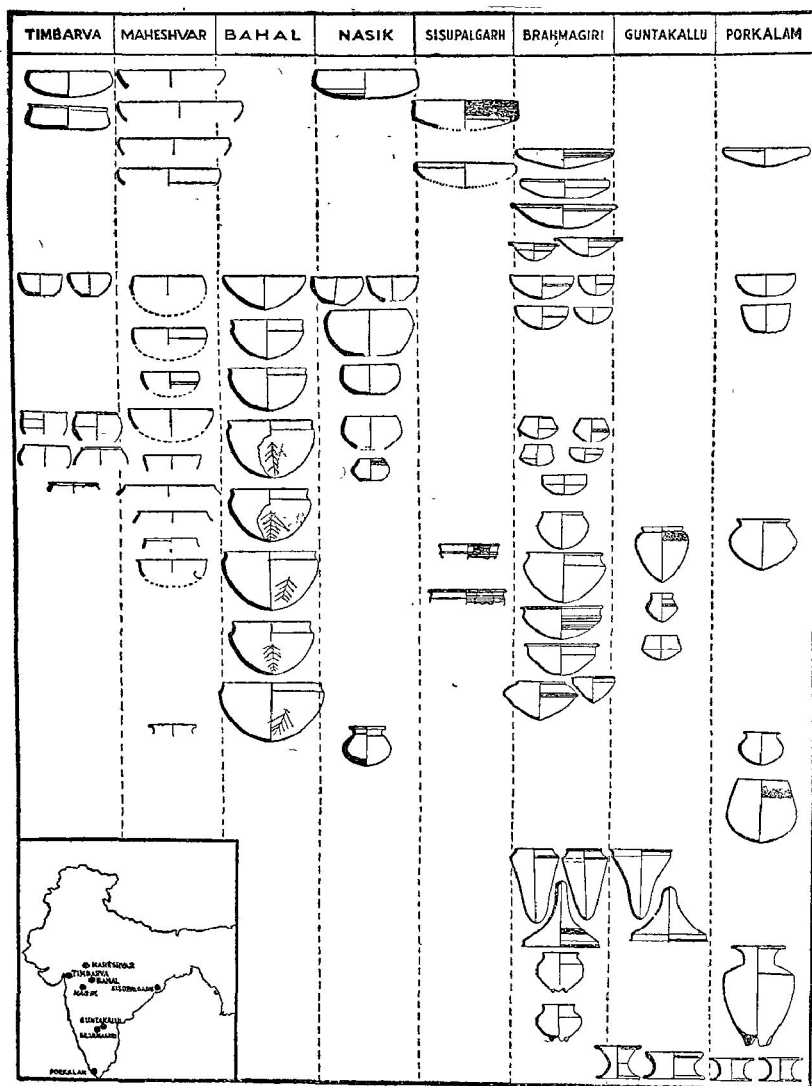
cations.¹⁷ So we begin with the latter and then discuss the former a little further. Col. Gordon's case may be summarised as follows. The megalithic complex is associated with Red-and-Black pottery and iron. Prof. Codrington thought, but without stating any particular reasons that the rock cut tholoi of Malabar (caves) were the earliest. Since Wheeler had dated the megaliths at Brahmagiri to about 200 B.C., Gordon suggested an earlier date for the southern group. As iron appeared to him to be absent in Northern India before 250 B.C., he inferred that iron was earlier in the South. Since Brahmagiri suggested a sudden infiltration of the megalithic folk, Wheeler saw in the collapse of the Mauryan empire an ideal context for a folk migration into Central Deccan from the South. Accepting the identification of Prof. Haimendorf, Gordon imagined a Chola migration upto the Vindhya and their rebuff at the hands of Satavahanas. But the recent evidence does not bear out most of these assumptions. The two crucial criteria of Gordon viz. the pottery and iron will be discussed, leaving the more controversial factors.

About the pottery, there is no doubt that the one unifying factor of this burial complex of South India is the Red-and-Black ware. However, the recent work in Central India has made this pottery extremely important for further studies. Hence the writer made a special study of the forms, fabrics, decorations and techniques. (See Fig. 5). It shows that most of the basic forms are common except the tendency for an elongation and development of pointed bases in the South. Besides its wide distribution in space, it has an equally wide distribution in time—nearly a thousand years. Hence a distinction is sought to be made on the basis of megalithic burials. But the definite chronological priority of this ware in Central India and Western India, and such positive affinities in fabrics and forms weakens any assumption of independent origins for the megalithic and non-megalithic Red-and-Black ware. (See Fig. 6). So the solution to this problem lies elsewhere and the possibility of its being earlier in South India is eliminated by the uniformity of the grave goods and pottery with this entire burial complex. At the present stage of our knowledge, the following alternative hypotheses should be explored:

1. A people already practising some form of megalithic burial in the South could have adopted this fine burnished ware

17. Gordon, D. H.: "Early use of metals in India and Pakistan", JRAI, LXXX, 1950.

SYNOPTIC MORPHOLOGY OF THE RED-AND-BLACK WARES



EMERGENCE OF UNITY

PRE-CHRISTIAN ERA

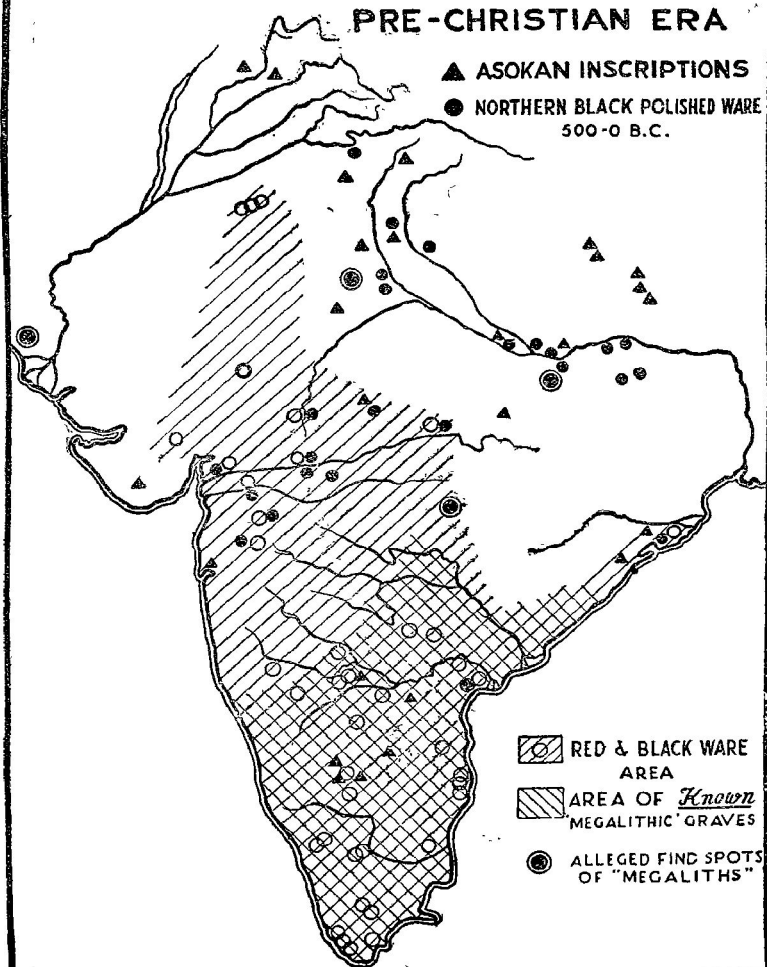


Fig. 6.

and hence its popularity with their graves. In this connection, the extended burial with pots in Br. 17 at Brahmagiri may be considered.^{17a}

2. Or the megalithic culture could have infiltrated by land across the geneissic areas of Central India into South where they have survived for a longer time. The alleged find-spots of megaliths in Northern India — though badly neglected — may be a pointer. The close affinities of the pottery from the burials at Bahal and the pottery below the cists at Brahmagiri (already referred to) shows a definite Pre-Iron type of burial, in Central India with the same pottery.

About Iron, when Gordon wrote his paper on "The early use of metals in India and Pakistan", the finds of iron from Taxila and Hastinapur were not published. The subsequent excavations at Maheshvar also carry the age of iron to a period about 500 B.C. Hence it is not possible to maintain that iron was earlier in the South. About the typology of the iron tools, most of the types are common to both North as well as South. The only distinctive types being the shaft-hole-adze found at Taxila only, and the adze with a ring fastener supposed to be typically megalithic. But this occurs at Junapani and Thakurghat "barrows" near Nagpur. Thus the evidence tends to show that iron and the Red-and-Black wares came together into South India. Such association has been noticed at Timbarva and Somnath in Gujarat and Nasik and Nevasa in Maharashtra.

The other relevant issue is the so-called sudden appearance of the megalithic culture at Brahmagiri and the dramatization of Wheeler by comparing the Toda settlements and the city of Ootacamund for the difference between the megalithic and pre-megalithic phases. The evidence of Brahmagiri itself with some of the pots from the Chalcolithic burial in Br. 17 with some of the crude rimless type bowls etc., suggests a slow infiltration. These significant overlaps, as Wheeler himself described them, were confirmed at Sanganakallu. Certain pottery forms common to both were pointed out by the writer.¹⁸

Finally what about the megaliths in the North? We cannot close our eyes to very responsible but vague accounts which give

17a. Wheeler: *Ancient India*, 4, Fig. 21, p. 228.

18. Subbarao: *Bellary*, 1948, p. 15.

quite a wide distribution. They are reported from Rajaputana, Uttarpradesh, Bihar and Kashmir.¹⁹ Cockburn has given us an account of an excavation of a barrow 60 feet in diameter with black pottery and blades, reminding us again of what we now know from Bahal. We have similar accounts from Nagpur area (Junapani and Thakur Ghat).

Thus the archaeological evidence so far and particularly the pottery, and the occurrence of different and early grave-goods suggest again a southward movement and their longer survival in the gneissic areas of South India. The question of its movement straight to South India by sea is not supported by our present knowledge, since none of the megalithic remains can be reasonably dated prior to 500 B.C. But this particular hypothesis needs to be verified.

The strongest objection to Prof. Haimendorf's identification is the linguistic one. Burrows²⁰ has shown that the greatest influence of the Dravidian languages on Sanskrit is in the post-Rigvedic and pre-Buddhist period. If this is true, we revert back to the earlier hypothesis of a wider distribution of Dravidian languages and their gradual displacement or southward movement. One of the major structural lines of Indian historical geography follows the edge of the Deccan plateau, abutting against the Indo-Gangetic plains. With the infiltration of the Aryan cultural elements into the South, one sees the remarkable feature of increasing resistance to alien influences. For example, depending on the distance and the length of the thrust, there is a descending order of Northern influences in Maharashtrians, Andhras, Kannadigas and the Tamilians. Tamil preserves its comparative purity due to what Eickstedt has called "the double mountain barrier". Hence it is premature to make any attempt to identify the Dravidians. At one time Heine Geldern suggested the Neolithic people. Then we had the identifications of Fr. Heras with the Indus valley people. Guha attributed the megalithic traits to the Palaeo-Mediterraneans.

Before closing this section on this, I propose to put forward a few suggestions for detailed consideration by scholars.

1. It is necessary to separate the pottery and megalithic idea or ritual.

19. M. R. Sahni: "Palaeontology, Palaeo-botany and Prehistory in India", *Journal of the Palaeontological Society of India*, I, 1956, p. 38.

20. Burrows: *The Sanskrit Language*, London, 1954, p. 387.

2. No more progress can be made in the study of this problem unless we verify and determine the character of the megalithic remains in the North.
3. We have to look for a possibility of Megalithic burial complex without this Red-and-Black ware.
4. Is it possible to look for such a contact (pottery and megalithic ritual) in Central India? In Malenesia, the square axe with cut side (*Vierkantbeil*) is associated with the megalith.²¹ Is it possible that the meeting of these two traits Red-and-Black pottery and this megalithic cult took place in Central India about the middle of the 1st millenium B.C. before their movement into South India? This would probably meet the possible objection from linguistic as well as archaeological evidence. But this problem requires very careful investigation and this hypothesis is put forward to stimulate further studies.

Tamilnad

It has been felt that the need for further work in this region is very great indeed. After the Late Stone Age Cultures of Tinnevely and the possible Neolithic complex north of Kāvērī, we know very little about the culture sequence and particularly the pre-megalithic phase in Tamilnad. The excavations at Arikamedu, Sengamedu, Sanur and Pallavamedu have only yielded the Megalithic at the lowest levels. Hence we would like to know the character of the Neolithic culture in Tamilnad (Salem as well as Madurai districts deserve further attention). Did the Chalcolithic culture of North Mysore spread into this region? Shall we be able to get more definite independent chronology for the megaliths in the South?

These are some of the important problems which require immediate attention. At present we should explore and excavate a few sites in the lower deltaic plain of Godāvarī, Krishna and Kāvērī so that we can fully understand and correlate the recent evidence from Western and Central India.

21. Alphonse Reisenfeld: *The Megalithic Culture of Melanesia*, Leiden, 1950, p. 642.

SCIENTIFIC METHODS IN ART AND ARCHAEOLOGY*

BY

R. SUBRAHMANYAM

We shall here consider a field of applied science which during recent years has been receiving increasing attention to the benefit of archaeologists, Museum Curators and Art Collectors. Scientists have been interesting themselves in various fields like the extraction of metals from ores, the manufacture of various compounds, the investigations on the composition of naturally occurring materials, synthesis of various compounds and so on. These diverse studies have simultaneously necessitated the development of improved analytical techniques and better and more accurate instruments and apparatuses. It is but natural that in an era of great progress in the field of physical sciences attention has also been focussed on the employment of modern techniques to the investigation of materials used in ancient days, to the art creations of past and present and to the methods of restoring and preserving these valuable antiquities. This would also include scientific investigation of paintings. Since Museums are in the main repositories of these cultural objects the scope of the science has broadened to include various incidental problems which one comes across in Museums, as for example, proper lighting for paintings, suitable insecticides, control of temperature and humidity, study of preservative coatings, etc.

I shall first say some of the many problems which have been investigated and solved in this field including the observations. I shall give an outline of the work on some of the specific problems in this field which I carried out under the direction of Dr. A. H. Cousin, Head of the Chemistry Division, Johns Hopkins University, Baltimore. These studies at Hopkins were made possible by a research fellowship for me from the American Philosophical Society and a Fulbright travel grant by the U. S. Government. I should express my grateful thanks to the concerned authorities. I should also express my gratitude to Dr. R. J. Gettens, Technical Associate of the Smithsonian Institutions, Washington, for valuable help and suggestions and for permitting me to utilise the facilities at their laboratories.

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We shall begin by the application of analytical chemistry to Art and Archaeology. In this end the following examples will be indicative rather than exhaustive of the methods employed. Analysis of ancient materials involve some special situations. Antiquities are all valuable objects; samples have to be taken from odd corners of the materials making sure at the same time that they are representative enough of the composition. Very often the quantity of material available for analysis may be just a few milligrams and in the case of paintings it may be much less. It is here that the advancement in the fields of micro-chemical methods, spectro photometry and chromatographic analysis in recent years have come in handy.

Klaproth, who lived in the latter half of the eighteenth century was the first scientist to have applied chemical methods to the analysis of Greek and Roman antiquities and to some objects from the Far East. Chemical investigations into the materials and methods of ancient painting were also given a start in the late eighteenth century in Europe. The first microscopic examination of a particle of painting was made in 1863 in Munich. In the beginning of the 20th century William Ostwald first made a micro-chemical analysis on binding mediums. There has been since then marked progress in the application of chemical analysis to antiquities and works of Art. Pigments, oils, resins, various metals and alloys, ceramics and glasses, textiles, dyes, pomades and ointments, perfumes and various other materials have been analysed. In many instances it is rare to find the correct technical terms—as are known to us at the present day—in the description of the ancient texts and these analysis have helped in confirming the nature of the materials in addition to giving the archaeologists a general survey of the materials used by the ancient peoples. With analytical methods it has been possible to identify the earth colours, the madder and the Tyrian purple used by old masters. These studies have removed the belief that the colour qualities of the masters were due to some special unknown pigments. The admirable qualities of ancient paintings must be explained more by the way they used the pigments rather than the pigments themselves. For example it has been found that yellow glazed over blue gives a more brilliant green than using a mixture of the two.

Analytical methods have again helped in identifying materials which have been mistaken for similar types of materials. For example, chemical studies on several crude spear heads—belonging to ancient China—showed them to be really copper (with

quantities of lead) without any tin in it. Only by chemical analysis can one distinguish the alloys used in former times for coinage, statues, ornaments, etc. These can lead us to conclusions regarding the knowledge of the ancients in mixing the proper elements to give the required qualities. These chemical studies can be further aided by metallographic examination. A small section of the alloy is taken and a flat surface is prepared by grinding on a carborandom block moistened with water (to prevent the specimen becoming hot). The specimen is then rubbed on a series of emery papers of increasing fineness and finally polished by alumina or similar material and etched with a suitable reagent and examined by a metallographic microscope. From the patterns seen, the critic can draw various conclusions as regards the inclusions and information such as whether the metal was cast or worked or both. A systematic study of coinage metals of a particular nation can act as an index to the prosperity of the nation through the years. Spectrochemical methods have been employed to find the various trace elements in ancient metals and alloys. In some cases it has been possible to trace the origin of the ore to particular mines.

The analytical problems in the case of paintings include delicate separation of the pigments and the binding medium out of very small quantities of materials. Micro-chemical and microscopic methods have been developed to differentiate various types of pigments like white lead, China clay, gypsum, chalk, yellow and red ochre, umber, cinnabar (vermillion), red lead, green earth, bitumen, lamp black, ivory black, ivory black orpiment, lapis lazuli, azunite, malachite, etc. Methods have also been developed to distinguish media like casein, egg-white, glue, etc. Chemical analysis has been helpful in many other ways. I would like to cite a case mentioned by C. C. Fink and A. H. Kopp ("Metropolitan Museum Studies," IV, Part 2, 1933, 163-167 "Ancient Egyptian Antimony Plating on Copper Objects"). Some of the ancient copper vessels were covered with a bright coating of material which appeared to be silver. Micro chemical analysis proved them really antimony and the starting materials which the ancient Egyptian women used as eyebrow paint. The authors proved by laboratory experiments how this plating could have been achieved by using antimony sulphide and other materials known to ancient Egyptians. To quote another instance I shall refer to the analysis of some ancient glass beads conducted by me sometime back. (Anal. of ax: Glass beads, *Current Science* 19 (1950), p. 19). The

interesting point was that the beads contained neither copper nor cobalt and that the colouring matter was iron. Iron produces blue colour only if it is present partly as ferrous and partly as ferrie in particular ratios. It would be of interest to find out if this represents a stray case where by accident the blue colour was obtained from the high content of iron in the sand used or whether the ancients were aware of a method by which they could get blue colour from Fe.

Various radiations whose wave lengths lie on either side of the visual range have also been used in the examination of antiquities. Of these have been Gamma rays, X-rays and ultra-violet rays which lie on one side of the visible spectrum and infra-red rays which lie on the other side. ("The application of X-rays, Gamma rays, Ultra-violet and Infra-red rays in the study of antiquities" by A. A. Moss).

X-rays have been used in detecting hidden metal joints used in repairs of pottery, in detecting spots of welding and for revealing silver inlay work under corroded bronzes.

In obtaining good radiographs of ceramic and thin metallic vessels Gamma-rays have been found to be very useful. Formerly Radium used to be the only source, but recently artificial sources like cobalt-60, tantalum-182, iridium-192 and thulium-170 have been used. Of course all these sources necessitate proper safety precautions.

Ultra-violet rays have been used in detecting old marbles from recently cut ones. Flourescence and ultra-violet photography have been used in studying various layers of paintings. Infra-red rays have been used in the study of documents. Sometimes one comes across several areas in documents which have been heavily inked to render them illegible. Infra-red rays could detect what lies under these inked areas. These rays, however, require special plates for photography as also special cameras as they penetrate the wooden portions. Further the rays do not focuss in the same way as visible rays and hence focussing has to be done by trial and error.

The methods of science have also been useful in detecting fakes and forgeries. The discovery of a modern pigment in a supposedly old picture is a definite evidence of faking. Van Neegeren, the faker of Vermeer paintings is a classic example of forgery of old paintings. Natural ultramarine (lapis lazuli) was the blue pigment

commonly used by the ancients. In one suspected painting a small quantity of blue cobalt pigment was found which was identified to be Thenard's blue discovered in 1804. Van Megeren used the method of purchasing old canvasses, scraping off these minor paintings and repaint them with pictures imitating some of the well-known works of the Masters. These fakes could be detected by X-ray photographs as they invariably showed traces of the original underlying paint. ("The Scientific Examination of Paintings" by A. E. A. Werner).

Another recently developing application is fixing the date by Radiocarbon analysis and Flourine and Pollen analysis. Neutrones from cosmic rays are captured by atmospheric nitrogen and the nucleus thus formed disintegrates leaving a carbon atom with atomic weight 14 (as against the ordinary carbon atom of atomic weight 12). The carbon 14 is taken in by plants along with carbon 12. Carbon 14 is radioactive and disintegrates. Once an organism is dead it no longer receives carbon 14 and so the proportion of carbon 14 to carbon 12 in an ancient organic matter will be indicative of the time elapsed. The half life period of carbon 14 is about 5500 years, which means that if we have one gram of carbon-14 today we will be left with half a gram after 5500 years. The effective range of this method is about 20,000 years. In much older specimens there is so little carbon-14 that the error in analysis is high. The radio activity of the carbon is measured in a specially constructed radiation counter. (See "Radiocarbon dating" (University of Chicago Press) by W. F. Libbey and "Dating the Past" (London, Methuen) by F. E. Zeuner). Dating of ancient materials, has also been carried out by determining the percentage of flourine in human bones.

Now I shall tell you about some of the methods undertaken for the preservation of these valuable materials. Taking the question of paintings of various types methods have been evolved for removing the discoloured varnish layers by organic solvents, for strengthening the canvas by relining with cold setting resins, for preventing the warping of the wooden supports by controlling the evaporation and intake of moisture content by sealing with materials of the Polythene group and for disinfecting the worm eaten wooden supports.

Various electrolytic and chemical methods have been developed to remove the disfiguring corrosion products, to bring out the

inner hidden details and to preserve valuable ancient bronzes, coins and other alloys.

In the case of the corrosion products of blue, greenish and sometimes grey colours found on ancient bronzes detailed studies have been made to find out the process of corrosion so that methods could be evolved to prevent recurrence of future attack. Without getting into details I shall just say that the mechanism of corrosion has been proved to be mainly electro-chemical in nature, the various areas of the object at different potentials acting as the cathodes and anodes. I had occasion to examine at the laboratory of Freer Art Gallery, Washington several cross sections of mounted specimens of corroded bronzes and in some I could see re-deposited copper showing the electro-chemical nature of the corrosion mechanism.

The study of these corrosion products was helped in another way. We now know that in a genuine antique bronze the distribution of corrosion products comprises of carbonates at the outer layers chlorides and oxy-chlorides in the next inner layers with an undercoat of cuprous oxide adjoining the unattacked metal. This structure is difficult to initiate in the case of faked patinas and so can be used with the help of the microscope to find out the genuineness of antiquity. It may be that the patina is faked but the bronze is genuine. But then typical inclusions and pitting can in many cases again help in showing that the object is really old.

I shall now tell you some typical methods we are employing in the Government Museum Laboratory, Madras, for the restoration of ancient bronze and coins. The electrolytic restoration of bronze images upto a height of about 4 feet is carried out by means of a special equipment employing a Motor-generator combination. By control circuits the output from the generator is fed to three electrolytic cells, and the current density to each of these cells could be independently adjusted. The method employed for treatment of these corroded bronzes is known as "the Fink Process". Welded iron tanks form the anode and the bronze images the cathodes. The electrolyte used is a 2% caustic soda solution. The hydrogen evolved at the cathode acts on the corrosion products and converts them to slimy copper. After the treatment the image is washed thoroughly in running water and brushed with a soft brush. For satisfactory restoration the surface of the image requires a current density of about one ampere

per 20 square inches of cathode area. In such of those bronze images which have projecting areas (such as an extended arm) which are too close to the anode there is the danger of these areas receiving too high a current. Hence the anodic areas close to these projections are electrically insulated by means of Shellac varnish. Another difficulty met with is the blocking of air under the hollow pedestal of the image. To overcome this tiny holes are drilled in an odd corner of the pedestal. Yet another problem which is sometimes met with is the presence of very hard calcareous material in the corrosion product. Electrolytic treatment in a case like this results in uneven reduction. Preliminary experiments carried out on pieces of unimportant antique bronzes have shown that if this calcareous material is first loosened by applying a warm 5 to 10% solution of sodium metaphosphate and then subjected to the electrolytic treatment the reduction is uniform and the resistance to the passage of current is also much less.

Chemical methods have been employed for the treatment of coins of various alloys. Warm Formic acid of strength ranging from 5 to 10% has been used in the restoration of several hundreds of silver punch marked coins. In the case of silver coins containing sulphide corrosion products a 1 to 2% solution of potassium cyanide (poison) has been successfully used. Careful treatment with dilute acetic acid has helped in the restoration of a big lot of Andhra Satavahana lead coins. It is also proposed to try ion exchange methods for the treatment of lead coins.

Now I shall tell you in broad outline two of the problems that I worked on at the Hopkins Laboratory in Baltimore. One represents a method which has been evolved for the restoration of completely corroded copper sheets and the other is about the investigation of the "Fink Process" from a fundamental point of view.

In the first case the corrosion products found on various ancient mineralised copper sheets were analysed both with reference to the proportion of various components and also with reference to the type of distribution of these materials. The corrosion of copper sheets was then artificially carried out under conditions which will give products identical with those found in the ancient mineralised specimens. Another line of approach was to prepare artificial specimens by mixing the various components of the corrosion products in the correct proportions. Both these types

of samples were subjected to gaseous reduction (by hydrogen or carbon monoxide) and after several series of experiments proper conditions were reached in which the reduction goes to completion without creating warping on the reduced specimens. These experiments were conducted with special reference to the restoration of some ancient mineralised copper rolls found near the Dead Sea area. These rolls are in the form of a spiral with some hebrew characters running lengthwise. The idea was to evolve a method by which the mineralised rolls could be reduced to the metal under conditions where the metal would be strong enough to stand unrolling.

The other problem with reference to the Fink Process was to study the electrolytic reduction under controlled potentials instead of controlled current density. An electronic mechanism was employed which could control the potential of either the cathode (bronze image) or the anode current to 0.1 volt. Reductions were attempted in various media—aqueous, semi-aqueous and non-aqueous. The individual minerals of copper—Malachite, Azurite, Atacamite, Brochantite—were also subjected to this treatment to find out their reduction potentials. These minerals resemble the corrosion products found in ancient bronzes. The details of these two series of problems which have greatly helped in a better understanding of the restoration of ancient bronzes will be shortly published in the proceedings of the American Philosophical Society.*

* I am thankful to Dr. Aiyappan who as Superintendent of the Museum gave me great encouragement for work in this field.

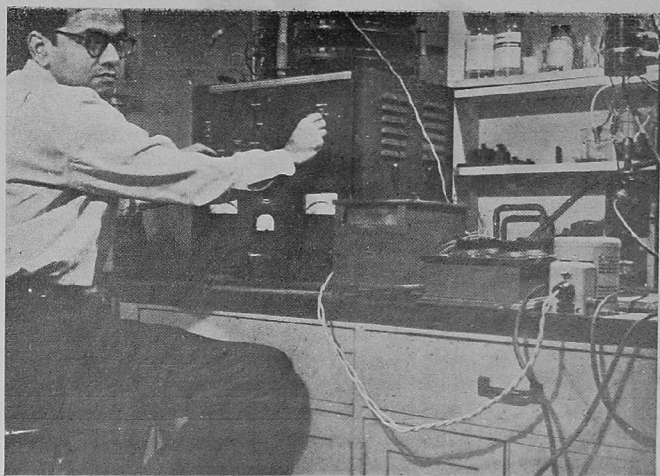


Fig. 1. Hopkins Laboratory, Baltimore: Apparatus for Electrolysis at controlled potentials.

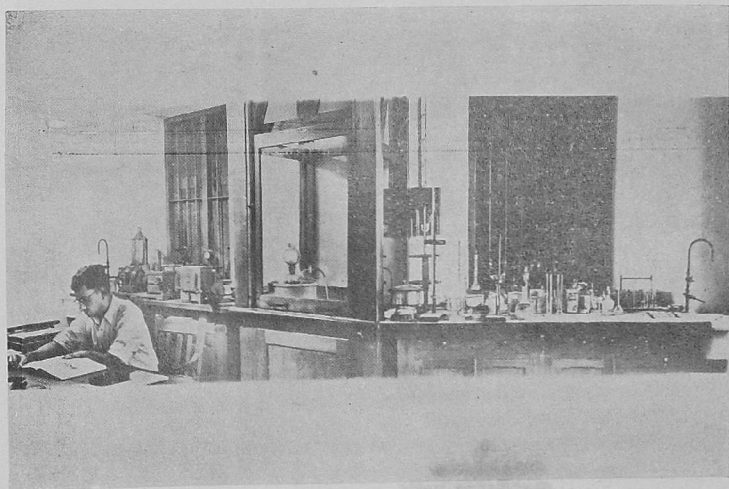


Fig. 2. Chemical Laboratory, Government Museum, Madras.
A wing of the Analytical Laboratory.

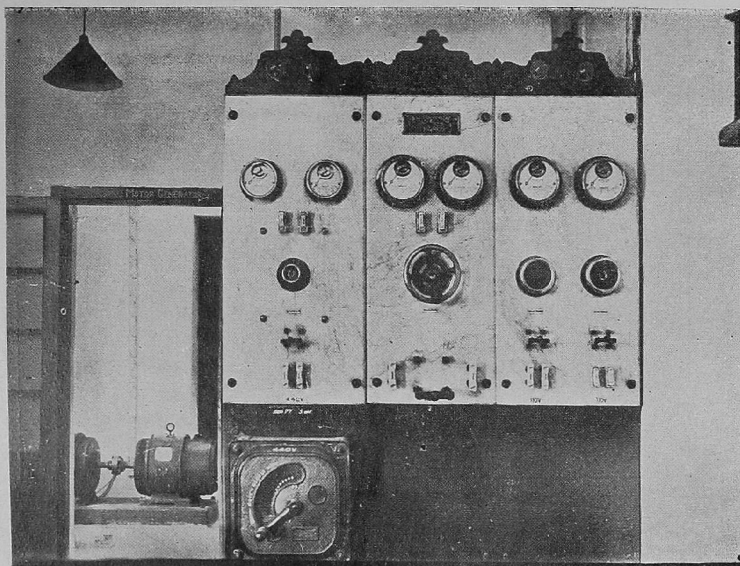


Fig. 3. Chemical Laboratory, Government Museum, Madras.
The control panel for Electrolytic cells.

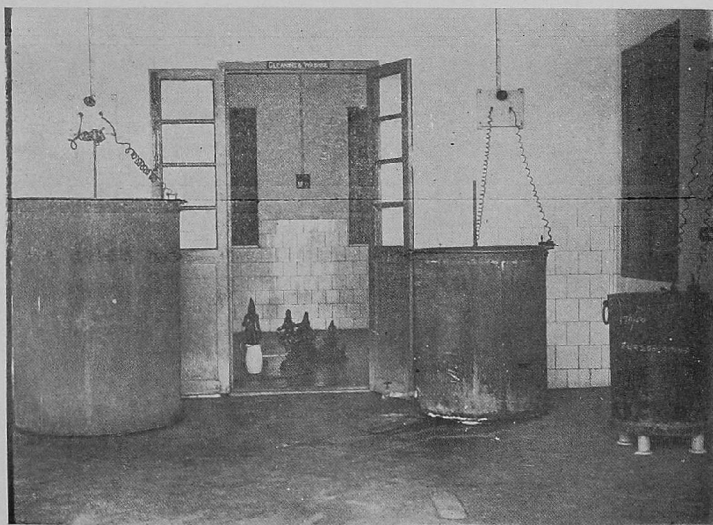


Fig. 4. Chemical Laboratory, Government Museum, Madras.
The three Electrolytic cells.



Fig 5. Before treatment



Fig. 6. After treatment

Electrolytic restoration of a bronze statue.

A NOTE ON THE ŚITTANNAVĀŚAL AND KUḌUMIYĀMALAI MONUMENTS *

BY

K. R. VENKATA RAMAN

The southernmost place in the provenance of the inscriptions of Pallava Mahēndravarmān I (A.D. 600-30) is Tiruchirapalli. After his reign, until that of Nandivarman II—(733-96) Pallava inscriptions are conspicuously absent on the banks of the Kāvērī. The reference in the Śendalai pillar inscriptions and in the Vēlvikuḍi grant to Kodumbālūr and one or two other places in the former Pudukottai State, indicates that in the 8th century all these places were within the territory of the Pāṇḍyas. The earliest Pallava inscriptions within the Pudukottai territory belong to the reign of Dantivarman (804-845); there are a few others dated in the reigns of Nandivarman III (844-66) and Nripatunga (850-96). A line drawn from Rājālipattu to the north of Koḍumbālūr in the north-west of Pudukottai State to Kunnāṇḍārkōvil in the north-east would mark the southernmost limit of the provenance of Pallava inscriptions. This line is about 20 to 23 miles to the south of the Kāvērī, and none of the Pallava inscriptions on or near this line is earlier than the closing years of the eighth century or the beginning of the ninth. More than 15 miles to the south of this line and more than 35 miles to the south of the Kāvērī lies Śittannavāśal, and still farther away to the southwest is Kuḍumiyāmalai. These two places were never under Pallava rule, and this consideration alone will set at rest all suggestions that the monuments that have made them famous were the creations of Mahēndravarmān I in the first half of the seventh century. The grounds usually set forth for this belief, though purely of academic interest may nevertheless be examined in some detail. It is often said that the Śittannavāśal rock-cut cave temple reproduces the architectural features of the 'Mahēndravarmān' style of cave temples. Longhurst has shrewdly observed that further south of Kāñchi and the country lying immediately round it, the so called Mahēndravarmān style persisted much later, and south of the Kāvērī, Pallava

*Paper read before the Archaeological Society of South India on 30-4-1955. Reprinted from *J. I. H.*, Vol. XXXII, Part III, December 1955, with the kind permission of the Editor.

architecture was influenced by the neighbouring cultures of the Pāṇḍyas and Cōlas. Even as early as in 1916 J. Dubreuil wrote that the southernmost Pallava monument is the cave of Kunnāṇḍārkkōvil, the inscriptions in which indicate the last years of Pallava sovereignty.¹ Mahēndravarmān's inscription in the Maṇḍagapaṭṭu cave temple reads —

ēṭadaniṣṭakamadrumamalōhamasudham vicitracittēna /
nirmāpitannrpeṇa brahmēśvara viṣṇu lakṣitāyatanam //

(This temple, in the construction of which neither brick, nor timber, nor metal, nor mortar has been used, has been caused to be erected by the King Vicitracitta to serve as the abode of Brahmā, Īśvara, and Viṣṇu.)

This inscription apparently lays stress on the word *ēṭad* (this) signifying that *this* cave temple at Maṇḍagapaṭṭu was the first one ever scooped out of the rock in the Tamil country; and it was dedicated to the Trīmūrtis. It is not odd to say that Vicitracitta (the 'inventive-minded' king) had earlier erected a cave temple for the Jain Tīrthaṅkaras in Śittanavāśal, a place beyond the frontiers of his realm.

An inscription in Tamil verse just to the south of the facade of the Śittanavāśal cave-temple, which K. R. Srinivasan has commented upon,² clearly says that in the reign of the Pāṇḍya King Śrīmāra Śrīvallabha also called Āvanīpaśekhara (815-62) a Jain Ācārya named Iḷan Gautaman, also called Madurai Āśirīyan (the Ācārya from Madurai) renovated and embellished the *ardhaman-tapam* and added a *mukhamantapam*. Srinivasan points out, among other things, the variations in the linear dimensions of the floor and ceiling, the unequal excavations in the back wall of the verandah, variations in the projecting niches and the differences between the architectural features of the pilasters and corbels of the niches and those of the facade. Originally perhaps a rectangular cell with bas-reliefs and an unfinished verandah in front, similar to some other crude cave temples in this part of South India, this temple was renovated and given its present shape in the ninth century.

About fifteen years ago, while cleaning the paintings S. Paramasivan and Srinivasan noticed a patch of old painting representing conventioal carpet designs, over which the new layer of painting had been superimposed by Madurai Āśirīyan's painters.

1. Italics mine.

2. See *The Proceedings of the Indian History Congress—Madras, 1944*.

In the rest of the area within the cell and all over the ceiling, pillars, corbels and beams the renovator painted the *samavasaraṇa* heaven, the lotus pond, the flowers and animals, the *bhavyas*, the dancing women and what appears to be a royal group, over a ground of plaster *directly* laid over the bare rock surface. The painting that we see and admire today belongs to the 9th century.³

Now to Kuḍumiyāmalai. One hundred and twenty inscriptions have been copied from the walls of the temple here, and they relate to all the dynasties that ruled this part of the country, but not one of them relates to the Pallavas. The two earliest records⁴ are inscribed in the cave temple, called in the inscriptions Tirumēṛṛali or Melaikōvil, and are dated in the reigns of the Pāṇḍya kings, Śaḍaiyan Māraṇ (Māra-varman Rājasimha (730-65) and Mārañ-jaḍaiyan (Jaṭila Parāntaka Varaguṇa (765-815).

The pillars of this cave temple have bulbous capitals resting upon square bases, and the corbels are flattened though provided with roll ornaments with a median band; this style is absolutely different from the 'Mahēndravarmaṇ' style. The sculptures include a Valamburi Gaṇēśa and a Sōmāskanda group. Though the Sōmāskanda group first made its appearance in the reign of Pallava Narasimha Varman I Māmalla (630-68), it became prevalent as a

3. The following extracts will be read with interest. 'The painting in the Sittannavāsāl Jain cave, formerly ascribed to the early seventh century (the reign of Pallava Mahēndravarmaṇ), are now seen to be much later and to furnish a connecting link between Ajanta and the Tanjore paintings of the Chōla period'—(K. A. Nilakanta Sastri: *History of India*, Part I, Page 164). 'The *ardhamantapam* of the Śīṛṇnavāyil (Sittannavāsāl) cave-temple was renovated during the reign of Avanīpaśēkhara Pāṇḍya Śrī Vallabha (830-62) and a *mukhamantapam* was added to it. The entire cave structure must have been painted at the time of the renovation. Inscriptions of the reign of Śrī Vallabha occur in Tirumalaipuram near Kāḍayanallūr in the Tirunelveli district, and the painting here must be contemporaneous with that in Śīṛṇnavāyil. To this epoch may be assigned the painting in the cave temple at Tirunandīkarai in the extreme south of the Tamil country. No careful observer will fail to be struck by the resemblance between the figure of Śiva, painted in this temple, and that of the 'royal personage' on the Śīṛṇnavāyil pillar and that of Avalōkitēśvara at Ajanta.' (M. S. Ramaswami: Article in *Ōviyam (Paintings)* in *Kalaikkalaṇṇiyam (Tamil Encyclopedia)* Vol. II, pp. 743-4.—[Translated from the Tamil.])

4. P.S.I: 238 and 240: The name of the donor in the second record—Parāntaka Adalaiyūr Nāḍālvān helps us to identify the king as Jaṭila Parāntaka. This administrator of the *nāḍu* must have taken the name of his sovereign according to the custom then prevailing.

characteristic feature of temples built during the reign of Nara-simha Varman II Rājasimha (680-720). Rājasimha's Sōmāskanda group was chiselled in bas-relief on the back wall behind the *liṅgam*, but in the Kuḍumiyāmalai *mērrālī* it is sculptured in the round and is loose standing. The *liṅgam* here is not prismatic as in Rājasimha's temples. The costumes and ornamentation also disclose considerable deviation from the Rājasimha epoch.

The inscriptions of the 8th century referred to above mention two shrines, the *Tirumūlattānam* and the *Tirumērrālī*. The first was a structural *vimāna*, and was as its name implies, the principal shrine while the second was the rock-cut shrine in the west. The *mūlattānam* originally built in the 8th century has since been renovated many times over by successive dynasties, and in the *prākāram* are now assembled sculptures of the different epochs. Everything points to the conclusion that the *mērrālī* also was erected in the 8th century.

Just to the south of the *mērrālī*, on the rock face, is a marvellous inscription which is a long exposition of music. One would obviously conclude that the inscription was contemporaneous with the cave temple.⁵ It is really surprising that scholars should attribute its authorship to Mahēndravarmaṇ I on the strength of the occurrence of the name—Guṇasēna (which they fancy was another form of Guṇabhara, a surname of Mahēndravarmaṇ) *not in this inscription but in similar ones at Tirumeyyam and Malayaḍipatti*, both to the south of this place.

On the top to the right is a label which reads *parivādinī*: Parivādinī is an old kind of *vīṇā* with seven strings. The music of the inscription was obviously meant to be played on the *parivādinī*. The text begins with the invocation *siddham namaḥ śivāya*, and runs into seven sections, each arranged in sub-sections of sixteen sets of four *svaras*, each under an appropriate heading. The colophon reads *śrī rudrācārya śiṣyēna parama māhēśvarēna rajñā śiṣyahitārtham kṛtāḥ svarāgamāḥ* ('composed for the benefit

5. It is unfortunate that the palaeography of the inscription has not been carefully studied. The text proper is in the *Grantha* script that was used in contemporary Pallava inscriptions and Pāṇḍya records (the Velvik-kuḍi and Museum grants). There were two forms of this script in Mahēndravarmaṇ's time and four in Rājasimha's. Dubreuil points out that 'a difference in the stage of evolution of the letters does not at all indicate a difference in the ages' and that Rājasimha in the 8th century borrowed an alphabet (that of the first half of the 7th century) that at his time was already archaic.

of learners by the king, a staunch (Māhēśvara and a disciple of Rudrācārya'). Below is a note in Tamil—*eṭṭirkum, ēḷirkum ivai uriya*.

Is this Paramamāhēśvara Mahēndravarman I? There is not a single inscription definitely ascribable to Mahēndravarman that does not contain one or more of his numerous surnames in Sanskrit, Tamil or Telugu, and not a work of his that is not presented with a flamboyant string of epithets. One would expect a work of the nature of this unique musical composition, if only Mahēndravarman had composed it, to be heralded in high-sounding verses full of self-adulation.⁶ Nor on the other hand, do we find in any of his inscriptions or in his play *Mattavilāsa* the invocation *siddham namaḥ śivāya*. From this period till late Cōla times Pāsupatas and Kāḷāmukhas chiefly constituted the class of Mahēśvaras, and they followed a gruesome form of *vāmācāra*. In his *Mattavilāsa* Mahēndravarman holds among other sects, the Mahēśvaras and the Mahāvratins to ridicule as a degenerate crowd addicted to drunken revelry in the company of women. It is obvious that Mahēndravarman, who pours so much invective upon the Mahēśvaras, will not call himself a *parama Māhēśvara*. In the temples that he built he enshrined not only Śiva but also Viṣṇu and Brahmā. It is a grave error to describe one Pallava king as exclusively a Śaiva (much less a Māhēśvara) and another a Vaiṣṇava; they honoured all forms of God-head.

Kuḍumiyāmalai was included in the old territorial division of Kōnāḍu, the capital of which was Koḍumbālūr, which was an important seat of the Pāsupata—Kāḷāmukha cult; one of its rulers was a canonised Śaiva saint, while another—a later one, Vikramakēśari, endowed a *maṭha* for his Kāḷāmukha preceptor and provided for the daily feeding of the latter's disciples. One may not be wrong in thinking that the king who calls himself a *paramamāhēśvara* may have belonged to the distinguished line of Irukuvēḷṣ⁷ of Koḍumbālūr.

6. E.G.: The royal style of Mahēndravarman put into the mouth of the *Sūtradhāra* in his play *Mattavilāsa*, and his surnames cleverly woven into the *maṅgala ślōka*, the *Bharata vākya* and in the speeches of the Nati.

7. The *dvārepālakas* of the *mēraḷi* are two-armed and stand in an attitude of adoration, and while both were *rudrākṣa* beads, only one wears the *yajñōpavīta*. They are portrait sculptures like many other *dvārepālakas* in the early temples of this region. The figure with the *yajñōpavīta* may represent Rudrācārya, and the other without it the king, his disciple.

There was an inscription on the rock face of the Śiva cave-temple at Tirumeyyam, the text of which was wiped out in A.D. 1245 as some unintelligible matter in an unknown script, by an ignorant scribe, who recorded over it the award of a tribunal presided over by a Hoysala general. A few expressions, such as *Rṣabham*, *Gādhāram*, *Pañcamam*, *Duritam*, *Niṣādam* and *Madhyamam* and some lines of the note in Tamil below can still be deciphered. There must have been another inscription, similar to this, on the rock face of the cave-temple at Malayakkōvil, to the west of Tirumeyyam which again was later obliterated. The label *Parivādinā-e* and a few lines of the note in Tamil are all that remain. While in the Kuḍumiyāmalai inscription it is stated that the composer was a *parama mātēśvara rājā*, these two compositions are said to be based on the authority of Guṇasēna—*Guṇasēna pramāṇam śeyda vidyā*; Guṇasēna was by no means Guṇabhara; Tirumeyyam and Malayakkōvil are situated farther inside in Pāṇḍināḍ—far beyond the frontiers of Guṇabhara's territories. From the records of this epoch so far available it is clear that *Sēna*, *Nandi*, etc., were suffixes in the names of South Indian monks of the Digambara order of Jainism. It is quite probable that Guṇasēna was a Jain monk⁸ who was also an adept in music.

One of Mahendravarman's surnames was *Saṅkīrṇajāti*. P. Sambamurthi of the Madras University does not accept Minakshi's rendering of *jāti* as *tāla*, and *saṅkīrṇajāti*⁹ as a new kind of *tāla*

8. There was no branch of learning and culture—literature, music, drama, painting, stucco, etc., which the Jains did not cultivate. Their contribution to language and fine arts was incalculable. A celebrated monk bearing the name Guṇasēna (c.A.D. 700) presided over the famous monastery at Tirukāṭṭampalli at Kuṇḍai in Vēmbanāḍ which comprised a large area to the south of the Southern Veḷḷār. Was this Guṇasēna an adept in music also?

9. Writing under the belief that the Kuḍumiyāmalai composition was a work of Mahendravarman, Minakshi (*Administration and Social Life under the Pallavas*, P. 256) has sought to connect it with Mahendravarman's inscription in Māmaṇḍūr (S.I.I., IV, Page 12) which is very much damaged and now quite unintelligible. It contains such expressions as *Gandharva śāstra*, *Pāñcālanirmita*, *Vālmīkivaṇita*, *Vatsāpahāra*, *Vyāsakaḷpa*, and *Kavīnāṃprakāśa*, and mentions *Mattavilāsaprakaraṇa*, *Bhagavadajjuka* and *Vṛttidakṣiṇācitrā*. Then there is mention of *varṇacaturthaka* claimed to be the first of its kind and pleasing alike for sweetness of voice and merit of composition. Lastly comes praise of queen Candralēkhā and the king. The Kuḍumiyāmalai composition marks a clear stage of advance over anything that the Māmaṇḍūr record would suggest. It now appears that *Bhagavadajjukā*, which was believed to have been written by Mahendravarman, is the work of some other poet. 'Nothing definite can be said about the age of the work, though its

invented by this king. Quoting the authority of Bharata, he translated *jāti* as *rāga*; in fact, as he points out, *jāti* was formerly used wherever *rāga* was meant. The surname only signifies that Mahēndravarman was an expert in the exposition of *saṅkīrṇa rāga*, which means a mixed *rāga* wherein are traces of two or more *rāgas*. The Kuḍumiyāmalai text, as Sambamurthi points out, 'is the first record to mention the solfa names of the seven notes, *sa, ri, ga, ma, pa, dha* and *ṇi*, where the *śrutis* are designated by resorting to the vowel changes in the name of the note and reduced to a mnemonic system of absolute notation.' The Tirumeyyam music, though meant to be practised on the *parivādini*, would lend itself, as the Tamil note indicates, to the three branches of Gandharva vidyā 'as known in the world' viz., vocal, instrumental and dance music.

The period threw up some notable masters from all classes of the society. Among the rulers of Kāñchi, Mahēndravarman I was *saṅkīrṇjāti*, and Rājasimha was *vādyā-vidyādhara* and *viṇa, Nārada*. In Madurai Neḍuñjaḍaiyan was *gītikinnara*. In the Cōla country Pāṇan Nilakaṇṭha and his wife Mātangacūlāmaṇi set Saint Sambandar's soul-stirring *padigams* to *svara* and played them on the *yāl*. Tiruppāṇ Alṽar's *yāl*¹⁰ poured forth a flood of devotional music as sanctifying as the floods of the Kāvērī on whose banks he lived. The Māhēśvara monk Rudrācārya and his royal disciple, and Guṇasēna and his followers invented musical notations and recorded them.

This artistic impulse of this epoch may have proceeded from Kāñchi, during the reign of Mahēndravarman I, but for its further achievements, credit goes to all South Indian dynasties whose contributions built up a composite South Indian culture, which influenced India north of the Vindhyas and Farther India across the seas. In pursuing this fascinating line of research, no student could afford to miss a proper study of the contributions of the different kingdoms of the South, much less of the Pāṇḍyas and their vassals and artists.

author seems to be known. For one Bōdhāyana kavi is given as the name of the poet in two of the MSS, including the commentary, and I see no reason to doubt that this is the name of the poet, though in the prologue neither the author's name nor the title of the play is mentioned'—[M. Winternitz: *Preface* (Pp. VI & VII) to the *Bhagavadajjukiyam* (Palayam MSS edition—Jayan-tamangalam—Cochin)].

10. It will interest readers to know that there are two sculptural representations of this stringed instrument, one on the panel within the Viṣṇu cave-temple at Tirumeyyam and the other built into a wall in the Mahiṣa-mardini temple at Kilḷukoṭṭai, both within the former Pudukottai State.

A NOTE ON THE KALABHRAS*

BY

K. R. VENKATA RAMAN

In the Tamil country a long historical night set in after the close of the Śaṅgam age until about the beginning of the 7th century. The only historical incident that has come to light relates to the complete subjugation of the Tamil country by a tribe called Kaḷabhra, who overturned not only the political system of the land, but also the old social order. And about them practically very little is known. Who were the Kaḷabhras? Where did they come from?—are questions that have not been answered so far.

The earliest Tamil record that mentions the Kaḷabhras is the Vēlvikuḍi grant of Pāṇḍya Jaṭila Parāntaka Varaguṇa, also known as Māraṇjaḍayan and Neḍuṇjaḍayan, restoring the village of Vēlvikuḍi to the descendants of the original owners, who had earlier received it from a Pāṇḍyan king of antiquity—Mudukuḍumi. The Kaḷabhras, during their occupation of the Pāṇḍyan country had deprived the owners of their village.

Line 39 of the grant reads *aḷavariya atirājarai ahala nīkki ahala iḍattai kaḷapran ennum kali araśan kaikkonḍu*..... The Kaḷabhra who conquered Madurai is described as a *Kali king*, who had uprooted countless monarchs. *Kaliaraśan* has generally been translated as 'wicked king', but the late Krishna Sastri suspected that the reference was to a dynasty. That there was a dynasty called *Kalikula* is evident from line 8 of the Kopparam Plates of Chāḷukya Pulakēśin II, though Hultzsch, not suspecting that a dynasty of Kali could have existed and obsessed with the notion that kali meant wickedness, tortured about two lines in the text and substituted *Kali khalānām*, for *Kalikulānām*. The plain meaning of lines 8 and 9 of the grant is: Prithivī Yuvarāja, who having defeated by the prowess of his arm the circle of enemies,—his arm which was a churning stick to the kings of the Kalikula.

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We also hear of a *Kali era*. I was much surprised that the author of a brochure published in Mysore identifies the Kalki era of the north with the Kali era of the south. The Gupta power in Western India declined towards the close of the 5th century, and Kalki is alleged to have ruled after the Guptas for 42 years. This is a Jain tradition; this ruler whom they call Chaturmukha Kalki was a tyrant who persecuted the Jains. Pathak identifies him with Mihirakula, and K. P. Jayaswal¹ with Viṣṇu Yaśōdharman. Jayaswal goes further and avers that he answers to the Kalki avatara of the *Purāṇas*, born to rid the land of the non-Vedic cults. After a critical examination of the Digambara and Śvētāmbara traditions and the writings of Jīnasēna, Guṇabhadra and Nēmichandra, H. B. Bhide of Bhavnagar² points out the discrepancies in the different accounts and concludes that Kalki was not a historical personage—neither Mihirakula nor Yaśōdharman, but the creation of a tradition that after every 1000 years after the Jina, a Kalki appears, and after 500 years an Upakalki. However it may be, it is a far cry from Malwa and Western India to the Kannada country. That a Kali era *was* prevalent in the South is obvious. The consecration of the colossal statue of Gommaṭa in Śravaṇabelagōla, for instance, is dated in that era:

Kalyabdē ṣaṭchatakyē vinuta vibhava samvatsarē māśi caitrē
 pañcamyām śuklapakṣe dinamaṇi divasē kumbhalagnē suyōgē /
 saubhāgyē mastanāmnī prakāṭita bhaganē suprasastām cakāra
 śrīmacchāmuṇḍarājō bēlagulanagarē gōmmaṭēśa pratiṣṭhām //
 (*Bāhubalīcarita*—V. 63)

It is known that Chāvuṇḍarāya erected this Statue of Gommaṭa in 983; the Kali era may be taken to have commenced 600 years earlier; about 383 (4th century).

There was also a *cult of Kalidēva* in the Kannada country. A Kannada inscription³ registers the grant of 12 *mattar* of land by Rēchidēva for the eightfold worship with camphor, saffron and sandal of the blessed feet of the Lord Kalidēva and the Jina at Baṭṭakere. The cult spread to north Kannada where it was prevalent till the 11th century, as an inscription at Kōlūr,⁴ dated in the reign of Sōmēśvara I, will testify. The inscription records an

1. I.A., XLVI (1917).
2. I.A., XLVIII (1919).
3. E.I., XV, p. 343.
4. E.I., XIX, pp. 180-2,

endowment of land and houses to the temple of Kalidēva by two vassals Rājaguru and Kaliammaraśa. The name Kaliammaraśa, Kaliya for short, occurs in a number of inscriptions⁵ as belonging to the Jīmūtavāhanānvaya, bearing the serpent standard (*pañnāgadvaṇṇa virāja*) devoted to the worship of Padmāvatī (*Padmāvatī labdha vara prasāda*) and adorned with the dust of the pollen of Jīna's lotus feet (*Jīna pāda paṅkajā rajah puñja piñjarita gātra*). Men belonging to different walks of life took the name of this deity. We hear of a Kalidēva⁶ making an endowment. Another Kalidēva^{6a} is referred to as a poet. A Kalidēva Śetti^{6b} is described as the Samayachakravartin seated in the *vajra baisanige* in the Banañju town of Kurumbetta. These instances will suffice to show the wide prevalence of the cult for some centuries. The monks of this cult belonged to the Aḍḍa Kaligaccha of the Valahāri gaṇa (*Aḍḍa Kaligaccha nāma valahāri gaṇa pratīta vikhyāta yāsāh*).⁷

So much for *Kalikula*; and now for the term *Kaḷabhra*. The Chikka-betta, or the smaller of the two hills in Śravaṇa-belagōla, was designated in old Kannaḍa inscriptions *Kaḷavappu* or *Kaḷabappu*—the Samskrit form being *Kaṭavapra*. A local tribe called *Kaḷabhōra*, is referred to in a very old inscription,⁸ from a village in the Bēlūr taluk not far from Śravaṇabelagōla. Here the Kadamba king Kākustha (c. 425-450) is said to be the enemy of the *Kaḷabhōras* (*Srīmat Kadamba parityāgasampannan Kaḷabhōrāna ari*). The Pāli and Prākṛit form is *Kaḷabba*, which in Tamil became *Kaḷabhrar*, *Kaḷappar* or *Kalappālar*. Mahāvidvān M. Raghava Iyengar has pointed out that this Tamil rendering is similar to the following:—*andaṇar*, *andaṇālar*; *aruvar*, *aruvālar*; *vēl*, *vēlālār*.

One historical fact may be deduced from this record. During the first half of the 5th century, the region round Śravaṇabelagōla, Bēlūr, etc., had passed into Kadamba hands. Later this region came under the sway of the Western Gaṅgas. The Kōvalevetṭu grant of Diṇḍiga,⁹ ruler of Kaḷabappu Nāḍu, records a grant made

5. Cf. Kolur and Devageri inscriptions, *E.I.*, XIX.

6. Kadamba inscription at Niralgi.

6-a. At Lakshmeshvar (Puligere).

6-b. *E.I.*, XIX, No. 4.

7. *E.I.*, VII, p. 187.

8. Halmidi (Belur) (Museum, Mys. Arch. Office) *M.A.R.* 1936, No. 16.

9. *Mys. Arch. Report*, 1927, No. 118, Mandya Taluk.

with the consent of the Western Gaṅga king Śrīpurusha. Another inscription—this one from Śravaṇabelagōla, states that Diṇḍiga and queen Kampitā witnessed the passing away of a great Āchārya. And Chikkabetṭa or Kaḷabappu thenceforward came to be called in inscriptions Chandragiri, Tirthagiri and Rishigiri, and the old name was forgotten.

Dislodged from the region of Śravaṇabelagōla, the tribe seems to have moved eastward and settled down in the region comprising the modern districts of Bangalore, Kolar and Chittoor. A *vīragal*¹⁰ in Hoskote taluk tells us that this region was called Kaḷavaranaṇḍu evidently after the Kaḷavar or Kaḷabhara. The names Kaḷavaranaṇḍu and Kalināḍu, that this region bore, seem to have lingered in the memory of successive generations for some centuries later. E.C., X, Chickballapur, 9, tells us that Nandi was situated in the Kaḷavaranaṇḍu and E.C., X, Chintamani, 9, also mentions Kaḷavaranaṇḍu and E.C., IX, 97, Kalināḍ. The groups of villages mentioned in these records belong to this region. On the strength of a verse¹¹ in praise of Achyuta, a Kaḷabhara King, Mahāvidwān, M. Raghava Iyengar puts forth a suggestion that the home of the Kaḷabhras must have been the Nandi Hills in Kolar district, and his suggestion seems to be amply borne out by the inscriptions.

The Kāśākūḍi plates of Pallava Nandivarman include among the enemies of his ancestor Simhavishṇu (575-600), the Kaḷabhōra, who are juxtaposed with the Malayas, Maḷavas, Chōḷas and Pāṇḍyas. Again the Kūram plates of Narasimhavarman mention this order—the Chōḷas, Kēraḷas, Kaḷabhras and Pāṇḍyas. The Nerūr grant of Chāḷukya Vikramāditya II has the following—‘Pāṇḍya, Chōḷa, Kēraḷa, Kaḷabhara prabhṛti-bhūbrid.’ The Harihar grant of Vinayāditya mentions Pallava, Kaḷabhara, Kēraḷa. Though it may not constitute a valid ground for forming a definite conclusion, it is however not without interest to observe that the Kaḷabhras are mentioned between the Pallavas and Kēraḷas. These inscriptions, however, make it clear that the Kaḷabhras held sway over this region till about the beginning of the 8th century, when they were finally liquidated; and their territories were included in the Chāḷukya and Western Gaṅga kingdoms.

10. E.C., IX, Hoskote 13.

11. *perumpuhalachchutakkōvē nandi māmalaḷ silamba
nandi nīrpāvutal nāvālarṅkarite*

quoted in the *Yāpparaṅgalavṛitti*

From this region, which was their homeland from about the 5th century, if not earlier, the Kaḷabhras must have marched into the Tamil country.

Peaceful migrations and armed incursions from the Kannaḍa country to South Tamilnāḍ have been frequent from time immemorial before the Kaḷabhra incursion. The Kurubhas from the South Kannaḍa country migrated to the region south of the Palni hills and gave it the old name of Panrināḍu. The commentary on *Tolkāppiyam* narrates that Agastya brought with him 18 septs of Vellālars with a Vēl or chieftain at the head of each, some of whom after a sojourn in the modern state of Mysore spread themselves all over the South. Even as early as the 3rd or 2nd century B.C., Jain monks were sent from Śravaṇabelagōla to the South, and their followers were to be found all over the Tamil land as far south as Nagercoil, and they studded the land with monasteries. They grew enormously in number and influence and established the Jaina Saṅgam at Madurai about A.D. 470 with a network of branches and monastic establishments spread far and wide. The Tamil Jains continued to look upon Śravaṇabelagōla as the principal seat of their religion. The hills of Śravaṇabelagōla are full of epitaphs recording the visits of the monks from the south. The peaceful penetration of Jaina monks prepared the way for the incursion of warlike tribes. Śēkkiḷār recalls one such incursion of a predatory chief from a region in Kannaḍa situated in the midst of impenetrable forests.¹² The chief captured Madurai where he suppressed the daily worship in the temple of Sundarēśvara. Mūrti Nāyanār, whose service consisted in preparing sandal paste for the anointment of the God, was deprived of the means of rendering this pious service. The chief died without heirs; the ministers sent round the royal elephant with a garland which the lordly animal threw round the neck of Mūrti Nāyanār, who then assumed the rulership of the State. Venkayya is disposed to identify this Purāṇic story with the invasion of the Kaḷabhra king, but the details of this *Periṇṇaḥ* story totally differ from what the Vēlvikuḍi grant narrates. The Kaḷabhra occupation of Madurai lasted for a pretty long time, and it was terminated by Kaḍuṅgōn. This story may, however, relate to an earlier incursion.

The initial date of the *Kali era* must be placed in the last quarter of the 4th century. Early in the 5th century, the Kaḷabhras of the

12. *kānakkūḍi śūl vaḍugak karuṇāḍar kāvan mānappadai mannan varindu nilangoḷvāṇāy*

Kalikula had settled in the region from Bangalore to Chittoor. We may, therefore, assign to the Kaḷabhra conquest of the south some date about the middle of the 5th century.

The story of the Kaḷabhras, as gleaned from the records mentioned above, may be summed up in a few words. Dislodged by the Kadambas from their earlier home round about Śravaṇabelagōla, they moved east and carved out a kingdom, which included Bangalore, Kolar and parts of Chittoor district which came to be called after them Kalināḍ, or Kalavarnāḍ, and from there they spread out into Tonḍaināḍ, Chōlanāḍ and Pāṇḍināḍ overthrowing the long-established Tamil monarchies.¹³ They occupied Madurai some time after the reign of Mudukuḍumi—how long after, we do not know. The 'Saṅgam epoch' had already closed and was followed by a period of darkness. The faineant successors of Mudukuḍumi were perhaps too insignificant and inept to be celebrated in song. One such king was slain by the Kaḷabhras. The Chōḷas were in a state of hibernation and easily went under. There is a gap in the history of Kāñchī. The Pallava kings of the Samskrit charters prior to Kumaravishṇu had lost possession of Kāñchī and confined their rule to the Telugu districts wherefrom they issued their charters. The interregnum in Kāñchī commencing roughly from A.D. 436, perhaps marks the Kaḷabhra occupation of Tondaimaṇḍalam, which was finally terminated by Simhavishṇu.

It would, therefore, appear that Tamilnāḍ was under the Kaḷābhras for the best part of the period—5th to 6th centuries A.D., and the final debacle was brought about by the Pāṇḍya Kaḍuṅgōn and the Pallava Simhavishṇu; each stands at the beginning of a powerful line of rulers. This was by no means the end; they were still a power in their homeland which was repeatedly attacked by the Pallavas from the east and the Chāḷukyas of Bādāmi and their feudatories from the north till they were liquidated.

The assumption is forced upon us that more than one family of Kaḷabhras ruled over the Tamil land. A Kaḷabhra ruler in Tondaināḍu was designated king of Kaḷandai. He was Kurruva Nāyanār, one of the 63 canonised Śaiva saints. Śēkḱilār speaks of him as *Kaḷandaivēndar-Kaḷappālanāhiya-Kūrruvan*. He approached the *muvāyirattār*, the hereditary trustees and priests

of the Chidambaram temple, to invest him with the Chōla crown. Three old stanzas reproduced in *Yapparunṅaḷakkārikai* and the colophon in Buddhadatta's Thēravāda manual in Pāli, *Vinayavinichchaya*, refer to another ruler Achyuta Vikrānta (*Kaḷabbakula Achchutavikkanta* in Pāli). He ruled over the Chōla country and liberally patronised Buddhism. The Chief, who occupied Madurai, was a Jain. Long after the Kaḷabhras passed out of history, some Kaḷappālars continued to be mentioned in Tamil inscriptions of a much later century and they were men of no importance—petty officials mostly in the *nāḍus* and *kūrrams* of the Chōla kingdom.

ARCHAEOLOGICAL NOTES

The last ten years constitute a very important period of archaeological activity in India. While upto 1945 we had only some disjointed archaeological material relating to the early phases of the history of our country, we have now a fairly large and cogent volume of it, thanks to the work of the archaeological departments of the Government of India and some States, Indo-logical Research Institutes and a few Universities. In recent years over fifty planned excavations have been conducted in different places which have widened and deepened our knowledge of the pre- and proto-history of our country as also its ancient and mediaeval history. The excavated sites may be mentioned in the following geographical order.

Indus Basin: Harappa, Mohenjodaro, Taxila, Rupar and Kila Gul Mohammed.

Gangetic Valley: Hastinapur, Kausambi, Vaisali, Rajgir, Patna, Jagatram, Tamluk and Bengarh.

Malwa Plateau and Central India: Maheswar, Tripuri, Nagda, and Ujjain.

Gujarat and Rajputana: Rangpur, Vasai, Lothal, Amreli, Somnath, Vadnagar, Baroda, Timbarva, Variavi, Bhinnamala, Ahar, Langhnaj, Akhaji, Amrapuri, Rangmahal, Lakhabawal and Amara.

Maharashtra: Bahal, Nasik, Jorwe, Nevasa, Kolhapur and Prakash.

Deccan: Brahmagiri, Maski, Sanganakallu, Piklihal, Chandra-valli, Nagarjunakonda, Kotturu and Salihundam.

Orissa: Sisupalgarh.

Tamilnad: Arikamedu, Sanur, Sengamedu, Pallavamedu, Amritamangalam and Kunnattur.

It is not possible to review in this small compass all the archaeological excavations conducted during this period. But the more important ones may be briefly noted:

One of the major problems engaging the attention of the Archaeological Department is to bridge the gulf between the end of the Harappa culture about 1500 B.C., and the beginning of

the historical period about the age of the Buddha. Hence excavations have been undertaken at various archaeological sites in North-western, Central and Western India. One of them representing work over some years is at Rupar, sixty miles north of Ambala. The site was a happy choice, since it yielded material which revealed an almost continuous sequence of occupation from the period of the Harappa culture to mediaeval times. It is believed that the Harappans occupied Rupar also for about half a millennium. The site appears to have been deserted for some centuries after which it was re-occupied about 1000 B.C., by a different people with a different tradition, who bore resemblance in their culture to the one revealed by many sites in Rajasthan, Punjab and West Uttar Pradesh. This was followed by three other periods in the cultural history of the place.

The Harappa culture was considered to have extended as far as Gujarat in the South and so a thorough examination of important archaeological sites in the area had to be undertaken. Among the more important ones where systematic digging has been undertaken are Rangpur and Lothal. The excavations conducted in these places have been definitely fruitful since they reveal Harappa characteristics. Rangpur has shown three cultural levels, microlithic, chalcolithic and late chalcolithic roughly dating between 2000 B.C. and 800 B.C., and thus has provided a good cultural timetable from the Harappa period to the period of the Northern Black Polished Ware without any break. Excavations were conducted on a high mound $19000' \times 1000' \times 20'$ at Lothal. The place has yielded many antiquities, among them being steatite bangles, bowls, earrings, beads, chert-blades, copper arrow heads and weights like those found at Harappa, besides a number of Indus seals with the usual script, and animals like the unicorn. They point to the fact that the early culture of the site had Harappan characteristics. A number of other similar sites have also been found in Gujarat, like Lakha balol, Amra, Phala, Cota and Somnath.

"The bearing of the excavations at Rangpur and Lothal and the explorations in Saurashtra undertaken in recent years on the movement of the Harappa folk in the Gujarat Peninsula may be summed up here. The Harappa sites in Gujarat now number about twenty, most of which are concentrated near the coast. Shri S. R. Rao feels that this indicates a maritime route followed by the Harappans in their Northwest movement. The Harappans seem to have taken a sea route and landed first at the ports situat-

ed on the mouths of rivers where they made temporary settlements, and to have moved further interior along the river banks, so as to have larger settlements with assured water supply as at Rangpur, Lothal and Gop. It is significant that not a single Harappa site was found in North Saurashtra; yet it is in this region that such sites were to be expected had the Harappans followed a land route from Sind."

In order to find out the nature of the chalcolithic phase of ancient Indian culture in Western India and its sequence, excavations were made at a mound in Prakash at the confluence of the Tapti and Gomai. The place has revealed a continuous sequence which can be divided into four cultural periods from the first millennium B.C., to the sixth century A.D.

Excavations were conducted at two sites in Nagda and Ujjain, both in Madhya Bharat. The site chosen at Nagda was a mound 90 ft. high on the bank of the River Chambal. The excavations at the place have revealed three periods of occupation from the period of the chalcolithic culture to about 200 B.C. It is interesting to note that among the numerous archaeological finds at the place is a terracotta ball with an inscription in Brahmi characters. Since it was found in the upper levels of the excavated site it may be assigned to the second century B.C. Excavations conducted in a large mound on the bank of the River Sipra in Ujjain have revealed the ruins of an ancient city. The occupational deposits at the place could be divided into different periods from the seventh century B.C., to at least the sixth century A.D. Since only limited work was done last year at the site work is being continued there this year also.

Excavations were conducted at Mathura, a place of hoary antiquity. The digging has revealed through its many interesting archaeological finds, its continuous history from about the sixth century B.C. to the sixth century A.D.

Among a few other excavations mention may be made of those conducted at Purana Qila (Old Fort) in Delhi usually identified with Indra Prastha of the Mahābhārata fame and Kanyākubja (Kanauj in Uttar Pradesh). The excavations at the former place have revealed that it was under continuous occupation from about 1000 B.C., to the Kushan times at least. The digging at Kanyākubja, a place with a long history and an important centre of

political activity from the seventh century A.D. has revealed four cultural periods from about 1000 B.C. to about 700 or 800 A.D.

A very important excavation relating to early historical times was undertaken at the *śvamedha* site at Jagatram thirty miles to the north of Dehra Dun in Uttar Pradesh. It revealed remains of three sites where a king called Śilavarman performed horse sacrifices in the third century A.D. The inscription on the bricks of one of the altars at the place reads, "this is the altar of the fourth horse sacrifice performed by king Śilavarman who was of the Vishagana Gotra and was sixth in descent from Pona or was of *Ponavamsa*."

The Deccan College Post-graduate and Research Institute, Poona and the Baroda University have been conducting very important and useful excavations at different places in Western India. One of them was at the high mound at Nevesa in the Ahmednagar district on the southern bank of the River Pravara. The site is particularly important as it provides for the first time a fairly complete sequence of cultures from the earliest times to the mediaeval period namely the palaeolithic in two stages, neolithic, chalcolithic, early historical, Roman Satavahana and early Muslim. (Bahmani).

Among other excavations were those made at Maheswar in Madhya Bharat, and Langhnaj in Saurashtra. In the former place have been found below the remains of three historical periods vestiges of a proto-microlithic and proto-neolithic culture. The excavations at Langhnaj also has revealed a wide range of microlithic culture.

Ahar near Udaipur was the capital of the Guhila kings, the ancestors of the Rājas of Mewar. Excavations at a mound at the place have revealed several building levels and a continuous occupation of the site from about 500 B.C. to almost the Kushan times.

The University of Allahabad conducted excavations at Kausambi for a number of years, the main concentration being at the Ghoshitarama monastery. The excavations have been fruitful in as much they have yielded much useful archaeological material and showed that the site was under continuous occupation from the sixth century B.C., to the fifth century A.D. Further excavations at Kumrahar have shown that the Mauryan pillared hall had on the whole 84 pillars of which 72 had been located by

Dr. Spooner. It appears that the hall was destroyed about the middle of the second century B.C.

The University of Saugar excavated at Sirpur two prominent mounds lying about a small distance to the south of the Lakshmana temple. They have revealed two large Buddhist monasteries and the ruins of a number of small structures including *vihāras*. Excavations made in the habitation mound showed three occupational periods from the fifth century A.D. to the eleventh century A.D.

Excavations were conducted by the K. P. Jayaswal Research Institute, Patna at four different places near the city. Five periods of occupation from about the sixth century B.C. to the seventeenth century A.D., with an unfortunate gap of nearly 1000 years from 600 A.D. to 1600 A.D., have been found. Among the interesting antiquities found in the course of the excavations is the fragment of the capital of probably an Asokan pillar.

Much excavation work is being done in the Andhradeśa which is rich in Buddhist remains. The most important of the places in the Andhra country which has been receiving the largest attention is the famous Buddhist site of the Nagarjunakonda valley to the South of the River Krishnā in the Guntur District and associated with the name of Acharya Nagarjuna. Years ago some Buddhist remains were excavated at the place by Longhurst, Hamid Quaraishi and Ramachandran. But since the Nagarjunakonda valley is soon to be submerged under deep water by the Nagarjunasagar project, an intensive programme of excavation of the site has been undertaken since 1954. As a result of this, many monasteries, *stupas* sculptured slabs and temples, one of them dedicated to Hariti, the Buddhist mother-goddess have been exposed. Besides a ghat on the Krishnā bank and a brick-built stepped embankment have been brought to light. Among other buildings that have been exposed are structures in the palace area, pillared pavilions etc. In the course of the excavations a few inscriptions of the Ikshvāku dynasty have been discovered. One of them mentions the Buddhist sect Mahāvihāravāsin of Theravāda-vibhajjavāda which was one of the three divisions of Theravāda of Ceylon. Nāgārjunakonda appears to have been occupied by the palaeolithic man also. A few burial sites also have been excavated at the place. Among other places in the Andhra country where excavations were conducted are the Buddhist sites of Kotturu and Salihundam.

The outstanding problem engaging the attention of the Southern Circle of the Archaeological Department in the Tamil country is the megalithic problem. Parts of South India, particularly the Chingleput District and the adjoining ones were surveyed for the purpose. The Chingleput District itself revealed the existence of more than 200 such sites. A few sites in the District, namely Sanur, Amritamangalam, and Kunnattur, and one site, Sengamedu, in the South Arcot District were excavated. In the Chingleput District two main megalithic types have been found namely Cairn circles and Dolminoid cist. The Sarcophagus internment is found at Kunnattur. Excavations are in progress at the site even now. The Sengamedu excavations have revealed a pottery of the megalithic folk as also a later intrusion of the rouletted ware indicating Roman contact as at Arikamedu. Excavations was made at Pallavamedu near Kanchipuram to see if it contains relics of the Pallavas. Different parts of the Tamil country particularly the Districts of South Arcot, Tanjore, Tiruchirapalli and Madurai have been partially explored in recent times by the Archaeological Department to examine their archaeological wealth. The explorations have shown that there was an Indo-Roman trading centre at Nattamedu in the South Arcot District. In the Madura District have been found a number of cairn circles.

Recently excavations were conducted at Jadigenahalli 20 miles north-east of Bangalore by the Archaeological Department of Mysore. They have revealed the existence for the first time in Mysore of the sarcophagus burial, a mode of burial largely confined, so far, to the Chingleput District. But unlike the Chingleput ones, the sarcophagus at Jadigenahalli occurs in a large pit circle at a depth of 10-12 feet. There are small pit circles with baby sarcophagi. Iron implements and polished pottery, both red and black, are present as usual.

A 'Temple Survey Project' has been organised by the Archaeological Department with a view to study systematically temple architecture, its evolution, chronology and style. India has been divided into two zones for the purpose, north and south. Work has started on them.

Till recently the Indian Archaeological Department had practically no contact with the neighbouring countries, not even with Afghanistan and the other adjoining ones on the north-west, though there have been cultural contacts between India and those countries from very early times. For the first time an Indian

Archaeological Delegation was organised last year by the Government of India at the invitation of the Afghan Government for exploring Afghanistan and assessing its archaeological wealth. The expedition which was led by Sri T. N. Ramachandran, Joint Director-General of Archaeology in India, explored about 4000 miles of Afghan territory and collected a large mass of archaeological material belonging to a long period of history. It is hoped that following this, excavations will be undertaken by the Archaeological Department of India at important archaeological sites in Afghanistan with the help of the Government of the country.

The Archaeological Department participated in the exhibition of Buddhist Art and Antiquities held at Rangoon in 1954. Later in 1956 it celebrated the 2500th Buddha *parinirvana* anniversary in co-operation with the Lalit Kala Akademi (National Academy of Art) and organised at Delhi an exhibition of Buddhist Art and Antiquities, a very unique one of its kind. Then the Exhibition was taken to Banaras, Patna, Calcutta, Madras and Bombay. The occasion of the celebrations was availed of to make extensive improvements to the Buddhist remains of Sravasti, Sankissa, Sarnath, Kusinagara, Nalanda, Rajgiri and Sanchi. The Archaeological Department took part in the Exhibition organised by the University of Madras in 1957 in connection with its centenary celebrations.

The Epigraphical Branch of the Archaeological Department has made outstanding discoveries of a number of inscriptions. Two of them are versions of the Minor Rock-Edict of Asoka. One of them is on a rock at Rajula Mandagiri in the Kurnool District and the other is at Gujarra in the former Vindhya Pradesh. The latter is particularly important on account of its mention of Asoka by name. It may be mentioned that the first inscription mentioning Asoka by name was found years ago at Maski. Another is a damaged version of the Ninth Rock-Edict of the same Emperor from Sopara. Sopara is known as the findspot of a fragment of the Eighth Rock-Edict also. To us in South India an inscription from Kanchipuram, most probably of the time of Pallava Narasimhavarman II which refers to the Ajivikas and a temple of Arivas (Arhat) is important. Another in the Kamakshi temple at the same place contains a *prasasti* which describes the relationship between the Hoysala king Vira Ballala III and the contemporary southern powers*

*The notes are largely based on the publications of the Department of Archaeology, and information given by friends.

MEETINGS OF THE ARCHAEOLOGICAL SOCIETY OF SOUTH INDIA (1956-'57)

- 1-8-1956. Annual Meeting.
Speaker: Dr. M. Arokiaswami, Reader in Indian History and Archaeology University of Madras.
Subject: Social Developments under the Imperial Cholas.
- 11-8-1956. Speaker: Sri T. N. Ramachandran, M.A., Joint Director-General of Archaeology in India, New Delhi.
Subject: Recent Archaeological explorations in Afghanistan.
- 22-10-1956. Informal meeting.
Chief Guest: Sri A. Ghosh, Director-General of Archaeology in India, New Delhi.
Subject for Discussion: Problems relating to South Indian Archaeology.
- 30-10-1956. Speaker: Sri T. N. Ramachandran, M.A., Joint Director-General of Archaeology in India, New Delhi.
Subject: Java and India.
- 18-2-1957. Speaker: Dr. C. L. Fabrie.
Subject: Art and Archaeology.
- 23-3-1957. Speaker: Prof. K. A. Nilakanta Sastri, M.A.
Subject: The Deva Raja Cult in the Far Eastern Countries.
- 30-4-1957. Speaker: Sri K. R. Venkatarama Ayyar, Director of Public Instruction (Retd.), Pudukkottai.
Subject: Jainism in South India from Inscriptions.

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