THE FUTURE OF ARCHAEOLOGY IN TAMIL NADU

Inaugural Lecture

Tamil University

by

Professor of Archaeology Department of Epigraphy

Please send your comments, if any. to the Registrar, Tamil University Thanjavur - 613 001 before 187.95



TAMIL UNIVERSITY
THANJAVUR

Y. Subbarayalu

Archaeology is concerned the study of the entire human past using the material evidence that has survived the ravages of time. Even though archaeology is usually equated with 'prehistory' it has a lot to contribute to the clarification of historical period also. This paper first reviews briefly the studies undertaken till now in the prehistoric as historical archaeology well of Tamilnadu, then highlights some of the unsolved problems and considers future mode of action to solve these problems. It must be clarified at the outset that the archaeology of Tamilnadu cannot be studied in isolation as otherwise we would be making the mistake of treating it as a cul-desac.

Archaeological research in India started more than a hundred years ago. Thanks to the efforts of various Institutions and individuals durina this long period, particularly during the last five decades, a fair outline of the Indian prehistory is now available. But still there are a number of gaps in the picture. One major reason for this deficiency is that publication of the results of most fieldworks had been much delayed with the result that no proper feedback of new information took place, hampering further active research:

In 1944 the first scientific excavation of a site in Tamilnadu j.e., Arikamedu near Pondicherry, was undertaken by the Archaeological Survey of India (hereafter abbreviated as A.S.I.) and the results were published within a couple of years. But other excavations undertaken many subsequently by the A.S.I. have not been reported fully, though some information has been disseminated through a few sporadic articles. In addition to the A.S.I., the Department of Ancient History and Archaeology of the University of Madras and the Tamilnadu State Department of Archaeology have been continuously undertaking archaeological fieldwork for the last two decades. Altogether about thirty-five sites have excavated during the last four decades and among these are included such important sites as Gudiyam, Paiyampalli, Kavirippumpattinam, Kanchipuram, Korkai, Karur, Uraiyur, etc. Full reports have been published so far only for seven of the excavated sites.

Some Districts have been intensively explored by the A.S.I. for fixing up the ancient sites: Pudukkottai, Chingleput, Madurai, Coimbatore, Dharmapuri and parts of the North Arcot District. This and the exploratory works of the Madras University Department and the State Department have brought to light a large number of ancient sites, some of them having good archaeological potential. Here again comparing notes is difficult as detailed reports of the above excavations are not available.

Splorations

Even though full data were not published some scholars were simultaneously interpreting and making some synthesis of the available material. The first thought-provoking article was written by an anthropologist, C. von Furer Haimendorf (1953) who initiated the debate about the possible Dravidian authorship of iron-using megalithic culture. The first serious treatment of the new archaeological discoveries by a historian is the one found in K.A. Nilakanta Sastri's A History of South India (1955).² T. Balakrishnan Nair who contributed the relevant chapter to this book made a neat and succinct up-to-date summary of the 'earliest peoples and cultures' of South India. After this, many works on Indian or South Indian archaeology in general have included discussion relating to Tamilnadu (Subba Rao, B, 1958; Sankalia, H.D., 1963; Banerjee, N.R., 1965; Allchin, Bridget & Raymond, 1968; Gururaja Rao, B.K., 1972). Recently two works were published by B. Narasimhaiah (1980) and K.S.-Ramachandran (1980) specially devoted to Tamilnadu. And there is a good chapter in the book by K.K. Pillay (1975),

The knowledge accumulated so far from all these works may be summarised as follows. Our understanding of the earliest stage, i.e., the Palaeolithic stage, is still very much limited. No progress has been made beyond the typology of the

stone tools picked up in thousands in Attirampakkam and other places in the Chinaleput District. The pioneer of V.D. Krishnaswamy, works Terra and Paterson have not been improved upon so far. The excavations conducted by the A.S.I. at Gudiyam and other nearby places in the Chingleput District should provide a large volume of data if and when the results are published. One thing seems to be certain. That is, the Palaeolithic cultural material are found only in the Chingleput District. But the Mesolithic/Microlithic tools are available in this District as well as in the coastal tracts of the Tirunelveli District and in some other localities. Some new information has accumulated about this stage since it was first studied by F.E. Zeuner Allchin (Allchin, Bridget Bridget. 1966). Recently some work has been done on the Tirunelveli sites by the archaeologists of the Deccan College (Joshi, R.V. et al. 1980). The most important finding that has emerged from these studies is that there exists close similarity between the microlithic tools of the Tirunelveli and Kerala coasts and those of Sri I anka.

As for the next stage, the Neolithic stage, more information has been collected since the work started in the 1940's. In the present state of research the Neolithic culture seems to be confined to the Districts

- 1. The earliest book relating to the archaeology of Tamilnadu is that of P.T. Srinivasa lyengar (1926). It must be said that when such works were written the serious study of Indian prehistory had hardly begun. Even after serious work had started some very out-dated books were published. e.g., V.R. Ramachandra Dikshitar, Prehistoric South India (1951).
- 2. This book was actually completed in 1949 but was published only in 1955.

of Dharmapuri and North Arcot i.e., to the northern part of Tamilnadu abutting Karnataka. The impression may change if further work is done as a number of surface finds of Neolithic celts is reported from other Districts also. But habitation and factory sites have been found only in the northern Districts. Paiyampalli in the North Arcot District was excavated by the A.S.I. and some section-scraping study of three other sites in the Dharmapuri District was undertaken by Narasimhaiah. While the Paiyampalli excavation is not yet fully reported, the painstaking study of Narasimhaiah (1980) is significant in that it has tried to make a comparison of the Dharmapuri material with that found in Nagarjunakonda in Andhra Pradesh and in the Karnataka sites and by this he has put forth a number of hypotheses to work upon further. According to him there are three Neolithic phases and a pre-pottery Neolithic phase. The excavation at Paiyampalli has provided a few radiocarbon dates for the Neolithic phase of that site and on typological basis Narasimhaiah dates his three Neolithic phases from c.2800 B.C. This dating has to be confirmed by future researches.

The Neolithic Age was succeeded directly by the Iron Age in Tamilnadu without the intervening Copper Age as far as the present excavated evidence goes. Even though previously Iron Age was equated with the 'Megalithic' culture in archaeological literature, most scholars now are wary of the equation. Because the few excavations conducted in the megalithic burial sites after Independence could not clearly relate them to

a nearby Iron Age (or megalithic) habitation site and vice versa. Independent dating of the megalithic burials to a period earlier than the 3rd century B.C. has not yet been possible whereas Iron Age (habitation) sites have been dated from about 1000 B.C. in northern Karnataka and from the 7th century B.C. at Paiyampalli.

During the last four decades many new discoveries have been made. An exhaustive account the known megalithic sites is given by Gururaja Rao (1972) and also by Leshnik (1974). Narasimhaiah has studied the distribution pattern of various megalithic burial types found in Tamilnadu and mainly on the typological basis he dates the various types within a time bracket ranging from 500 B.C. to 100 B.C., types being found in the earliest north-western parts and the latest ones in the Tirunelveli District.

There is still no proper definition of the Early Historical period far as the excavated material is concerned. If the appearance writing is taken to mark the advent of historical period, then c. B.C. may be taken as the starting point. This however cannot be easily fixed in the archaeological contexts which do not supply sufficient written material. But some written material has been unearthed in many of the 'historical' sites: Alagarai, Uraiyur, Karur, Korkai, Vallam, Arikamedu, Madurai and Kodumanal. In all the sites the transition to the historical period does not show any break. There is a perfect continuity. May historical period saw the introduction of bricks and tiles for constructing buildings. Even though full plans of early structures

not yet available due to the limited nature of the digs, burnt bricks of big size and the grooved tiles were encountered in many of the above sites.

The Problems:

Most of the excavations referred to above by their pioneer nature involved collection and classification of data only. Again they were, with a few exceptions, small scale works. The primary aims of those were to find out the antiquity and the culture sequence for the concerned sites. So they did not require much interpretative work. If some questions were posed they were only incidental. Added to this descriptive nature of the works, the findings were kept the excavators for themselves and thus failed to attract further research in them. As there were framed no hypotheses for testing, the District-wide exploratory works were also not so fruitful and left unnoticed. Some scholars who asked questions or enunciated hypotheses kept aloof and did not interact much with the actual field workers.

Some of the questions that come to mind immediately on reading the available literature may be mentioned now. Is there a continuity between the Mesolithic (or Late Stone Age) and the Neolithic stages. Narasimhaiah inclines to say But his pre-pottery Neolithic phase is yet to be proved convincingly. The relation of the Neolithic culture of Tamilnadu to that of Andhra-Karnataka area is not clearly settled. Its extension into the southern parts of Tamilnadu has also to be probed further. A related question is who culture. of this authors the were

Were they autochthonous to or immigrants into the peninsular India? The Allchins suggest that they should have been the speakers of Dravidian languages migrated from Iran or thereabouts on the basis of similar pottery and skeletal remains of Caucasoid or Mediterranean features (Allchin, B, & R., 1968).

Certainly there is some discontinuity between the Neolithic culture on the one hand and the succeeding Iron Age culture on the other, though they coexisted for some time during the transition stage. Strangely there intervenes no Copper Age in peninsular India as in the Deccan and other areas. Next, what exactly is the relation between the people who produced the megalithic burial complex and the people who introduced iron in this area? There seems to exist some time gap between the two events. The impression may prove to be wrong when more evidence is collected. In the Vidarbha region of Maharashtra (about Nagpur) the megaliths are dated by radiocarbon method from the beginning of the 6th century B.C. (Deo and Jamkhedkar, 1982). So far no such independent radiocarbon dates are available for the southern megaliths. The present dating is based on typological classification or on some dubious numismatic evidence. In this connection the occurrence or non-occurrence of the so-called Andhra ware or Russetcoated ware has also been used. It has been claimed that this pottery spread from the Karnataka-Andhra region into Tamilnadu. But actually this pottery seems to have its original home in the Kongu region (Coimbatore-Districts) as it occurs Perivar profuse quantities in this area and outside the area it occurs in proportionately lesser quantities. Gururaja Rao (1972) suggests that the Russetcoated ware might have had its origin and growth in the lower Kaveri basin basing his argument on the evidence from the Tirukkampuliyur excavation. But it may be mentioned that in the Thanjavur delta this ware has not been noticed so far. At Vallam not a single sherd of this pottery was found. Its clear stratigraphic position and its relation and proportion to the Black-and-Red ware should be studied carefully before any generalization is made. In this connection the evidence collected from our recent excavation at Kodumanal may help to a great extent as here we get comparable pottery both in the habitation deposit and within the burials.

The next problem is that relating to the authors of the megalithic cultrue. Many scholars stress, each for his own reasons, that it is the Dravidian speakers who introduced the megalithic culture into South India. One basis for all these hypotheses is that the area of the megalithic burial complex and the area of the Dravidian speakers almost coincide. The tenuous anthropometric evidence of a few skeletons found in the burials was also used in this connection. Some questions however have to be answered convincingly before this equation is accepted. There is a possibility that iron was introduced into India by a wave of Aryan immigrants about the end of the 2nd millennium B.C. (Allchin, B & R., 1968). But there is no evidence to relate the Aryan-speaking communities with the megalithic

monuments, even though Asko Parpola thinks otherwise (Parpola, 1973). Secondly, the megaliths appear too late in the South Indian context. Thirdly, the identification of the settled Neolithic communities who had occupied the area right from about 2500 B.C. becomes a problem if they were not themselves the Dravidian speakers.

As mentioned above, most megalithic burial sites are found without any habitation nearby. So now some scholars have postulated or revived some old idea that the megalithic people were some sort of pastoral nomads (Deo, 1983; Leshnik, 1974; Narasimhaiah 1980). S.B.Deo on the basis of some careful statistical analysis of his Vidarbha material points out that agricultural implements are proportionately less compared to war weapons in the iron repertoire of the megalithic burials. Leshnik produces some demographical support his idea. Narasimhaiah has also questioned the earlier suggestion that the megalith builders first introduced tank irrigation in Tamilnadu. All these scholars suggest that the Black-and-Red pottery in the megalithic burials was acquired from contemporary settled communities. If so, what is the evidence for these other communities? Secondly could some nomadic tribes build such huge monuments which involved lot of labour and a good knowledge of local geology and geography? Moreover, S.B. Deo (1983) has noticed that the megalithic sites are found in clusters in the Vidarbha area. which may not be possible if their founders were nomadic people. So

3. A summary of these views is given in Gururaja Rao (1972) and in Nara simhaiah (1980).

there crop up a chain of such problems if the megalith builders are considered as a nomadic people. But the opposite view also cannot be stressed unless and until a few associated habitation sites are identified and thoroughly excavated.

Whoever were the authors of the megalithic burials in the beginning, they became part and parcel of the Tamil society by the dawn of the historical period. The Cankam anthologies refer to the popularity of the urn burials (K.R. Srinivasan, 1946). They also refer to cremation of the dead. Even in the Manimekalai a Post-Cankam text, urn-burials and perhaps cist burials also are mentioned. The Cankam evidence may provide a clue as to the original authors of the megalithic tradition. That is by the way.

As mentioned earlier there is no cultural break between the Iron Age and the historical period. But we have still the problem of defining more rigorously the advent of the latter. It has to be checked whether brick-built buildings and the Brahmi writing are peculiar to this stage. Here the evidence from our excavations at Vallam and Kodumanal may be considered. In the limited dig inside the fort area at Vallam near Thanjavur the two bottom most layers, (9) and (8), yielded the Blackand-Red pottery and the associated Red pottery in a total deposit of 0.9 m. The deposit was clearly divisi-

ble into two sub-periods. In period I-A (0.6m deposit) the pottery contained a number of graffiti symbols while in the period I-B (0.3 m deposit) the pottery had practically no graffiti. But in I-B a few sherds were found with Brahmi letters. Does this mean that the graffiti, which had been earlier used for some sort of communication, were replaced by the Brahmi writing? It may be mentioned here that many other sites in Tamilnadu yielded graffiti-bearing pottery. They have to be studied for their proper strati-graphical context get answer to the above question. At Vallam the graffiti context put to early 2nd century B.C. by a single radiocarbon date.

At Kodumanal the Black-and-Red ware deposit is about 1.5m to 2m thick and the Brahmi letters seem to appear from the earliest level. And interestingly, a name written in Brahmi characters was obtained from a cist inside a cairn circle. This may be an evidence for the extension of megalithic burial cult into the historical period.

The excavation at Arikamedu has elucidated to some extent the maritime trade of the Tamil country with the Roman empire and by the way confirmed the literary evidence relating to this aspect. But so far very little is known about the internal trade activities and about the general economy. In this aspect the excavated material may help to a great extent. For instance the etched carnelian

^{4.} K.R. Srinivasan missed this point. Even some of the poems referred to by him mention cremation.

^{5.} Report on the Vallam excavation conducted in 1984 March-May will be published soon. Kodumanal was excavated only this summer.

are found in good number in the megalithic graves of Tamilnadu, particularly in those of the Kongu region. Kodumanal has yielded as many as eighty beads from a single burial. Carnelian, a semi-precious stone, is not available locally. Most probably it was imported from Gujarat. It may be recalled here that the Cankam Poem Pattinappalai (1.187) refers to 'precious stones and gold from Northern Hills' imported into the port of Kavirippumpattinam. Such material bearing on the economy of the early period has to be studied more carefully. Textual evidence can be clarified very much by the diligent use of archaeological material.

though lot of research has been made in the field of historical archaeology particularly in medieval archaeology (sculpture, architecture, etc.) the literary and inscriptional data have not been adequately There is a lot of untapped potential both the Tamil literature inscriptions. For instance, there is a lot of information in them relating to ancient place names. It is possible using this data to reconstruct the pattern of ancient settlements and correlate them to the archaeological picture. An attempt has been made by Champakalakshmi to see whether there exists any correlation between the settlements of the Velirs and the megalithic sites. The demographic information found in inscriptions should also prove

to be useful to check the archaeological evidence.

What should be the future course of action? The major defect of the previous archaeological research works was their piecemeal nature. Whatever reasons existed past for that, in future, only planned large-scale research projects must be undertaken as far as possible. Otherwise complete picture а early cultures would never be available. We should aim to unearth completely at least some streets of our early towns and villages. In Kodumanal there awaits us such a bright prospect. A trench in the last excavation revealed as many as eight floor levels. all in the Black-and-Red ware context. Resources may not be a problem if they are judiciously pooled for joint ventures by the University Departments and the Government Departments. Only a team of archaeologists and scientists in the allied disciplines can cope with the magnitude of the work awaiting. In the Indian context archaeologists and should take the help of scholars in the literary and linquistic fields. To create awareness in, and purposeful dialogue on, the new finds, publications must keep pace with the discoveries. Our ultimate aim should that the results interpreted scientifically should reach and educate the larger public and make them understand the country's cultural heritage in proper perspective.

BIBLIOGRAPHY

Allchin, Bridget 1966 The Stone tipped Arrow. London: Phoenix House.

Allchin, Bridget & Raymond 1968 The Birth of Indian Civilization. Penguin Books.

6. An exception to this is the work of K.R. Srinivasan (1960).

- Banerjee, N.R. 1965 The Iron Age in India. Delhi: Munshiram Manoharlal.
- Champakalakshmi, R. 1976 'Archaeology and Tamil Literary Tradition', *Purattva*, No.8, pp.110-22
- Deo, S.B. 1983 'The Megaliths: Their Culture, Ecology, Economy & Technology' (mimeo). Seminar on 'Recent Advances in Indian Archaeology'. Deccan College, Pune.
- Deo, S.B. & Jamkhedkar, A.P. 1982 Naikund Excavations 1978-80. Bombay: Department of Archaeology and Museums, of Maharashtra.
- Furer-Haimendorf, C. von 1953 'New Aspects of the Dravidian Problem' *Tamil Culture*, Vol.II no.2
- Gururaja Rao, B.K. 1972 The Megalithic Culture in South India. University of Mysore.
- Leshnik, L.S. 1974 South Indian Megalithic Burials The Pandukal Complex. Wiesbaden.
- Mahalingam, T.V. 1970 Report on the Excavation in the Lower Kaveri Valley: University of Madras.
- --- 1978 'Studies in South Indian Archaeology, Epigraphy, Architecture and Sculpture with special reference to Tamilnadu', Transactions of the Archaeological Society of South India. Madras.
- Maloney, Clarence 1975 'Archaeology in South India: Accomplishments and Prospects', in Burton Stein, ed., Essays on South India, University of Hawaii, 1975, pp.1-40

- Nilakanta Sastri, K.A. 1955 H i story of South India. Madras: Oxford University Press.
- Parpola, Asko 1973 Arguments for an Aryan Origin of the South Indian Megaliths Madras: Tamilnadu State Department of Archaeology.
- Pillay, K.K. 1975 A Social History of the Tamils University of Madras.
- Ramachandra Dikshitar, V.R. 1951

 Prehistoric South India. Madras.
- Sankalia, H.D. 1963 Prehistory and Protohistory in India and Pakistan. University of Bombay.
- Srinivasa Iyengar P.T. 1926 The Stone Age in India. Madras.
- Srinivasan, K.R. 1946 'Megalithic Burials and Urn Fields in South India in the Light of Tamil Literature and Tradition'. Ancient India, No.2, pp.9-16
- as Revealed by Early Monuments and Literature of the South. University of Madras.
- Subba Rao, B. 1958 The Personality of India. University of Baroda.
- Sundara, A. 1983 'Cultural Ecology of the Neolithic in India'. (mimeo). Seminar on 'Recent Advances in Indian Archaeology', Deccan College, Pune.
- Joshi, R.V. et al 1980. On the Problem of Chronology of the Mesolithic Industries in Kerala and South Tamilnadu. (mimeo). Seminar on Prehistory Allahabad.

