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(25 August 2014)

**MDTCLCP**

Department of History  
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(25 August 2014)

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## **ᱠᱟᱨ ᱦᱚᱱᱚᱛ ᱦᱚᱱᱚᱛ ᱦᱚᱱᱚᱛ ᱦᱚᱱᱚᱛ ᱦᱚᱱᱚᱛ ᱦᱚᱱᱚᱛ ᱦᱚᱱᱚᱛ**

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### **ᱠᱟᱨ ᱦᱚᱱᱚᱛ**

Understanding the cultural transition from Iron Age to Early Historic in South India, particularly in the region south of Deccan comprising the present states of southern Karnataka, Kerala, southern Andhra Pradesh and Tamil Nadu, is one of the difficult tasks in the field of archaeology. The available archaeological material suggests the existence of certain amount of cultural uniformity. But, drawing a chronological demarcation line between Iron Age and Early Historic has become a complex issue. The beginning of Iron Age as well as Early Historic is generally determined by the presence of a specific cultural element namely iron in the case of Iron Age and Brahmi script as a written document in the case of Early Historic. Irrespective of the literary source, the epigraphical data plays a decisive role in determining beginning of Early Historic period. In general, the introduction of iron and the availability of black-and-red ware generally are taken as the beginning of Iron Age. The occurrences of iron are not uniform throughout the south Indian cultural landscape. For instance, the study area provides certain palaeographic peculiarities of Brahmi script as one witnessed at Bhattiprolu and in cave inscriptions of Tamil Nadu. The Sri Lankan linguistic peculiarities also reflected in south Indian Brahmi script. The non-availability of absolute radiometric dates to identify the introduction of iron, black-red-ware and Brahmi script in south

Indian cultural context eluded the scholars for long. The recent radiometric dates obtained from specific stratigraphical position help us to understand the chronological context of these three important cultural elements.

The cultural transformation in a particular region covers a wider chronological phase and it is unwise to expect uniformity in its cultural expression throughout the landscape. The transformation was achieved by the process of acculturation that is more visible in an area of attraction and less in certain pockets which can be labelled as areas of limited attraction. These acculturation processes could be seen in social, economic, political and religious domains with different degrees of penetration. Thus, understanding the emergence of Early Historic South India is a fascinating and a complex affair.

The present evidence demonstrates that the emergence of Early Historic period is not uniform throughout South India and this is perhaps due to varied ecological settings. The beginning of Early Historic south India is still a matter of debate. The historians, linguistics, epigraphists, numismatics and archaeologists are trying to draw their conclusion based on data retrieved from their own source of study. The diverse and complex primary sources still prevent the scholars to come to a definite date for the beginning of Early Historic.

In general, the availability of the deciphered written document is considered as the beginning of historical period. In that sense, based on the Brahmi inscription of Asokan times,

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3<sup>rd</sup> century BCE is considered as the beginning of Early Historic period in south India. Therefore, the date of introduction of Brahmi script is very crucial to understand the beginning of Early Historic in South India. The historical inputs extracted from these Brahmi inscriptions engraved on stones, relic caskets, coins and inscribed potsherds are considered as a chronological anchor. Due to over-emphasis on a particular class of evidence, i.e., Brahmi script here, all other social parameters like the usage of coins, formation of trade routes, the size of the settlement, the formulation of various clan groups, the emergence of state and so on so forth are not seriously engaged. These parameters did not emerge as one time cultural package within a short time span but developed and evolved over a longer period as a social product. The cultural traits formed during Neolithic-Chalcolithic and Iron Age regime could be considered as a gestation period. The remarkable developments that had taken place in different spheres of the society during previous cultural phase culminated into the Early Historic. Therefore, it is necessary to study closely the cultures of a region that existed prior to Early Historic to understand the real foundation of Early Historic.

In south India, the culture that precedes the Early Historic is designated with different terms like proto-historic culture or Black-and-Red ware culture or Megalithic culture or Iron Age culture (Fig. 1). Among them, the labelling of megalithic culture is the common feature in south Indian cultural context. The term megalithic culture purely denotes a type of mortuary practice prevailed in this region prior to Early Historic and to larger extent followed in the Early Historic

times. Understanding this culture in a given cultural context is a crucial to understand the various cultural processes that had taken place in different segments of the society.

The term “megalithic” as applied to a particular type of burial complex is not only a misnomer but also stands as an inadequate term to define a comprehensive and complex sepulchral monuments that are found in different ecological zones. Majority of the monuments are labelled and the cultural identity of these monuments is established based on surface indicators. There is a vast difference, both in content and in chronology, exists in the sub-surface features of identical graves. For instance, the surface features of the majority of graves identified at Kodumanal, Porunthal and Thandikudi are cairn circles. But, the excavations demonstrated that these cairn circles entombed pit burial, urn burial, simple cist, transepted cist, transepted cist with one or two subsidiary cists and double cists (Fig. 2-6). Besides architectural variety, the graves also differ significantly both in content and chronology. Thus, the vague definition of megalithic and loose application have compounded the difficulties involved in studying these burials. It is just a system of burying the dead that followed in different cultural contexts. It has been practiced with same intensity during the Iron Age, Early Historic period and even today in certain packets of the country. For instance, the occurrence of inscribed potsherds with Brahmi script from a transepted cist found at Kodumanal (Subbarayalu 2008:209-249) and Porunthal (Rajan 2009:109-115; Rajan *et.al* 2014:62-85) and from an urn burial at Marungur are the finest indicators of its continuity in Early Historic times (Fig. 7). The survival of this

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mortuary practice for more than a millennium in different social and environmental contexts need not be designated or restricted with a simple term as megalithic. First, we need to differentiate the Iron Age megalithic monuments from the Early Historic megalithic monuments. Then, we need to differentiate early, middle and late Iron Age megalithic monuments too. A number of questions related to Iron Age still remains unanswered. In majority of the cases, the burial system does express homogenous cultural traits like black-and-red ware and iron objects. It is believed, exclusively based on the grave goods collected from different mode of burials, that it shows a homogenous culture. In fact, it does not show such things if compared the habitation material with grave goods obtained from the same habitation-cum-burial sites. For instance, the habitation-cum-burial site at Kodumanal provided a good picture on the nature of habitation and the burials. This site was excavated in seven seasons in which 17 burials in the graveyard and 61 trenches in the habitation were opened. A Tamil-Brahmi inscribed potsherd, beads of carnelian and agate, few pieces of russet coated painted ware and black-and-red ware collected from graves are identical to the one found in habitation. Besides the above repertoire, the habitation met with innumerable cultural objects which demonstrated various dimensions of the society. The furnace and crucibles demonstrated the technological level of iron, steel and copper technology (Figs. 8 and 9); graffiti marks and Tamil-Brahmi inscribed potsherds established their literacy level and linguistic pattern (Fig. 10); presence of Prakrit words and raw materials like carnelian, cats'eye, lapis lazuli and agate proved their external contact; the occurrence of Northern Black

Polished ware (Fig. 11), silver Punch Marked Coins (Fig. 12) and inscribed potsherds with Sri Lankan influence established their trade dimension; the availability of beads in different stages of manufacture attested the bead making technology (Fig. 13); collection of cotton piece with woven pattern and large amount of spindle whorls demonstrated the existence of weaving industry (Rajan 1996:72-86). In all, the habitation material gave a holistic view of the Early Historic society that practised megalithism. Such is the case in all four south Indian states. The multi-faceted and advanced nature of the society in all spheres of life would not have been realised if graves alone were opened. It is true, all the material that found in graves were encountered in the habitation but the material remains collected in the habitation were not surfaced in the graves. One has to take note of this situation while studying the excavation reports. If one studies the grave goods alone, leaving aside the habitation material, then it would give altogether a different picture such as nomadic or semi-nomadic way of life as suggested by Leshnik (Leshnik 1974:247-254). The combined examination of the material show a well-developed society. This is the root cause of the problem in the study of Iron Age or Early Historic culture of South India.

The intriguing factors like availability of commercially exploitable resources, the level of accessibility to the resources, the optimum utilization of natural resources and the capacity to transform the resource to their advantage by adopting a suitable technology, formation of trade routes, continuous capital inflow into the market and market mechanism and other such sustainable factors played a dominant role. The ancient society



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managed to adapt their life with ease by adopting a suitable technology or exploitation of natural resources both in potential agricultural zones and in dry commercial zones. For instance, it is widely believed that the fertile agricultural zones had played a dominant role in the social formation when compared with dry zones. In contrast, certain dry zones articulated their dominance in all spheres of life through the exploitation of natural resources like semi-precious stones and iron ores. The presence of considerable number of Neolithic and Iron Age sites and later Asokan edicts in gold mine area of Karnataka could be cited as an example. Likewise, the people living in coastal zones exploited the ocean resource, namely pearl and chank as one observed at the ancient ports of Korkai and Alagankulam in the Gulf of Mannar. As stated above, the capacity to transform the resource to their advantage is the key to their progress and it constitutes several micro-zones or sub-cultural zones. Such a situation also witnessed in Deccan. The Deccan, the ancient *Daksinapatha* covering south of the Vindhyas up to the Krishna-Tungabhadra basins, witnessed a three distinct cultural zones and sub-zones broadly encompassing the western, eastern and southern. The western Deccan met with more dominance of Chalcolithic culture and near or total absence of megalithic tradition. In contrast to this, the eastern Deccan has the Iron Age culture overlapping the Chalcolithic culture. In southern Deccan and northern Tamil Nadu, the Iron Age culture overlaps with the neolithic culture. In southern Tamil Nadu, the Iron Age culture overlaps with microlithic culture. Thus, the level of subsistence pattern that existed at the time of introduction of iron differs at a large scale. After the introduction of iron, one could witness change

in growth pattern of each cultural zone. Thus, the change in subsistence pattern or level of transformation differs from region to region. The lack of region specific and goal oriented explorations and excavations restricted our understanding of south Indian Chalcolithic, Neolithic-Chalcolithic, Neolithic, Iron Age and Early Historic cultures.

Thus, we have to reassess the whole south Indian megalithic graves keeping these conflicting factors in mind. Majority of the excavations conducted in South India concentrated more on graves rather than the habitation that resulted in giving an entirely different picture of the society. As stated earlier, the graves were ritual in nature and it was a single time deposit. Unlike habitation cuttings, the graves did not produce much stratigraphy. The evolutionary pattern of various forms of graves could be discerned, if one goes for large-scale excavation of graves. The slow change in the mortuary practice and in the placement of grave goods, still, evades our understanding. Studying, therefore, one group of material, either from graves or habitation, would not help to understand this culture. No serious attempt has been made to understand the composition of the inhabitants of South India despite the advances made in historical and archaeological studies in the last fifty years. Lack of written documents is cited as the reason for this lapse. So, it has to be addressed or reassessed the nature and potentiality of this culture with the help of available archaeological material.

Drawing a chronological demarcation line between these two cultures is still a very complex issue due to poor

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evidence. The lack of region-specific chronological control led to generalization of time frame that further aggravated the problem. The Sri Lankan archaeologists attribute the emergence of the Early Historic times around 6-5<sup>th</sup> century BCE based on the date assigned to Brahmi script found at Anuradhapura (Deraniyagala 1990: 149-168; Coningham 1996:73-97). The recent seven AMS dates obtained in association with Tamil-Brahmi script at Porunthal and Kodumanal also supports the early date (Rajan 2009:109-115; 2013:279-285; 2014:62-85). These radiometric dates compelled us to have a second look on the beginning of Early Historic South India. The emerging evidence suggests that the emergence of Early Historic period in South India could be assigned to 6<sup>th</sup> century BCE as of north India. The amount of data accumulated over two decades slowly tilting the balance in favour of early claims.

### **Κατασκευή του αρχαιολογικού**

The generalization of data prevented us to understand the changing pattern that took place in the period between introductory and terminal phase of Iron Age. The Early, Middle and Late Iron Age phases are hardly identified in cultural material. In the same way, designating a culture based on one metal over a longer period of time, say over a millennium, is unwarranted. It is true, the introduction of iron into the society transformed their subsistence pattern drastically. However, it is very difficult to accept the view that this metal holds its sway with same intensity and utility over a thousand years. The subsequent development that took place

after the introduction of iron like enhanced agricultural production and craft specialization with associated trade mechanism would have dominated the society. Therefore, understanding this culture in a given context is very important rather than generalising the data based on specific cultural material. The three important components of this culture are black-and-red ware, iron and sepulchral monuments. These three components, both individually and collectively, played a crucial role in this cultural formation. In majority of the archaeological reports, these three cultural traits were seen as a package. The archaeological data was generalised based on presence of one or two of the above components. These three components have not been seen independently but they were observed as a package. This situation led to the creation of enormous discrepancy in understanding this culture. Even today, scholars do not have unanimous opinion in designating a single cultural name. This is perhaps due to its diversity. They call them as Black-and-Red ware culture, Iron Age culture and Megalithic culture based on the impact or prominence of one of the cultural traits namely black-and-red ware, iron or burial monument. In some of the excavations, the mere presence of black-and-red ware alone was considered sufficient to call them as Iron Age culture. For instance, the excavations like Mangudi (Shetty 2003), Mangadu (Satyamurthy 1992), Perur (Shetty 2003a), Vallam (Subbarayalu 1985) and Adichchanallur (Satyamurthy 2007:55-66) could be cited. The site Mangudi yielded three cultural phases, the excavator designated them as microlithic, megalithic and Early Historic. The availability of microlithic tools led them to designate the first phase as microlithic. The second phase is designated as

megalithic merely based on the presence of the black-and-red ware though the associated megalithic burials were not reported at that site. The urn burial site Adichchanallur has been designated as megalithic culture merely based on the presence of urn burial associated with black-and-red ware (Fig. 14). In fact, several urn burial sites do not carry any massive lithic appendage as one observes in the cairn circles or stone circles of northern Tamil Nadu. The graves without any lithic association, still, did not prevent them in labelling them as megalithic culture. The introduction of iron or black-and-red ware is merely a transfer of technology without disturbing the existing society or replacement/dominance of new incoming ethnic groups is yet to be assessed. For instance, it is believed that Mauryan incursion, though we get limited Mauryan material close to Asokan edicts, is one of the major causes for transformation. The language replacement theory also applied in certain cases. The availability of Prakrit is quoted for this theory. One must also keep in mind that the Prakrit language is generally noticed in official/state records but not in common public. The later disappearance of Prakrit in south India could be seen in this background. Likewise, Prakritization process in association with Buddhism and Jainism is ignored much but Sanskritization process associated with Hinduism dominates the scene in south Indian Early Historic period.

The nature of material exposed in archaeological stratigraphy and the information embedded in the written documents or in literary sources, in some cases, differ widely. This precarious situation created a dichotomy between archaeologists and historians. The archaeologists are grappling

very much in situating material culture of a particular society, whereas historians are looking forward for the processes of change. This process of change is also seen at different levels, say, tribal society to civil society; pre-state to state; subsistence economy to market economy; primitive to organised religion; pastoral to agro-pastoral and agro-pastoral to agro-commercial. Archaeological, literary, epigraphical, numismatic, linguistic and religious data obtained from different sources are seen through the prism of particular concept or theory. This led to different type of interpretation of an identical set of data. For instance, at Kodumanal, more than 500 Tamil-Brahmi inscribed potsherds were collected from the 180 cm cultural deposit. As per the convention, the total deposit should have been designated as Early Historic based on the presence of inscribed potsherds. But, the lower phase of the cultural deposit is designated as megalithic as it is associated with megalithic monuments (Subbarayalu 1988; Rajan 1996:72-86) and upper phase as Early Historic. Even an inscribed potsherd collected from the megalithic cist did not prevent it in designating this particular class of data as Early Historic. At this site, the presence of inscribed potsherd clearly points to the fact that the burial system was continued and followed in Early Historic. Based on recent AMS dates, the entire cultural deposit at Kodumanal is re-designated as Early Historic. This site serves as a good example to say that the mere presence of huge megalithic monuments alone is not enough to designate a culture as megalithic. So, burial system should be considered as a way of expressing the faith or fear towards the dead which resulted in the creation of monuments. The different sizes of monuments and nature of goods that embedded in the graves

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are related to their economic, social, political and ritual status. One has to assign name of the culture based on the material remains obtained from the habitation rather than on the material exclusively collected from the graves. It seems the rituals followed in the erection of megalithic monuments were followed for a long time without much change. The material life of contemporary society might have changed drastically to meet the growing needs of the time. One may observe such scenario in the habitation cuttings. The available data suggests that it is advisable or preferable to disassociate the burial while assigning the name to a culture. This would help to interpret the site logically. According to this prescription, the Kodumanal habitation material would have been easily designated as Early Historic rather than megalithic.

#### **Qti l p l pvt qf wevkpp qhKqp**

The analysis of earliest iron pieces that encountered in Old World Civilizations like the one in West Asia, Iran, China, etc., are mostly meteoritic in origin whereas the one observed in Indian sub-continent is metallic in nature that demonstrates the non-existence of technological connectivity. The recent investigations push the origin of iron in India somewhere around 1500-1400 BCE or much earlier in heartland and peninsular India (Tripathi 2008:26). The iron smelting sites Nala-Ka-Tila, Malhar and Lahuradewa located in the iron rich mineral zone of Middle Ganga valley in heartland of India pushes the origin of iron further back around 1800-1700 BCE (Tewari 2003:536-544; Tewari *et.al.*, 2002:54-62).

The TL dates from Kumaranahalli and Tadahanahalli placed the iron in south India around 1440-1130 BCE pushing back from the long held view of 1100 BCE obtained at Hallur. Based on the C<sup>14</sup> dates obtained for the cultural materials found at Paiyampalli, Arikamedu and Appukallu, the Iron Age culture of Tamil Nadu was placed somewhere around 700 BCE assuming that megalithic monuments are associated with Iron Age. The Paiyampalli dates for the megalithic culture are  $640 \pm 105$  BCE (TF 323) and  $380 \pm 105$  BCE (TF 350) whereas Appukallu is dated to 300 BCE. The terminal date of 300 BCE is fixed for the Iron Age on the basis of on the Roman coins collected from a grave at Chandravalli (Krishna 1942:16); in the Nilgiris and Coimbatore region (Congrave 1847:92; Sewell 1904: 623) and an Eran struck coin collected from a grave at Sultur (Beck 1930:166-182). Keeping these dates in mind, Iron Age in Tamil Nadu was fixed for long time between 700 BCE and 300 BCE/100 BCE and Early Historic between 300 BCE and 300 CE ignoring certain important cultural elements.

The recent dates encountered in the excavated sites at Adichchanallur, Mangadu, Thelunganur, Porunthal and Kodumanal demanded a fresh look on earlier assumptions. The recent OSL dates of Adichchanallur are  $3670 \pm 570$  BCE i.e. 1570 BCE and  $5750 \pm 1200$  BCE i.e. 3750 BCE (Satyamurthy 2007: 55-66) for the Iron Age culture. It is well known fact that Adichchanallur graves are exclusively of urn burials without any megalithic appendage. However, the presence of iron and black-and-red ware did not prevent us in comparing these dates with black-and-red ware of chamber tombs. Irrespective of its complexity, the dates of Adichchanallur have to be taken



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seriously as such early date of  $2890\pm 70$  BP was reported at Mangadu.

Above all, the metallographic analysis carried out in 2013 on the sword collected from Thelunganur in Mettur taluk of Salem district throw a fresh light on the origin of high carbon steel in south India. The metallographic analysis of the sword and the AMS date obtained from the carbon extracted from the sword throw interesting information. The AMS date obtained for the sword is  $3089\pm 40$  yr BP, which, when calibrated, places the calendar date between 1438 and 1261 BCE. Irrespective of a solitary date, this date is so significant in south Indian context both at cultural, chronological and technical level. At cultural level, an attempt could be made to understand the origin, evolution and assimilation of various types of graves as the grave sites located in and around Thelunganur yielded urn burial, pit burial and chamber tombs, all placed in a cairn circle. At chronological level, the AMS date obtained for the sword is the earliest datable object of Iron Age so far obtained in Tamil Nadu. At technical level, the sword was made of ultrahigh carbon steel with a controlled microstructure consisting mostly of particles of iron carbide in the ferrite background, which is almost free of non-metallic inclusions. The date within the range of 1438-1261 BCE is assigned to high carbon steel. The making of high carbon steel is a highly developed skill which is considered as a technological advancement made over iron. Therefore, there is a possibility of getting early dates to the iron as it normally goes prior to production of steel.

To understand the cultural chronological and technological significance of this sword, a team of archaeologists has revisited the site on 23<sup>rd</sup> and 24<sup>th</sup> November 2013 to get further information on the nature of the site. The team could able to identify two graves respectively measuring 3.60 m and 2.70 in diameter and are disturbed at the surface level by dislocating the huge capstone. The capstone of the first grave measures 140x80x26 cm and the second measures 145x120x36 cm. In both the graves, the pit was dug at the centre of the grave to a depth of 65 cm. This oblong pit measures 83 cm north-south and 62 cm east-west. Two pots were placed in the northwest corner of the pit. The red pot is placed facing south and another black-and-red ware pot placed in a vertical position. Close to these pots, three iron arrow heads were placed with tip facing north. A skull placed and two long bones probably a femur are placed in the pit in north-south orientation with head on the north. The placement of the skeletal remains suggests that they were secondary burial (Fig. 15). The second grave is also identical to the first but the grave goods are absent.

The occurrence of large number of Neolithic tools, the occurrence of pit burials, and the rudimentary nature of the grave goods suggest that these graves are at the early level of the Iron Age. The west facing chamber tombs with round porthole that encountered at Mulakkadu and Mangadu in the vicinity of Thelunganur suggest that the pit burials observed at Thelunganur is comparatively earlier to urn burials and chamber tombs. The Thelunganur sword came from an urn burial. The AMS date of 3089±40 yr BP (calibrated calendar

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date falls between 1438 and 1261 BCE) obtained for the sword well within the acceptable range. The Salem region is known for iron ore. The present date suggests that steel might have manufactured in this iron ore bearing region well before 13<sup>th</sup> century BCE. Further research, some more AMS dates and careful analysis would help to consolidate the present findings on firm ground.

The two AMS dates of 490 BCE (cal. 520 BCE) and 450 BCE (cal. 410 BCE) obtained for the Tamil-Brahmi inscribed potsherds collected from Porunthal graves go back to 5<sup>th</sup> century BCE (Rajan 2013:279-285; 2014:62-85; 2014a). Further, five samples collected at the depth of 15 cm, 60 cm, 65 cm, 85 cm and 120 cm in a well established archaeological stratigraphy at Kodumanal yielded uncalibrated dates of 200BCE (cal. 200 BCE), 275 BCE (cal. 380 BCE), 300 BCE (cal. 370 BCE), 330 BCE (cal. 380 BCE) and 408 BCE (cal. 480 BCE). The range of date lies between 200 BCE and 408 BCE assigned to the cultural deposit that falls between 15 cm and 120 cm (see table). At Kodumanal, the total cultural deposit that yielding more than 500 Tamil-Brahmi inscribed potsherds is 185 cm. There is still 65 cm thick cultural deposit containing inscribed potsherds below this dated level. Based on above dates and archaeological stratigraphy, one may easily presume that, though hypothetical, it took an average of 2 years for the accumulation of 1 cm cultural deposit at Kodumanal. Thus, the 65 cultural deposit found below the dated material would have taken another 130 years to accumulate, thereby taking the earliest deposit to middle of 6<sup>th</sup> century BCE. Therefore, there is an every possibility of pushing the date

further back to 5-6<sup>th</sup> century BCE. Thus, the beginning of Early Historic in South India goes back to 6<sup>th</sup> century BCE. The availability of NBP, Punch Marked coins, a quite number of personal names in Prakrit and the radiometric dates encountered in the sites like at Alagankulam, Porunthal, Korkai and Porunthal clearly suggests the 6<sup>th</sup> century BCE for the beginning of Early Historic period in south India. Keeping these new developments in mind, the cultural period that falls before 6<sup>th</sup> century BCE is considered as Iron Age.

Interestingly, the above said dates suggest that even after entering into the Early Historic times, the practice of erecting the megalithic monuments continued in the society. Thus, the megalithic monuments had its origin in pre-Iron Age times and continued in practice in Iron Age as well as in Early Historic period. The limited amount of radiometric dates directly coming from different types of graves is becoming increasingly problematic in dating different types of burial. In the same way, as stated above, the basic three components namely sepulchral architecture, black-and-red ware and iron are having independent origin and also having a long life than one anticipated. All these three components were finally integrated into a single cultural complex at a later date. Irrespective of these difficulties, the available archaeological data suggests that the period of their maximum popularity lies somewhere between 1500 BCE and 500 BCE. The upper limit is designated based on recent radiometric and OSL dates obtained at Thelunganur and Adichchanallur respectively. The lower limit of 500 BCE is assigned based on the discovery of inscribed memorial stones collected at Pulimankombai and

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Thathappatti, Tamil-Brahmi inscribed potsherds, NBP, Punch-Marked coins and personal names in Prakrit language unearthed from the sites like at Alagankulam, Korkai, Vallam, Porunthal and Kodumanal.

Further the analysis of the samples collected at Mel-Siruvalur (Sharada Srinivasan 1994:6) and at Kodumanal (Sasisekaran 2004:29-30) clearly suggested the production of steel at both the sites. The crucible furnace found in the Early Historical level at the depth of 125 cm at Kodumanal is being dated to 5<sup>th</sup> century BCE as stated above. The production of iron and steel becomes crucial in south Indian context. The antiquity of iron and steel now is relatively established in India.

Thus, the available material evidence suggests that certain degree of cultural homogeneity is attained during Iron Age. The usage of black-and-red ware, russet coated ware, metal implements particularly iron, metal objects of gold, silver, copper and bronze, beads of semi-precious stones, graffiti marks and veneration of the dead by raising sepulchral monuments express their thought structure, belief system and technological attainment. Irrespective of broad cultural uniformity, there still exists certain amount of cultural variation in South India. Such cultural variation could be seen even today. Leaving aside of these peculiarities confined to certain micro zones, there is underlying conformity in its cultural expressions.

Before drawing any conclusion based on the material that were collected from the graves or based on the types of

burial, one needs to take a through survey of the region and supported by well planned excavations of habitation mounds. The arrivals of black-and-red ware, iron and megalithism have to be studied independently before arriving to a conclusion. So understanding the cultural transition witnessed in Iron Age- Early Historic cultural scenario is utmost necessary to understand the emergence of Early Historic culture in South India.

### **Vj g go gti gpeg qhGctn J kmqt k**

The usage of the term Early Historic in archaeological context is not uniform and on several occasions it has been used loosely. There is no unanimity among the archaeologists in designating a cultural phase as Early Historic. The term Early Historic is substituted with the terms like Mauryan culture, Sunga culture, Satavahana culture, etc. with overtones of political authority rather than social process. In few cases, the occurrence of potsherd like NBP, rouletted ware (Fig. 16) or Brahmi inscribed potsherds suffice to designate the culture as Early Historic. For some, the establishment of the historicity of the great personalities like Mahavira and Buddha are sufficient to designate the culture as Early Historic (Dhavalikar 2002). In certain cases, domestic architecture, city planning, construction of secular and religious monuments, use of writing, coinage, introduction of Buddhism or Jainism and external maritime contacts are considered as the beginning of Early Historic. The above arguments suggest that there is no consensus among the archaeologists. As rightly pointed out by B.D.Chattopadhyaya, historians themselves do not have any

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consensus either (Chattopadhyaya 2008:3-14). Unlike in the Deccan or North, the different cultural phases in Tamil Nadu are designated as Black-and-Red ware, Megalithic, Early Historic and Historic. It is so fortunate that none of the site in Tamil Nadu is designated as Chera culture, Pandya culture, Chola culture or for that matter as Tamil culture. The Sangam literature is extensively used or corroborated with material evidences of the excavated or explored sites but none of the sites designated with a cultural phase called Sangam Age culture. The broad consensus among the archaeologists of Tamil Nadu to some extent helped the burden of undoing certain dynastic or literature oriented terminology.

The evidences embedded in epigraphical, numismatic, literary and archaeological records clearly points to the emergence or formation of new social order henceforth unnoticed in the previous Iron Age culture. The occurrence of bronze objects, carnelian and agate beads in Iron Age context well before the traces of NBP and Punch Marked coins suggest that South India had long distance trade well before the so called Mauryan incursion in Andhra Pradesh and Karnataka. Irrespective of this emerging scenario, majority of the sites in South India have been dated to 3rd century BCE. In the sense, the whole South India was urbanised in a very short span of time say within a span of two or three decades, which is quite unlikely. The reason for assigning all the sites to 3rd century BCE is with the assumption that the script is introduced in South India after Asoka. Unless one gets a pre-Asokan inscription in Deccan, it is unlikely to push the date beyond the anchor date of 3rd century BCE. It is almost clear now that

Asoka did not develop the Brahmi script. The origin or evolution of a script is a social process and it could not be associated with a particular individual or dynasty. The present mindset is that the pre-Asokan script does not exist in the south unless one gets it in the north. The one-way southbound cultural movement is the accepted norm in the archaeological interpretation. Keeping the historical mindset of this magnitude, all the archaeological sites irrespective of their cultural deposit have been dated to 3rd century BCE. Though several parameters like trade, technology, architecture, political authority, territorial integrity, urbanisation, etc. are available to designate a culture as Early Historic, the occurrence of Brahmi script is considered as the beginning of the Early Historic period in South India. So the date of Brahmi is crucial in understanding the context. Therefore, an attempt is made to throw some light on the various issues involved in understanding the historicity of the Brahmi script. Although script alone is taken here, it does not mean that all other parameters are irrelevant. I am fully aware that all the categories of evidences are equally important as of script and all evidences have to be seen as a single component to understand the past rather than isolating a specific group of evidences. However, for the purpose of clarity and focus, each region of south India is taken here for analysis.

### **Cpf j tc Tgi kpp**

The distribution of Asokan edicts in rich mineral zones at several sites of Karanataka and Andhra Pradesh reflects more of their economic interest rather than their political



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control. The near absence of Mauryan antiquities and structures at the edict sites like Brahmagiri, Siddapura, Jatinga-Rameswar, Yerragudi, Rajulamandagiri, Sannati, etc suggests their contact rather than control (Thapar 2004:74). The evidence of Buddhist sites with pre-Asokan inscriptions and coins (PMC) in Lower Krishna Valley sites like Bhattiprolu, Amaravathi-Dharanikota and Vaddamanu suggest spread of Buddhism even before Asokan times. The presence of edicts in economically potential zones suggests that these mineral rich zones were in contact with the north well before the Mauryan intrusion. The occurrence of agate, carnelian, steatite and copper objects are suggestive of its contact from the time of Iron Age. The transformation from Iron Age to Early Historic is not probably due to the impact of Mauryans alone. The sudden spurt of Buddhist structures in Andhra region is probably due to systematic missionary activities that might have accelerated during the time of Asoka. The external and internal trade supported with organized missionary activities served as a stimulus for the growth of urban centres in Andhra region. The spread of political control of Satavahanas from upper Krishna valley to lower Krishna valley might be due to their political interest or economic interest needs to be studied closely by taking into the consideration of feeder centers of each economic zones. There are attempts in this direction to identify the ancient territories like Assaka/Asmaka and Mulaka. It is believed that *janapada* like localities existed before the rise of the Satavahanas in Deccan. The title of *rajan* assumed by the local chiefs like Kubiraka and Somaka as indentified respectively in Bhattiprolu and Vaddamanu inscriptions and the later Sadas also assuming the title

*maharaja* as evidenced from Guntupalli and Velpur inscriptions (Rajendra Prasad 1994:22-25) support this view. The fair amount of inscribed coins issued by local chieftains stand as a testimony to this fact. The existence of such localities could be observed in and around Kotalingala-Dhulikatta-Peddabankur in mid-Godavari river valley (the ancient Asmaka/Assaka) and Amaravathi-Dharanikota-Bhattiporulu-Veddamanu in lower Krishna river valley. The occurrence of Punch Marked coins, NBP, early Brahmi inscriptions at Bhattiprolu and other Buddhist sites suggest their pre-Asokan nature (Sarma 1985:15-16). The Bhattiprolu inscriptions also record the emergence of literate society (*EI* II:323-324). The name of donors encountered in early Brahmi inscriptions suggests the existence of well-established society in lower Krishna valley well before the introduction of Buddhism, Mauryan contact and arrival of Satavahanas. The arrival of Buddhism in Sri Lanka has to be studied keeping these factors in mind. The existence of the site well before the establishment of stupa at Amaravathi is attested with the occurrence of a group of seventeen urn burials below and near the north circuit of a minor stupa adjacent to the main stupa complex (Rea (Rea 1908-09:90-91). The transformation of agro-pastoral into intensive agrarian as well as agro-commercial economy might have been more aggressive in lower Krishna valley than the neighbouring dry zones. The occurrence of terms *nigama* and *goshthis* in association with elites and chiefs need to be seen in this background. The intensive agricultural activities might have supported other religious activities. However, the archaeologists and historians are carried away by the impact of material and non-material

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culture. For instance, the impact of Sangam literature has eluded any meaningful discussion on material culture of Early Historic times in Tamil Nadu. In Gujarat and Rajasthan, Harappa culture prevented for any meaningful dialogue on Early Historic material. In the same way, the impressive Buddhist monuments prevented constructive dialogue in Andhra region.

### **Mauryan Ties**

The situation in Karnataka is not of much difference to Andhra region. Mauryan influences were expected in the material culture in the sites like Sannati, Banavasi, Maski, Brahmagiri, Kankanahalli, etc., The Asokan edicts, similar to those of Dhauili edict proclaiming *Dhamma*, found at Sannati did not yield any appreciable Mauryan antiquities (Sarma and Varaprasada Rao 1993:3-25). All other objects like ceramics, coins and structural remains (Howell *et.al* 1995) mostly belong to Satavahanas. The label inscription engraved at the base of a sculptural panel found at Kanhanahalli mentioning Asoka by name is not belongs to Asokan times rather it belongs to 2<sup>nd</sup> century AD (Thapar 2008:249-262). The Asokan major and minor edicts, structural remains like stupa, viharas, coins and other archaeological findings clearly suggest that Mauryan does not have complete control over the region. Several local chieftains are known to have exercised their control over the limited territories.

### **Vco kPcf wTgi kqp**

Unlike Andhra Pradesh and Karnataka, the land south of Venkatam presents a unique picture. The impact of Mauryan state is almost absent in Tamil Nadu and Kerala. The occurrence of silver Punch Marked Coins and NBP also restricted to capital cities, trade centres and port towns thereby indicating its trade contact rather than their administrative control. In case of language, the usage of Prakrit is restricted to trade or religion related items. In Sri Lanka, several hundreds of Prakrit inscriptions were brought to light, but not even a single exclusive Prakrit-Brahmi inscription was discovered in Tamil Nadu. The land sandwiched between Sri Lanka and Andhra Pradesh maintained a unique language. Further, majority of the Prakrit-Brahmi inscriptions noticed in Karnataka, Andhra Pradesh and Sri Lanka were having close affinity with Buddhism whereas the Tamil-Brahmi inscriptions of Tamil Nadu had close affinity with Jainism. Besides, there is a well-established literary tradition namely Sangam literature in Tamil Nadu and such tradition is absent in other parts. The Deccan and Andhra regions have a significant number of epigraphic and numismatic evidences for the Early Historic period with a conspicuous absence of vernacular literary texts similar to Sangam literature. Hence, attempts at correlating the literary evidence with archaeological data have been found to be more fruitful. Majority of the Early Historic archaeological sites particularly port sites like Arikamedu, Kaveripattinam, Alagankulam, Korkai and Pattinam, the capital cities like Karur, Uraiyur, Tagadur and Madurai, trade centres like Kodumanal and the other significant sites like Porunthal,

Mangudi, Thandikudi, etc., were identified based on literary data (Fig. 17). Besides, several hundreds of sites yielding Early Historic material in association with Iron Age material are documented in Tamil Nadu (Rajan *et.al.*, 2009a). The study of the settlement pattern suggests that there is closed interaction between several social groups with different level of subsistence pattern. It seems each ecological zone emerged as a distinct productive zone. The study of Sangam literature and Tamil-Brahmi inscriptions engraved on cave-shelters, Jain beds, coins, seals, rings and potsherds clearly points to the existence several social groups as well as lineage groups in Tamil Nadu during Early Historic times. Majority of social groups interestingly did not claim any myth origin. At the initial stage, there was no allegiance to a particular religion too. The literary, epigraphical and numismatic sources are almost silent on this aspect. The language of Tamil played a significant role in unifying these diverse social groups. The titles like *ventar*, *velir* and *mannar* adorned by the leaders of certain social groups clearly points to the emergence of new political order out of the existing social order.

### **Rqrlslec nUswc vkqp**

The Early Historic political situation could be discerned from four major groups of ancient records namely Sangam texts, 94 Tamil-Brahmi inscriptions including four memorial stone inscriptions, about 600 Tamil-Brahmi inscribed potsherds recovered from about 20 archaeological sites and considerable number of Tamil-Brahmi inscribed coins with king names (Fig. 18). Unlike inscriptions and coins which are very short in

nature, the Sangam literature still dominates the scene to such an extent that scholars have been generally unwilling to resist from describing that period as the Sangam Age. Besides language and linguistic studies, the last five decades of archaeological, epigraphical and numismatics studies provided a new dimension to the study of Early Historic. These material evidences have been compared and incorporated with the fact embedded in the Sangam anthologies and the dark side of the political history of Sangam Age got further light. *Eṭṭuttokai* (The Eight anthologies) and *Pattuppaṭṭu* (The Ten Idylls) are the two major groups of texts included in the corpus of Sangam literature. Some scholars have included *Tolkāppiyam*, the Tamil grammatical treatise, *Paṭiṇeṅkīlkaṇakku*, the eighteen didactical texts, and *Cilappatikāram* and *Maṇimekalai*, the two epics in the Sangam corpus. However, the epics are considered as post-*Caṅkam* works. *Caṅkam* (Sangam) means an academy, a story first mentioned in the commentary on *Iraiyāṇār Akapporuḷ*, a grammatical treatise ascribable to 7<sup>th</sup> or 8<sup>th</sup> century AD. Otherwise, the early commentators of *Tolkāppiyam* designated them as *Caṅrōr ceyyul*, poetry of the nobles. The medieval poet Kambar named them as *Cānrōr Kavi* (*Kambarāmāyaṇam* III.5.1). There are altogether 2381 poems by 473 poets and 102 poems by anonymous authors, besides the grammar and 18 minor works (Hart 1975:7).

Several scholars made an attempt to understand the political situation that prevailed during Early Historic. The first category of scholars were attempted to write the history through glorification of Sangam literature. P.T.Srinivasa Iyengar (1929), K.N.Sivarajapillai (1984) and S.Vaiyapuripillai

(1988) could be cited as an example. The second category of scholars like K.Kailasapathy (1968), K.Sivathamby (1974), P.Mathaiyan (2004), A.Arumugam (2008) and Rajan Gurukkal (2010) attempted to view the Sangam through Marxist spectrum. The third category of scholars like R.Poongundran (1989), Iravatham Mahadevan (2003), P.Shanmugam (2003) and Y.Subbarayalu (2008) tried to reconstruct the history based on archaeological, numismatic and epigraphical sources. Irrespective of mines of information available to us, there is still an element of uncertainty lies in several primary sources. The future discoveries in the field of epigraphy, numismatic and archaeology may tilt the balance in favour of writing a formidable history of Early Historic. Keeping these factors in mind, an attempt is made to understand the political situation of Early Historic.

The kings/chieftains are referred to variously by their personal names, family names and honourific titles both in the poems and colophons leading to certain controversies over different interpretations and identifications. Irrespective these lacunae, the poems provide a fair amount of details on political situation of the contemporary Tamil kingdoms. According to Kailasapathy (1968) 43 kings and 48 chieftains were found mentioned in *Purānanūru*. Of the 138 poems, 27 poems deal on 18 Chera kings, 74 poems praise 13 Chola kings and 37 poems speak on 12 Pandya kings. Although 43 kings belonging to the three dynasties are glorified in 138 poems, but hardly two or three kings from each dynasty were treated well. Likewise, one of the eight anthologies *Patirrupattu* (means ten tens) also speaks exclusively on Chera dynasty. It is an

anthology of 100 poems being divided into ten sections (decades) and each section appended with an epilogue (*patikam*) narrating the author, the king and his lineage. The first and last sections were lost and the remaining eight deals on eight kings in chronological order. *Akanāṅṅūru*, an anthology of 400 poems, contains 288 historical allusions. Thus, several of the Caṅkam literature is dotted with several historical allusions. The available Tamil-Brahmi cave inscriptions also supports this view especially the Mangulam, Jambai and Puhalur inscriptions. Mangulam inscription refers to the Pandya king Neṭuñceliyaṅ whereas the Puhalur inscription provides information on three kings in chronological order. The Jambai inscription speaks on Satiyaputras (Atiyamāṅ of Takaṭūr) (Mahadevan 2003:115-120). The Asokan Rock Edict XIII refers to four dynasties namely Cheras, Cholas, Pandyas and Satiyaputras thereby indicating the existence of dynastic rule. Though, we do have names of several kings and chieftains but each one had different level of power and territory. A cursory look on the existence of various political apparatus and terms used to denote the level of hierarchy would help to understand the state formation in Tamil Nadu.

The Sangam poems are broadly categorized into two namely war poems (*Puṛam*) and love poems (*Akam*). The love poems (*akappāṭal*) are compiled based on *tiṅai* concept. The *kuṛuñci* (mountainous region), *mullai* (pastoral zone), *marutam* (fertile zone), *neital* (coastal zone) and *pālai* (dry zone) are the five ecological zones and the love poems belong to these zones (*Puṛanāṅṅūru* 187). The geographical division of land into five kinds is unique in the Caṅkam poems, unknown to the Sanskrit tradition. Interestingly, the caste-system is totally absent in



*Akam* poems whereas the *Puram* poems record certain social stratification. Like *Akam* poems, war poems (*purappātal*) are also all brought under five categories namely *vetci*, *vañci*, *uḷiñai*, *tumpai* and *vākai*. The five ecological zones played a dominant role in their life style and in their productive forces. The mode of production differs from one ecological zone to another. For instance, the mountainous people (*kuruñci*) live basically on hunting and with rudimentary form of agriculture. The cattle based agro-pastoral life is the main stay of the *mullai* zone. The fertile zone (*marutam*) is known for intensive agricultural production. The coastal zone people engaged in fishing and dry zone people led their life on plundering. The nature of subsistence pattern led to the formation of society of its own. The expectation of the society on the leadership quality of a particular zone differs from another. The availability of natural resource and their ability to transform these resources to their advantage guided to an uneven development. The scarcity of the resource also led to frequent frictions/skirmishes that led to the creation of leadership within the society. Such leaders of different hierarchical order are known as *kilavaṅ* (family/clan head), *ūraṅ* (village head), *maṅṅaṅ* (leader/chief), *cirūрмаṅṅaṅ* (chief of lesser settlements), *kuṟunila-maṅṅaṅ* (chief of small territory), *mutukuṭi-maṅṅaṅ* (chief of ancient clan), *vēlir* (chief) and *vēntar* (king). Thus, the Early Historic is considered as the stage wherein the hunting-gathering/cattle raising society with kin-based societal set-up slowly moved to a state society with private community land holding pattern (Sivathamby 1971:342). The concept of kingship is started of emerging and

the political situation also changes due to social leadership. This is reflected much in *Puṛam* poems.

### **Vj g j kvqt kēcno qqtlpi u**

The *Puṛam* poems of *Puṛanāṇūru* provide a vivid picture on three major kingdoms namely *Chera*, *Pandya* and *Chola*. The first 86 poems out of 400 are compiled to give prominence to these three kingdoms. In certain cases, the entire poems are dedicated to a specific king/dynasty. In the anthology *Paṭiṛru-p-pattu*, each ten poems are devoted to delineate the political activities of a particular Chera king.

The next genre of poems *Pattu-p-pāṭṭu* provided exclusive importance to a particular king. For instance, the Caṅkam text *Porunarāṛruppaṭai* speaks on Chola king Karikālaṅ. Likewise, *Maturaikāñci* on Pandya king Neṭuñcelliyaṅ, *Cirupāṇāṛrupaṭai* on a chieftain Nalliya-k-kōṭaṅ, *Perumpāṇāṛrupaṭai* on another chieftain Toṅṭaimāṅ-ṭantiraiyaṅ and *Malaipaṭukaṭām* on Nannaṅcēy-Nannaṅ. Each poem runs majestically like a mini-epic to provide information on the political, social and cultural activities of the contemporary Early Historic period. Thus, the Caṅkam literature provided good scope to understand the nature of kingship/state that existed during that time. It is reasonable to have a broader view on the type of kingship that existed in Early Historic Tamil Nadu.

## **Kingship**

There are several lineage/clan groups attempted to establish a state by carving a considerable portion of territory which led to the frequent conflicts. In this act, different levels of leaders were emerged. The terms like *arasaṅ* (*Puṛanāṅṅūru* 17:3, 35:5, 55:10, 73:3, 158:2, 183:7), *iraivaṅ* (*Puṛanāṅṅūru* 18:26,48:5, 152:19, 316:4), *korraivaṅ* (*Maturaikāñci* 74), *kō* (*Puṛanāṅṅūru* 9:8, 17:40, 22:33, 67:11, 141:11, 147:9), *kōṅ* (*Puṛanāṅṅūru* 34:16, 54:1, 374:15), *maṅṅaṅ* (*Puṛanāṅṅūru* 26:14, 52:5, 54:9, 186:5, 299:5, 308:4; *Akanāṅṅūru* 54:1, 67:12, 77:17, 125:21, 188:4, 246:10) and *vēntaṅ* (*Puṛanāṅṅūru* 11:7, *Narriṅṅai* 153:8, *Akanāṅṅūru* 426:1, *Kuruntokai* 380:1) denote different level of hierarchical order in which *vēntaṅ* occupies the top order. The multiplicity of the terms indicates that the institution of kingship is just emerging or society learned to live with different levels of authority. It is necessary to have a brief understanding the status of each one in the given political situation.

## ***Ciṛūr-maṅṅar***

The *Puṛanāṅṅūru* (poems 285 to 335) converses *ciṛurmaṅṅar* as the clan leaders holding limited territory/settlement in a rain-fed zone. He never possesses anything for him rather he holds for the sake of his kinsmen. *Ciṛūr-maṅṅan* of Paruttivēli and Karambai (*Puṛanaṅṅūru* 299; 285) could be cited as example. Dry crops like *varaku*, *koḷ*, *tiṅṅai* and *avarai* are shown as their main productions. Sometimes they were not in a position to pay the tax (*puravu-*

*vari*) (*Purāṇānūru* 330:6). They were not quoted with personal names rather specified with heroic names. Cattle raising, cattle raiding and cattle retrieving are considered as their way of life. Memorial stones/hero stones were raised for the heroes who died in cattle raids (*Akanānūru* 67:6-15; 131:6-13; *Purāṇānūru* 306:2-7). Tuṭiyaṅ, Pāṇaṅ, Paṛaiyan and Kaṭampaṅ are some of the clans (*kuṭi*) mentioned in the literature. These local leaders and their kinsmen involved in cattle to fight against another king and they got reward from the king for their support (*Purāṇānūru* 306, 318-320). These local leaders sometimes aligned with kings (*Purāṇānūru* 281, 314, 324) and sometimes they refused to align with them (*Purāṇānūru* 327, 332). In few cases, they had matrimonial alliance with the kings. Thus, these local leaders were integrated with the kingdom through force or peaceful manner.

### ***Mutukuṭi-maṅṅar***

The *Purāṇānūru* (poems 336 to 335) converses *mutukuṭimaṅṅar* as the leader of a village/settlement and its associated land in a fertile zone. The term *mutu-kuṭi* itself suggests that there were the original settlers of the region (*mutu* > ancient *kūṭi* > clan). The terms like *taṅpaṅaiyūr*, *neṭunallūr*, *katuvāimūtūr*, *kaṅṅumēintu ukaḷumūr*, etc., indicate their nativity (*Purāṇānūru* 341, 343, 350, 355). Like *ciṅṅurmaṅṅar*, they were also closely connected with their society. The major difference between the *ciṅṅurmaṅṅar* and *mutukuṭimaṅṅar* is that the former is shown as the leader of dry zone/pastoral track and actively involved in cattle raids whereas the latter as settlers of fertile zone.

### ***Kurunila-maṅṅar***

These leaders/chiefs are generally associated with mountainous zone containing natural rich resources and also considerable territory (*nāṭu*) under their control. The chiefs like Atiyamāṅ, Pāri, Kāri, Āy, Pēkaṅ, Kaṅṅīrak-kō-perunaḷḷi, Iḷaviccikkō, Ōri, Kumaṅaṅ and Piṅṅaṅkorraṅ (*Puṅṅanaṅūru* 91, 109, 123, 128, 143, 148, 151, 152, 158, 168) could be cited. They were also known for their generosity.

### ***Vēntar***

Only three dynasties namely Cheras, Cholas and Pandyas are designated with term *vēntaṅ* (also *mūvēntar*, the three crowned kings). The Asokan inscription provides these three names and in addition to *Satiyaputō*, the ruler Atiyamāṅ of Takatūr (Tagadur) country. The Tamil-Brahmi inscriptions found at Mangulam, Puhalur, Jambai provide information on the name of the kings of Pandyas (Neṅṅuṅceliyaṅ), Cheras (Peruṅkaṅṅkō) and *Satiyaputō* (Atiyamāṅ) (Mahadevan 2003:115-120). The non-occurrence of Chola king is probably due to the non-availability of the Tamil-Brahmi cave inscriptions in Chola country.

The kingship is transferred from father to son as hereditary descent. The *Patikams* of *Patirrupattu* refers to the genealogical descent of Chera kings and the Puhalur inscription also supports this view. The Chola king Karikālperuvaḷattāṅ (*Pattiṅappālai* 227) and Pandya king Neṅṅuṅceliyaṅ (*Puṅṅanaṅūru* 72, 77) got power as hereditary right. The

succession dispute arose between Nalaṅkiḷi and Neṭuṅkiḷi, the two sons of a same Chola king also supports this view (*Puṛaṅāṅūru* 45). They ruled vast territory predominantly occupying the fertile *marutam* zones (*Puṛaṅāṅūru* 2, 11, 13, 28, 35, 42) and coastal *neital* zones (*Puṛaṅāṅūru* 17, 30, 343). They also waged war against the local chieftains like Pāri and Ōri and try to take control over the natural resources of mountainous *kuṛuñci* zones (*Puṛaṅāṅūru* 109, 209). These kings, unlike local leaders/chiefs, did not involve in any cattle raids. There is hardly any reference on cattle raid neither in *Puṛaṅāṅūru* nor in *Patirrupattu*. But there are several references on their attempt to occupy the territory of chiefs and they always wage war in economic point of view (*Puṛaṅāṅūru* 16, 15). They have been celebrated for carving a land from enemies territory (*Puṛaṅāṅūru* 20:13).

One of the interesting points to be observed here is that the local chiefs of pastoral zone were involved in cattle raids whereas the kings were concentrated on land. The *vēntar* (king) always attempted to capture the territory rather than plundering the cattle which suggests that their main aim is to create a land for themselves, one of the decisive factors for state formation.

In addition to the expansion of agricultural tracts, the trade, both internal and external, are also received the attention of kings. The famous seaports like Muciri (Pattanam in Kerala), Korkai, Kaveripattinam were under the control of *vēntars* and local chieftains like *cirūr-maṅṅar*, *mutukuṭi-maṅṅar* and *vēḷir* hardly had such control over maritime trade. Thus, the economic prosperity occurred through agricultural production,

technological development like gem stone cutting, iron and steel manufacturing, pearl fishery, internal and external trade led to the accumulation of surplus wealth. It created new social order like *aracar* (ruler), *antaṇar* (Brāhmīn), *vaṇikar* (trader) and *vēlāḷar* (agriculturist) (*Puṛanāṇūru* 183:8-10). This is in contrast to the earlier social order in which occupation based order like *paraiyan*, *tuṭiyaṇ*, *pāṇaṇ* and *kaṭampan* are existed.

Thus, the analysis of status of political situation suggests that the Early Historic is in transformational stage in which the new political institutions started emerging and the residue of the previous social order also continues to exist with less authority. The close knit clan-based or kin-based society started disintegrating and the surplus wealth created through the expansion of agricultural production and trade led to the emergence of powerful chieftains associated with new social order. These newly emerged kings (*vampa-vēntar*) assisted by various limbs of political organization slowly taken control over the land and the people. The power transformed from father to eldest son of the family. The attempt to capture the power by breaking these traditions of royal succession also recorded in Sangam texts. The *Pāyiram* of *Tolkāppiyam* refers to the Tamil country as the region between *Vēṅkaṭa* (Tirupati hills) on the north and *Teṅ-kumari* (South Kumari) on the south. The region beyond *Vēṅkaṭa* is considered as *moḷi-peyar-tēyam*, (the other language speaking area) (*Akanāṇūru* 211, 213). In accordance with this statement, all the Brahmi inscriptions found within Tamil Nadu carry Tamil language whereas the Brahmi inscriptions observed north of *Vēṅkaṭa* hills had Prakrit as their language. This vast land was ruled by

different kings/rulers/chieftains with flexible territories. In general, the Chera-nāṭu, Pandya-nāṭu, Chola-nāṭu and Koṅku-nāṭu are considered as the major territorial divisions. The boundary of the state is not static and the realignment of boundary had always taken place.

When these different tribal, ethnic and clan groups begun to lose their separate language identities and become a cohesive Tamil language group through replacement of other languages is very difficult to answer. However, one may expect these far-reaching changes took place in the previous Iron Age phase. The common social, economic and cultural traits like usage of black-and-red ware, metal objects, elite goods, graffiti marks, megalithic customs and erection of memorial stones observed in Iron Age suggest that the process of language replacement would have taken place in Iron Age. It is quite clear that during Early Historic times this language raised to the level of literary medium. The references like perfect Tamil (*cen-tamiḷ*) speaking area and imperfect Tamil (*koṭun-tamiḷ*) speaking area found contemporary in literary sources suggest that the process of replacement is not complete. It seems that the dominant Tamil language speaking ethnic groups like *Cōlar*, *Pāṇḍiyar*, *Cērar*, *Vēḷir*, *Āy*, *Maḷavar*, etc., began to assimilate other groups through language replacement (Indrapala 2009:125). The dominance of this language group occupying the southern part of peninsular India was referred to as *Damila/Damedā/Dravida* in contemporary sources of Andhra and Sri Lanka. Derivatives of the name *Tamiḷ* were used in the Prakrit languages. For instance, *Tramira* in Hathigumpha inscription of Kalinga Kharavela, *Damila* in



Amaravathi inscription, Dameda in Sri Lankan cave inscriptions (Paranavitana 1970: Ins. Nos. 7, 28 and 37) could be cited. However, the literary and epigraphical sources do not mention the name *Tamiḷ/Tamiḷan/Tamiḷar* rather this specify the territory as *Tamiḷnāḍu*, *Tamiḷakam* and *Tamiḷnilam*. The sources reflect the continuous inflow of various ethnic groups carrying different cultural traits, traders, Jain and Buddhist missionaries. The reference on ethnic groups like *Yavaṇar*, *Vaṭukar*, *Nākar*, *Kōsar* and *Paratavar* and skilled labourers like *taṭchers* (carpenter) and *kollars* (black smith) hailed from Avanti and Magatha made their visit to this part of the country. Such ethnic inflows are reflected in the form of Prakrit names in Brahmi inscriptions. Of the 469 Tamil-Brahmi inscribed potsherds, nearly one fifth of them can be recognized as Prakrit names. Likewise, the cave inscriptions carry nearly fifty percent of the Prakrit names and Tamilized Prakrit names (Subbarayalu 2009: 95-122). Thus, the population was diverse with new elements joining it. Nevertheless, the process of amalgamation had set in motion and the new language group was totally or partially assimilated with the existing ethnic groups. This process is continuous and ever ending. The later day Prakrit speaking Pallavas could be cited for early medieval scenario who had also assimilated in the process. Irrespective of these processes, the evolution of political identity was not seen in Tamil Nadu even during the reign of Pallavas and Cholas. The medieval south Indian empires like Pallavas, Chalukyas, Cholas and Rastrakutas transcended language and cultural barriers. The major lineages of South India aspired to control territories not only in the area of their origin but also the neighbouring regions. There was no room for any ethnic

identity when they succeeded in establishing their empire as in the case of Satavahanas, Pallavas, Chalukyas, Cholas, Rastrakutas and many other such dynasties. In the realm of unification, the state had priority over ethnicity. Members of the south Indian empire married into Telugu, Kannada, Malayalam, Tamil and Sinhala families cutting across ethnic boundaries. These matrimonial relations paved the way for claiming legitimacy to rule a region outside of their lineage. The invitation extended to Kulotunga of Vengi to take over the supremacy of Chola dynasty and the invitation extended to Nissanka Malla to the Sinhala throne at Polonnaruva could be cited as examples. Thus, the ethnic identities did not have any political basis due to continuous cross-border movements and subsequent assimilation for mutual benefits. The recent language/caste/ethnic identities did make limited influence on political system but they themselves did not become complete political basis. The lessons learned from history suggest that these activities are part of a cultural process and always remain as dynamic one.

Thus, the evidences embedded in literary, epigraphical, numismatic and archaeological records clearly point to the emergence or formation of new social order henceforth unnoticed in the previous Iron Age culture. The occurrence of bronze objects, carnelian and agate beads in Iron Age context well before the traces of NBP and Punch Marked coins suggest that South India had a long distance trade well before the so called Mauryan incursion in Andhra Pradesh and Karnataka. Irrespective of this emerging scenario, majority of the sites in South India have been dated to 3rd century BCE. The reason

for assigning all the sites to 3rd century BCE is with the assumption that the script is introduced in South India after Asoka. Keeping the historical mindset of this magnitude, all political personalities and the archaeological sites, irrespective of their cultural deposit, have been dated to 3rd century BCE. Though several parameters like trade, technology, architecture, political authority, territorial integrity, urbanisation, etc. are available to designate a culture as Early Historic, the occurrence of Brahmi script is considered as the beginning of the Early Historic period in South India. So the date of Brahmi becomes crucial in understanding the context. The historical inputs extracted from these Brahmi inscriptions engraved on stones, coins and inscribed potsherds are considered as a chronological anchor. Due to over-emphasis on a particular class of evidence, i.e., Brahmi script in this case, all other social parameters like the usage of coins, formation of trade routes, the size of the settlement, the formulation of various clan groups, the emergence of state and so on so forth are not seriously engaged. These parameters did not emerge as one time cultural package within a short time span but developed and evolved over a long period as a social product. The cultural traits formed during Neolithic-Chalcolithic and Iron Age regime could be considered as a gestation period. The remarkable developments that had taken place in different spheres of the society during previous cultural phase culminated into the Early Historic.

The formation of clan based society in the background of kin-labour mode of production system, the control of resource bases, the development of new technology, birth of

vibrant trading system, marketing centres, port towns and many other such activities accelerated to the creation of a state of different magnitude. Each state wants to move forward by retaining the power, society and their economy. This led to frequent conflicts between the states and that get reflected in the literature. The available material suggests that the political situation in south India during Early Historic is very fluid and complex.

The documentation of more than 3000 archaeological sites in Tamil Nadu, the recent radiometric dates obtained in a well stratified archaeological context at Thelunganur, Mangadu, Adichchanallur, Korkai, Vallam, Alagankulam, Porunthal and Kodumanal and palaeographical, linguistic and stratigraphical analysis of Tamil-Brahmi inscriptions helps to distinguish the cultural landscape of Tamil Nadu. The other adjoining states like Karnataka, Andhra Pradesh and Kerala share the same material culture. The combined factors suggest that Iron Age in South India is survived somewhere between 15<sup>th</sup> century BCE and 6<sup>th</sup> century BCE and Early Historic might have began around 6<sup>th</sup> century BCE with element of variation.

As concluding remarks, I wish to share my concern on certain specific areas that needs our immediate attention. On the social front, the process of interaction between the north and south assumes much significance in recent years. It is the time to focus on cultural interaction, mutual assimilation and acculturation rather than entangling with issues like *Aryanisation* or *Prakritization* or *Sanskritization*. The process

of *Prakritization or Sanskritization* has to be understood as a cultural dialogue rather than cultural imposition. In the process, the people make the dominant culture as a desired culture. The shared ideas and traits are needed to be exposed in archaeological data. On the economic front, the resource areas need to be identified and documented. The technological developments in the field of metallurgy, irrigation, transport, navigation, gem stone mining, pearl fishing and other related areas are not adequately addressed. Like iron technology, these technological developments had far-reaching consequences for the social development. Though, we identified sites like capital cities, trade centres, and port towns but hardly could we document trade routes and resource bases that connect these potential archaeological sites. Another important area that demands our concentration is of agrarian organisation. It is a well-known fact that agrarian system is the base for all social developments. The study of pollen and phytoliths are receiving attention of archaeologists in recent years. Still the data are sporadic and confined to a few sites. Unless we create a sufficient database, it is difficult to understand the impact of agricultural production in south Indian society. On the political front, there are limited studies on the process of state formation in South India. Scholars like Romila Thapar, R.Champakalakshmi, Sudarshan Seneviratne, Rajan Gurukkal, I.K.Sarma, P.V.Parabrahma Sastry, B.Rajendra Prasad, Y.Subbarayalu and many more made an earnest attempt to define the nature of state in South India. Thus, with serious efforts of the senior scholars, we could get a skeletal frame on the nature of cultural process that had taken place in this part of the country.

Hence, archaeologists and historians should make earnest endeavour to understand the processes of transformation through mutually supportive work and interpretative techniques. The process of change from one form to another has to be viewed as a dynamic and continuous one. The archaeological, epigraphical, literary and numismatic data need to be analysed within a given political, social, economic and religious context. A particular aspect may be emphasized more in a particular type of primary source. Therefore, each class of source is important and each has to be seen in a given context to understand its nature and content. Historians, archaeologists, epigraphists, numismatics, linguistics and literary experts should work closely to write and rewrite the history of South India for the benefit of future generation.

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<p style="text-align: center;"><b>Table</b>  <b>The AMS dates obtained for the samples associated with Tamil-Brahmi inscribed potsherds</b></p>								
S.No	Laboratory and Lab. No.	Site Name	Trench Number	Depth	AMS Date	Conventional Age (uncalibrated)	Calibrated Date	Two Sigma calibration
1	Beta Analytic Lab. 351053	Kodumanal	KDL-ZD20	15 cm	2150 +/- 30 BP	<b>200 BCE</b>	200 BCE	Cal BC 350 to 290 (Cal BP 2300 to 2240)/Cal BC 230 to 220 (Cal BP 2180 to 2170)/Cal BC 210 to 110 (Cal BP 2160 to 2060)
2	AMS Laboratory , University of Arizona AA99856	Kodumanal	KDL-ZE10	60 cm	2225 ± 41BP	<b>275 BCE</b>	380 BCE	Cal 389 to 199 BCE (Cal BP 2339 to 2149)
3	Beta Analytic Lab. 349958	Kodumanal	KDL-ZD20	65 cm	2250 +/- 30 BP	<b>300 BCE</b>	370 BCE	Cal BC 390 to 350 (Cal BP 2340 to 2300)/Cal BC 320 to 210 (Cal BP 2270 to 2160)
4	Beta Analytic Lab. 330303	Kodumanal	KDL-ZD10	80 cm	2280 +/- 30 BP	<b>330 BCE</b>	380 BCE	Cal BC 400 to 350 (Cal BP 2350 to 2300)/Cal BC 290 to 230 (Cal BP 2240 to 2180)
5	AMS Laboratory , University of Arizona AA99855	Kodumanal	KDL-ZE9	120 cm	2358±40 BP	<b>408 BCE</b>	480 BCE	Cal BC 731 to 691 (Cal BP 2681 to 2641)/BC 661 to 651 (Cal BP 2611 to 2601)/Cal BC 545 to 368 (Cal BP 2495 to 2318)

6	Beta Analytic Lab. 302854	Porunthal	MEG-I	-	2440 +/- 30 BP	<b>490 BCE</b>	520 BCE	Cal BC 750 to 680 (Cal BP 2700 to 2630)/Cal BC 670 to 610 (Cal BP 2620 to 2560)/Cal BC 600 to 410 (Cal BP 2560 to 2360)
7	Beta Analytic Lab. 305904	Porunthal	MEG-IV	-	2400 +/- 30 BP	<b>450 BCE</b>	410 BCE	Cal BC 720 to 700 (Cal BP 2670 to 2650)/Cal BC 540 to 400 (Cal BP 2490 to 2350)



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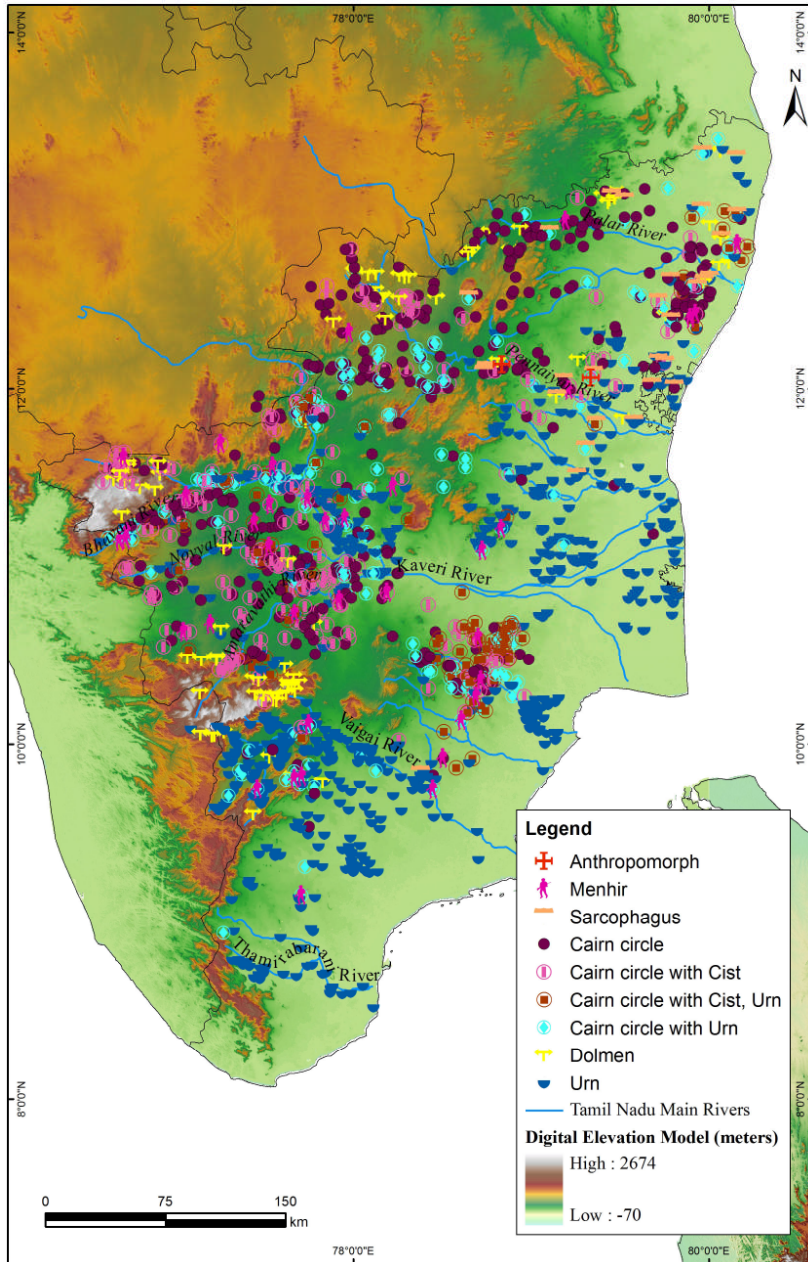


Fig. 1 : Iron Age sites in Tamil Nadu

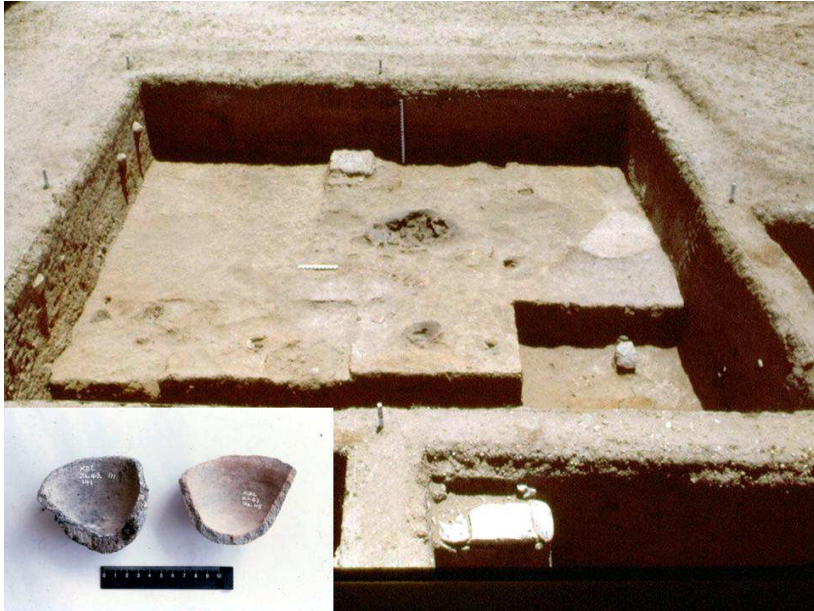


59 *Iron Age – Early Historic Transition in South India*





61 *Iron Age – Early Historic Transition in South India*







63 Iron Age – Early Historic Transition in South India





65 Iron Age – Early Historic Transition in South India

