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Interpreting the Ritual Complex of Nasrāṅikunn

A Study of a Megalithic Complex in Central Kerala, South India

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*“A person does not belong to a place until there is someone of his own
dead under the ground”*

- Gabriel Garcia Marquez
One Hundred Years of Solitude

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- Rachel

ABSTRACT

This thesis is a study of the Iron Age / megalithic burial sites of central Kerala, south India. The thesis organizes the scattered information we have on the Iron Age burials of central Kerala alongside the theoretical studies on the same, so as to identify the general trends and the major gaps. Specifically it takes up the problematic of spatial organization, a largely ignored theme in the studies on the Iron Age of Kerala. The base assumption of the work is that space is a dynamic concept that is experientially constituted and can be restructured. Spaces, especially symbolic architectural spaces like megalithic monuments, may represent power in terms of visual dimensions of domination, through visibility, by the division of space, by the privilege of inclusion, or by exclusion from the knowledge represented by them. With these assumptions in mind the spatial correlates of the sites of a single complex of Nasrāṇikunn in Central Kerala are examined in order to see how space was organized by the builders of the monuments at inter regional, inter-site and intra site levels. The thesis is a pilot study that initiates an effort to bring the concepts of spatial organisation and landscape relations to the centre of the discussion on the Iron Age of Kerala, and offers certain practical guidelines to generate data that facilitates such a discussion

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LIST OF ABBREVIATIONS

ASI: Archaeological Survey of India

IAR: Indian Archaeology: A Review (check footnotes in second chapter)

GSI: Geological Survey of India

SoI: Survey of India

MSL: Mean Sea Level

BCE: Before Christian Era

CE: Christian Era

my- million years

MGU: Mahatma Gandhi University

Puram.: *Puranānūru*

BRW: Black and Red Ware

RCPW: Russet Coated Painted Ware

MSL: Mean Sea Level

INTRODUCTION

This thesis focuses on the megalithic/Iron Age burials of Kerala, south-west India. The megalithic/ Iron Age burials constitute a major category of archaeological remains for pre- historic early historic south India. Academic inquiry on these burials started as early as the latter half of the 19th century, initiated as part of colonial antiquarian interest. This category of sources has received considerable attention from both archaeologists and historians of South India, in the post- independence phase as well. Peninsular Indian Iron Age overlaps the late- prehistoric early historic continuum towards the end of which written sources begin to appear from the region.

Yet, in comparison with the rest of the peninsula, the Kerala region remains inadequately explored. There have only been a handful of excavations till date. The region has yielded no habitation evidence for the period being investigated here. With regard to the other monuments, the information we have is sketchy and display major gaps. Attempts at theorisation have come largely from the part of the historians who employ the archaeological indications mainly as a corpus of corroborative evidence, to confirm textual sources that refer to the Early Historic period. Of course, there are exceptions to this approach.

This work organizes the scattered information we have on the Iron Age burials of central Kerala alongside the theoretical studies on the same. This is expected to give a general idea of the nature of the available published data and the limitations they pose.

One of the theoretical gaps in the studies on prehistoric archaeology of Kerala is in addressing the question of space. Landscape is often dealt as a static setting for events and actions. The base assumption of this thesis is that space is dynamic – it is as much a mental construct as it is a material one (HARVEY 2001). It is experientially constituted and can be restructured. Symbolic architectural forms signify such restructuring of space. Discussing in the context of South west Wales, Tilley observes that “megalithic building implies a need to represent in a physical form and capture permanently ancestral connection with the landscape” (TILLEY 1994). The experience of the landscape is mediated by the architectural forms, and the specific setting of the monument becomes a locus imbued with symbolic meaning sustained by the spatial organization within and among the sites and in relation to the landscape.

The thesis seeks to address these specific aspects by looking at a single group of sites closely. The group of sites chosen is from Nasrāṇikunn, of Palakkad district (Central Kerala). From the region itself we have no models for the study to fall back upon. Hence the methodology adopted relies heavily, both at a theoretical and a practical level, on studies with similar concerns from other parts of the world (TILLEY 1994, VAVOURANAKIS 2006, NASH 2008). The difference of the subject matter under study necessitates methodological adaptations. Also, care has been taken not to fall into the folly of simplistic parallels as has been the case in many of the early colonial and ethnographic studies on the prehistory of Kerala (See Chapter 1). There are real limitations in terms of tools of analysis like maps and geological information. The effort here is essentially to see how these limitations can be addressed, and a discussion initiated to draw in space as a central concern in the study of megalithic traditions of Kerala.

The thesis is organized across four chapters

- The first chapter “The Context” gives a broad idea of the study area in three sections. The first section focuses on aspects of physiography and geology that are integral to our discussion. The second section briefly addresses the question of chronology in the study of the Iron Age of Kerala. The temporal span is one where multiple categories of sources interact. The third section gives an outline of the nature and scope of the different types of sources.

- The second chapter is an extensive review of the existing discourse on the megalithic tradition of Kerala. The discussion gives an overview of archaeological research in the region. It looks at how these studies have been adopted by the historiography of late prehistoric- early historic Kerala specifically focusing on the differential employment of the different categories of sources that are discussed in Chapter 1. The discussion initiates a critique of the existing body of knowledge from where fresh ways of looking at the available information can be formulated.

- The third chapter, “Iron Age Burials of Central Kerala: An Overview” examines the currently available data on the megalithic/Iron Age sites of the study area. This is done through a survey of the published sources and through the author’s

personal observations, and insights shared by specialists. The result of this research is to have a generalized idea of the megalithic tradition of the study area that allows one to place further discussion based on selected locales in perspective.

- The fourth chapter “The Iron Age Burials of Nasrāṇikunn” specifically addresses the theoretical questions concerning space and place stated above. The discussion is based on the field work by the author at the site of Nasrāṇikunn in 2010, the information obtained by the participation of the author in the excavations at the site ANK09VI in 2009, the unpublished reports of the excavations at Anakkara by the Mahatma Gandhi University (MGU) in 2008 and 2009, and insights gained from discussions with experts and the local inhabitants of Anakkara. The analysis progresses in three parts that speculate on how space must have been organized by the builders of the monuments of Nasrāṇikunn at inter regional, inter-site and intra site levels.

CHAPTER 1: THE CONTEXT

This thesis investigates the megalithic tradition of central Kerala, South India (here after referred to as the study area). Megalithic tradition in Kerala in particular and South India in general is associated with the iron using communities. The monuments will be studied in the context of their landscape setting, using both practical and theoretical methods. The published research work as well as data generated from my own field work at the sites at Nasrāṇikunn of Palakkad district is employed in the study. As will emerge from the discussion in the next chapter, the available information on the megalithic tradition is very fragmentary in nature. Often the only information available to us is the name of the village where the monument is located. In order to make sense of this fragmentary archaeology, it is essential to examine the non-archaeological evidence, including the geological and geomorphologic aspects of the locality and the region. These elements have close bearings on the location and use of these monuments

The chapter seeks to contextualize this study in three sections. First it looks at the physiographic features and the aspects of geological evolution of the landscape following the assumption that these have direct and indirect implications on the occupant communities of the region. The second section is a brief definition of the chronological span under consideration, the justification of which would emerge as the study develops. The nature and scope of the sources at our disposal for the defined chronological span are then explored.

The Physical and Geological Context ¹

The state of Kerala is a narrow strip of land to the south west of Peninsular India (see Fig 1.1). The state has a total area of 38863 km. The North- South extension of the state is 575 km ($8^{\circ}17'57''\text{N}$ to $12^{\circ}27'40''\text{N}$). It tapers to meet with the states of Karnataka to the North



Fig 1.1: Map showing location of Kerala within Peninsular India
(Illustration: A. George, adapted from: SoI)

¹ The information presented in this section is based primarily on four sources. *Geology of Kerala* (SOMAN, 2002) is a part of a text book series published by the Geological Society of India on the geology and mineral resources of the states of the Indian Union. The work is an attempt to collate the knowledge on geology, geomorphology and mineral resources of the region and to identify the gaps therein. *Geomorphology of Kerala* (2007) is an effort to bring together the basic information about the morphology and land features of Kerala. The work published by the Department of Geology, University of Kerala targets both the specialist and the non-specialist. The third source is the official website of the Geological Survey of India (GSI). The online resources of the GSI, such as briefing books, miscellaneous publications and the maps are used. *Forest Landscapes of the Southern Western Ghats, India: Biodiversity, Human Ecology and Management Strategies* (2007) focuses on a landscape unit, a part of which that falls within the Kerala state, viz., the southern part of the Western Ghats mountain ranges. The volume is interdisciplinary in nature and seeks provide a “comprehensive ecological approach to biodiversity conservation and an effective planning strategy for natural resource management (GURUKKAL and RAMESH, 2007)”. It also looks at the human- forest interface to raise questions regarding ecology and human ecology

and Tamil Nadu to the South. The width of the state ranges from a minimum of 11 km to a maximum of 124 km (74⁰51'57" E to 77⁰24'47" E). Administratively Kerala is divided into 14 districts (See fig.1.2).

The general area of the study is the central Kerala region that falls within the drainage basin of the river Bharatapuzha. This region comes under the administrative boundaries of the districts, Palakkad, Thrissur and Malappuram. Within this area, the focus will be on Nasrāṇikunn, a hillock in the village of Anakkara located in Palakkad district adjacent to the border of Malappuram district. Nasrāṇikunn and the region in its immediate vicinity have yielded Iron Age burial evidence like the rest of the study region. The political division of the state of Kerala is linguistically based and political boundaries do not correspond to exact physiographical limits. Likewise,, Iron Age remains are spread across peninsular India and display broad similarities in their nature. The choice of the study area was largely a function of convenience and familiarity. However, the state of Kerala exhibits certain physiographical attributes and climatic peculiarities that distinguish it from the rest of peninsular India. Further, there are certain types of megalithic monuments whose presence is unique to the state.

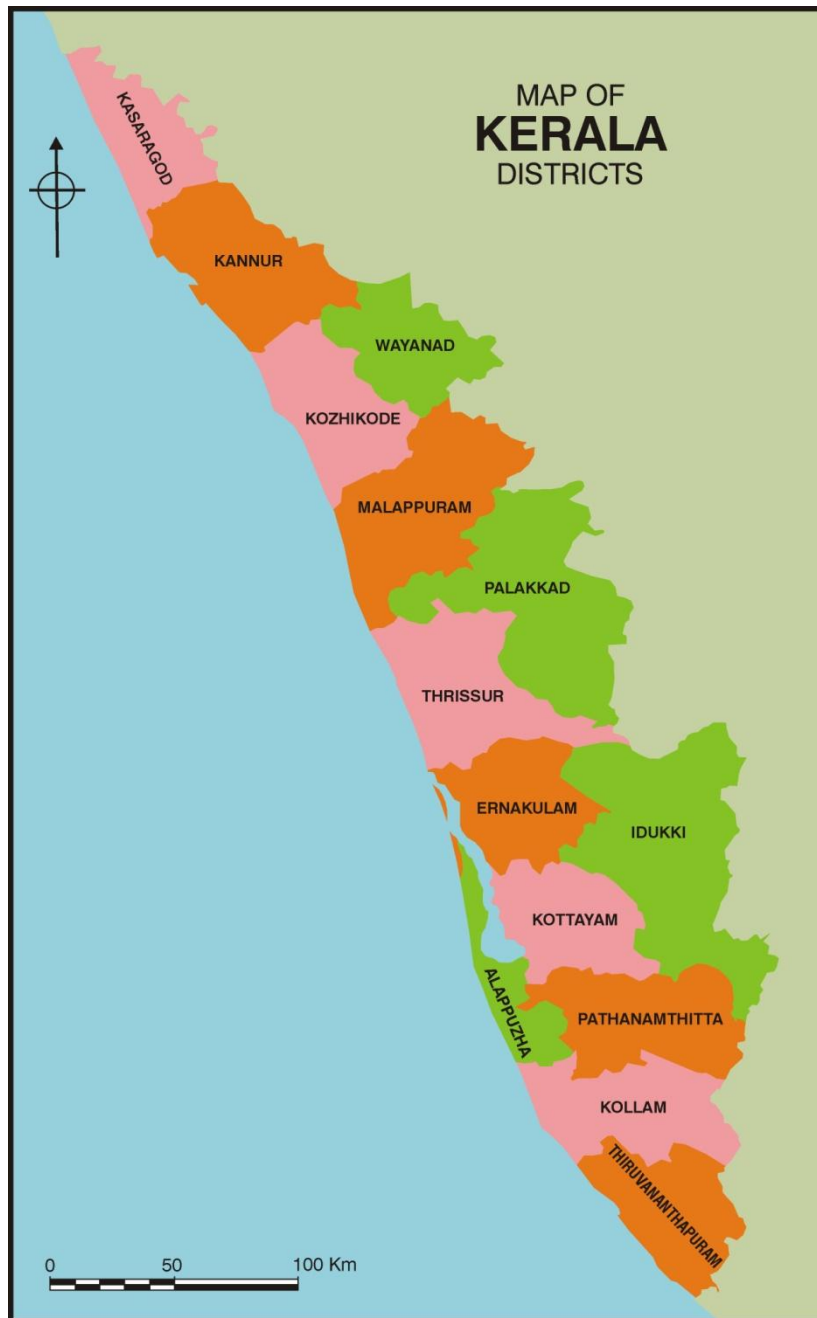


Fig 1.2: District map of Kerala (Illustration A. George, Adapted from Department of Survey, Government of Kerala)

Physiography

The region falling within the political boundaries of India can be divided into four macro regions:² Great Plains, Himalayan mountain ranges, peninsular uplands and Indian coasts and islands. These are further divided into twenty-eight meso- regions of

² This division is based on India- a Regional Geography by R.L.Singh published in 1977 and reproduced in GURUKKAL and RAMESH (2007)

which three concern the state of Kerala and the adjacent parts of the neighbouring states - the Karnataka plateau, Tamilnadu uplands and South Sahyadri, and the West Coast region. These are further divided into 9 first order, 27 second order and 54 third order regions of which 15 fall partially or fully within the political boundaries of the state of Kerala (see Fig 1.3) (GURUKKAL and RAMESH 2007).

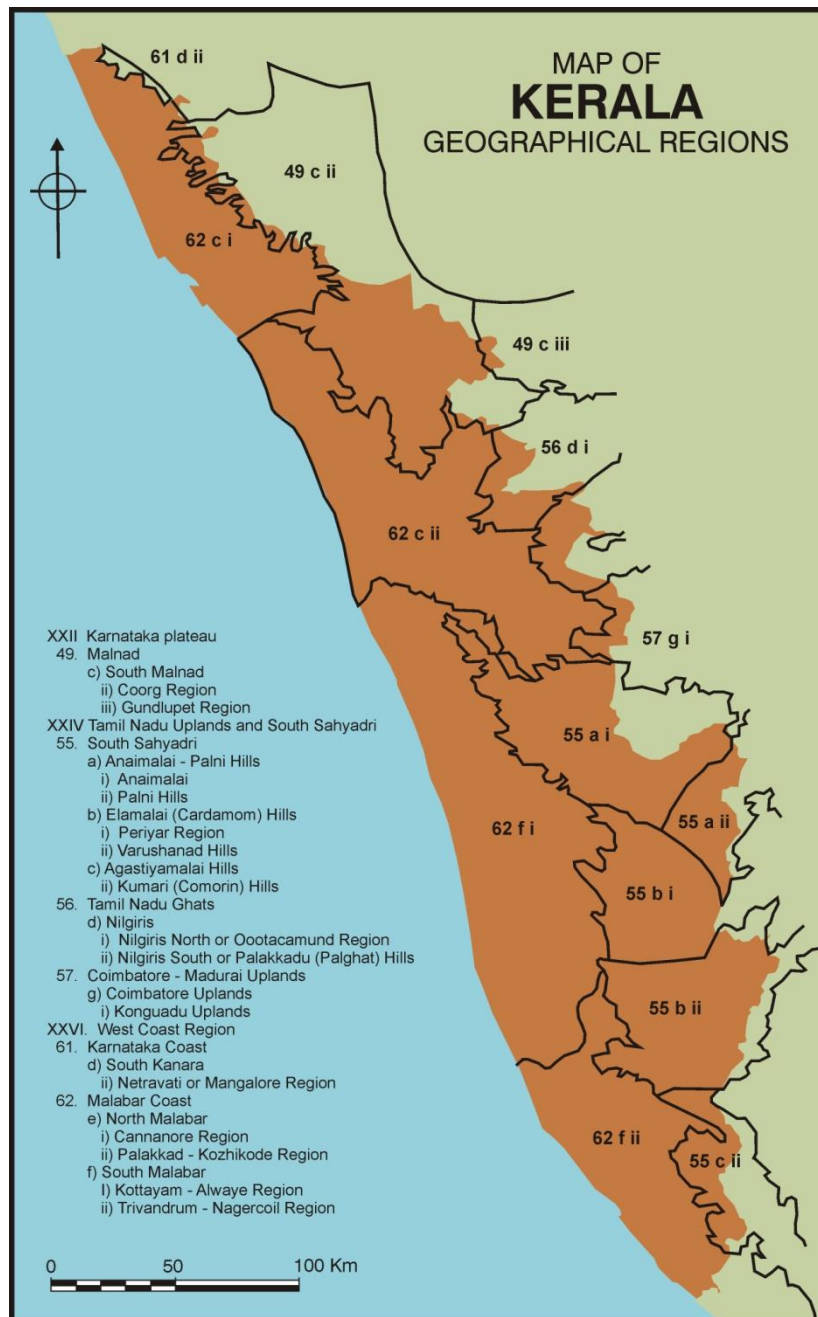


Fig 1.3: Showing the fifteen geographical regions entirely or partly located in Kerala (Illustration A. George, adapted from GURUKKAL and RAMESH (2007))

The state is bounded by the Arabian Sea in the West and the southern part of the Western Ghats mountain ranges in the east. Its northern and southern boundaries do not have a physiographic basis. The Western Ghats rise from a very low altitude of a few hundred meters up to over 2000m. It consists of a number of peaks which are above 2000m in height. The continuum of the ranges is broken by occasional mountain passes like Aruvamozhi and Chenkottai in the South and the Palakkad gap in the centre. Over a long period of time the Palakkad Gap has functioned as an important route of exchange that connected the Western and Eastern coasts of Peninsular India. Archaeological indications of strong exchange networks exist from the prehistoric times, and are marked by the spread of non-local items of trade and prestige goods like varieties of semi-precious beads and ceramic types.

The state can be divided into five physiographic zones (SOMAN 2002) of which 4 are almost parallel and lying in a north-north west-south-south east orientation (See fig 1.4). These are:

- The mountain peaks above 1800 m within the Western Ghats and constituting only about 0.64% of the total surface area of the state;
- The highlands at an altitude of 600- 1800 m and occupying 20.35% of the land area
- The midlands at the altitude of 300-600 meters occupying 8.44% of the area. This is constituted by the undulating Western fringes of the highland, the laterised rocky spurs projecting westwards, and parts of crustal breaks
- The lowlands at 10-300 meters, which cover a maximum area of 54.17%. The lowlands are quite asymmetric with dissected peneplains, flood plains, valley fills, colluviums and sedimentary formations. They also comprise of undulating rolling hills and shallow valleys running along Central Kerala. Where the valleys are wide, the land is ideal for the intensive cultivation of paddy. The interfluvial areas and slopes hold different plantations. The village of Anakkara falls within this zone. Anakkara has a number of laterite

hillocks of the altitudinal range of 35 to 70 m. These are interspersed with low lying flatlands with paddy and coconut cultivation

- The coastal plains and lagoons below 10 meters covering an area of 16.40% of the total. This zone is constituted by beach dunes.

The five zones are connected by an extensive drainage system.

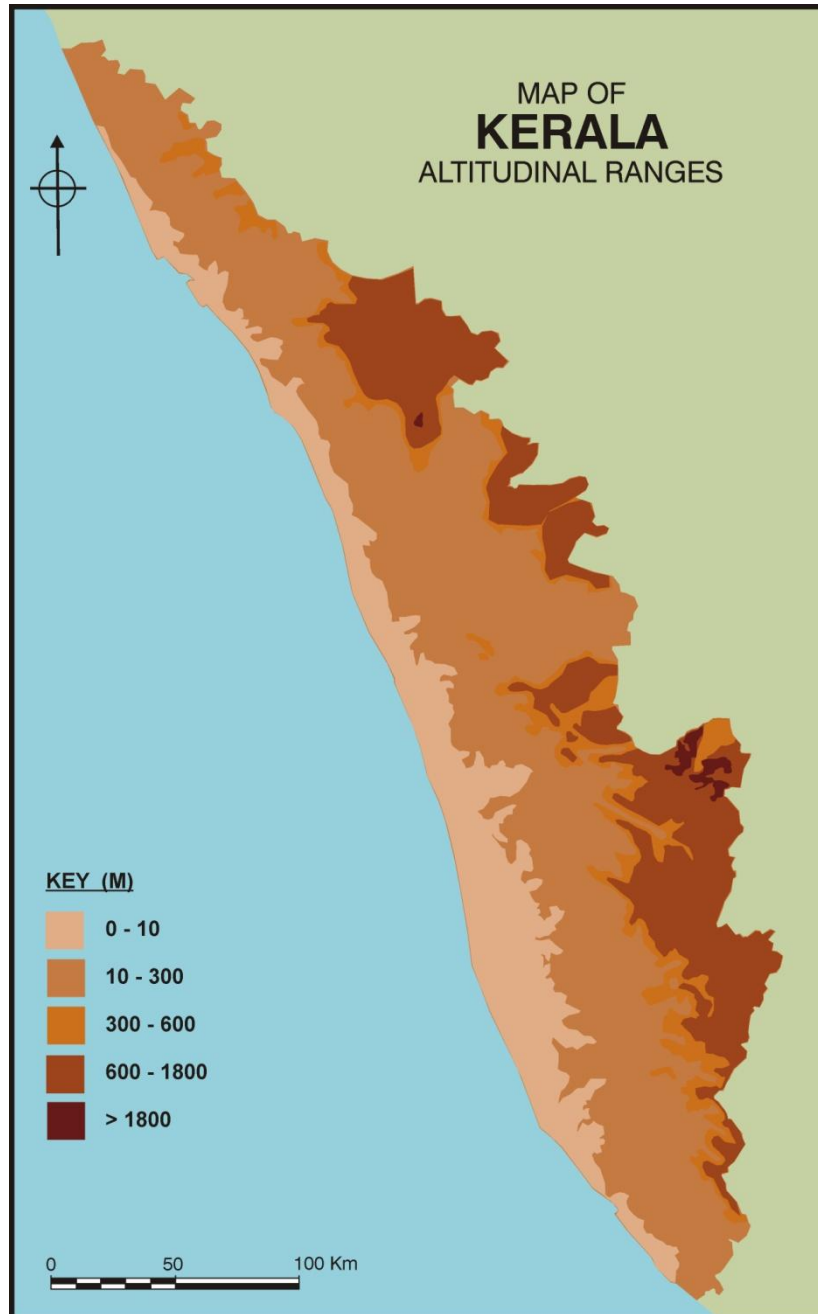


Fig 1.4. Figure showing altitudinal ranges in Kerala (Illustration A. George, Adapted from SOMAN 2002)

Drainage: Channels of Communication

Water transport has been a major form of communication in the state from the pre historic times till date. The river channels offer the most convenient and cheap means for transportation and until recently, this has been the preferred medium for timber transportation. Timber depots were located along the banks of the rivers. Logan talks about floating down timber to the main stream of Kutiyadi via smaller streams. From here they were “rafted to Calicut” (Logan 1887).

Our study area has yielded objects of non- local origin in association with a number of megalithic monuments. The exchange of these goods is channeled via routes operating through the waterbodies or along the banks of the major rivers. The late prehistoric-early historic port site of Pattanam is an interesting case in point. Pattanam is a hinterland port site, connected to the Arabian Sea and to the hinterland via the river Periyar. The site has yielded evidences of non- local produces and other items of trade that figured in Indo- Mediterranean exchange network arriving at the site *via* riverine transport. (CHERIAN, P.J. et.al. 2007). Researchers have indicated the tendency for megalithic sites to be concentrated along the alluvial tracts between branches of rivers and tributaries (ABRAHAM 2003)

Forty four rivers originate from the Western Ghats and cut across the state forming a network through tributaries and branches. These rivers are all perennial. Of these, forty one flow west-wards debauching into the Arabian Sea. The rivers are generally dendritic in nature. Most river courses are straight indicating structural control (SOMAN 2002). The *kāyals* or lagoons form a chain of water bodies running parallel or oblique to the coastline. This is a characteristic feature of the Kerala coast. It is a body of brackish, marine or hyper saline water, impounded by a sandy barrier and having an inlet connecting it with the open sea. Numerous perennial rivers discharge into the *Kāyals*. The *Kāyals* of Kerala are mostly separated from the sea by elongated sandbars. Perennial rivers debouch into the sea through these water bodies, compounding the system into lagoonal-estuarine, or partially mixed estuarine systems. (See Fig 1.5) Gurukkal and Varrier observe that the geo-physical peculiarities of the Kerala coast are conducive to water transport (GURUKKAL and VARRIER 1991). The *kāyals* and the channels connecting them form a water body traversing the length of the coastal regions

from Kozhikkode in the north to Kollam in the south. These water ways link the coast to the hinterland via the many rivers. The rivers, we have seen, are dendritic in nature spreading over the entire region. Thus the drainage system acts as channels of communication for the study area.

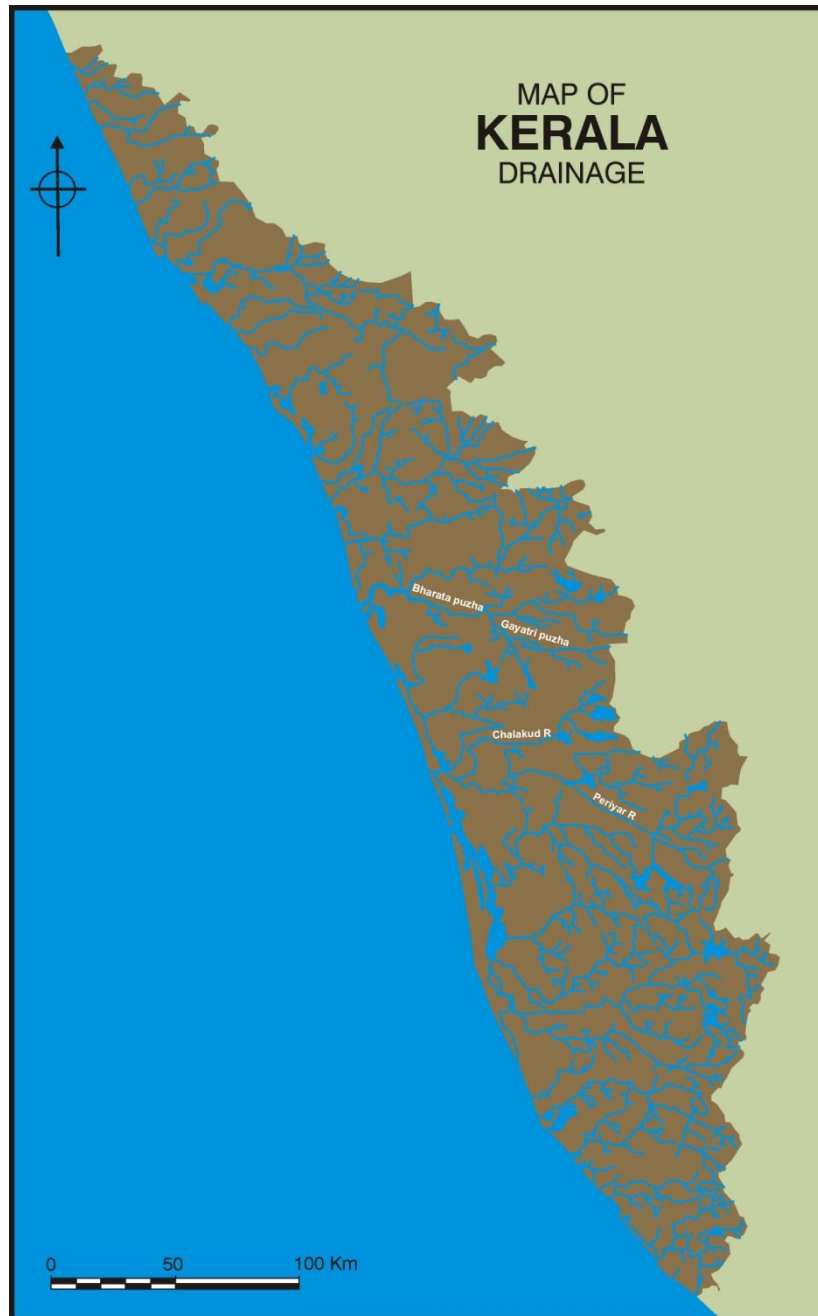


Fig 1.5: Drainage map of Kerala
(Illustration A. George, Adapted from SOMAN 2002)

The village of Anakkara lies 1.5 km south of one of the major west flowing rivers, the Bharatapuzha. Bharatapuzha is 209 km long. It originates in Anamala of the Western Ghats at an altitude of 1964 meters and flows into Kerala through parts of Coimbatore district in Tamil Nadu, flowing westwards through the districts of Palakkad, Malappuram and Thrissur before emptying into the Arabian Sea through the Ponnani estuary. Bharatapuzha is thus the major conduit linking Kerala with the regions east of the Palakkad Gap, as well as to the upland resource areas of the Western Ghats. The Coimbatore region has been a major industrial and trade centre for a very long time. Iron age sites like Kodumanal illustrate this fact (RAJAN 1994). The river has a number of tributaries and distributaries and acquires local names at different regions. It has basin area of 6186km² (PRASANNAKUMAR 2007). At Anakkara area the river takes the name Ponnani, even though Ponnani town is about 14 kilometers east-south east of Anakkara.

North of Anakkara, Bharatapuzha meanders to form a loop towards the South. It has a width of over two kilometers and loops out south about two kilometers from the main course of the river. Meanders cause erosion on their outer sides and deposition on the inner side. They also broaden and move downstream. Hence we can assume that at the period of our interest, the course of Ponnani was slightly off north from Anakkara than at present.

Climate

The state of Kerala falls within the ambit of tropical climate, and experiences the alternation of dry and wet climates. Certain areas in the Eastern region fall within the sub-tropical regime. Monsoons are a dominant feature of the region. Kerala experiences two monsoons, namely the south-west or *Edavappathi* (June to September) and the north-east or *Thulavarsham* (October to December). The seasonality of the monsoons had been used by the maritime traders to their advantage from the late centuries BCE. Occasional rainfall is also received between the two seasons. The average annual rainfall is about 300cms. March to May are the hottest months with temperatures reaching more than 32⁰C, and the lowest temperatures are experienced during the months of December and January, as well as July, when the state receives

plenty of rainfall and the sky is cloudy. The average temperature for the state as a whole is 28.5⁰C (SOMAN 2002).

The natural boundaries of the state contribute to its distinct physiographic and climatic characteristics. Kerala lies on the windward side of the Western Ghats. The Ghats break the South West monsoon winds causing heavy rainfall in the region east to it, while the neighbouring parts of Tamil Nadu on the eastern side of the ranges fall within the rain-shadow region. Hence there is a stark contrast in the vegetation and climatic features between the two areas. The dense forest cover of the Western Ghats is also a contributing factor to precipitation. This acts as a substrate for the condensation of moist- rising orographic winds from the Arabian Sea, and release much of the moisture back into the air through transpiration, allowing it to condense and precipitate (SOMAN 2002)

Almost the entire state is covered by lush green vegetation over the major part of the year. The conditions are favourable for a distributed habitation pattern. Kathleen Morrison has pointed out, on the basis of Paleo environmental studies, that even from the forest tracts of the Western Ghats there are evidences of modest human induced vegetation changes from as early as the first century CE.((MORRISON 2002)). In the case of Anakkara we see that herbs and shrubs cover the entire hillock except for short spells. Even with the poor water retaining capacity of laterite soils, the undergrowth of shrubs and grass is thick and tall enough to block the monuments at the site from visibility.

The physiographic and climatic conditions of the state can be assumed to have a major role in the occupational patterns for the period under our concern. K.N. Ganesh observes how the undulating nature of landscape has influenced the patterns of production in Kerala (GANESH 2007). The nature of landscape limits the possibility of any production technique having a wide regional spread. This necessitates micro regional systems of production and accumulation processes that involve inter regional interactions. The riverine transport networks have a major role to play in this regard. However we do not have many studies that explore this aspect. Ganesh also notices how the place names in Kerala indicate its physiography (GANESH 2007). Suffixes and

prefixes of place names in Malayalam signify particularities of a landscape unit signifying how the landscape was organized into distinct categories of perception. Many of these place names have great antiquity. This can be ascertained by the presence of words that signify landscape features in the Tamil *Sangam* texts. Closer to the present, dense population distribution and the richness of vegetation in areas that have a relatively lesser density of population have hindered archaeological research in the state.

Geomorphological Evolution of Landscape³

Southern Peninsular India exposes lithological assemblages from Archaean to Holocene (GSI, 2010). Geologically, Kerala is occupied by pre-cambrian crystallines, acid to ultra- basic intrusive of Archaean to Proterozoic eras, Tertiary (Mio- Pliocene) sedimentary rocks and Quaternary sediments of fluvial and marine origin. (See fig 1.6) Both the crystalline and tertiary sediments are extensively laterised (GSI 2005). Almost all the rock formations of Kerala are aligned in the NW- SE direction. This is because the structural grain of the Southern Peninsula has a NNW- SSE trend and Kerala lies to the Western edge of this mega structure (GSI 2005)

³ The discussion primarily focuses on the region of closer study, viz., Palakkad, Malappuram and Thrissur districts



Fig 1.6: Geological Map of Kerala
(Illustration A. George, Adapted from: SOMAN 2002)

The laterite outcrops and soils of the region are especially relevant to our study. Owing to the particular climatic conditions of the region, the geomorphic processes in Kerala are dominated by weathering and denudation. The climatic conditions affect weathering, soil formation, slope processes and river discharge and have significant control on the landform development of Kerala. (PRASSANAKUMAR 2007). The Archaean

crystalline rocks and the tertiary sedimentary rocks are extensively laterised. Laterites are seen up to an elevation of 2000 meters. However, the distribution has highest concentration within an altitude range of 50-150 meters above MSL and is mostly confined to an altitude of below 600 meters from MSL. This includes the lowlands and the midlands (SOMAN 2002).

The megalithic monuments built of laterite are unique to the Kerala region; of which most are made of laterite within the study area. They are conspicuous by their absence in the neighbouring state of Tamil Nadu where the presence of laterite is not extensive. Apart from the laterites, granites were also explored by the Iron Age communities of Kerala.

The landscape of Anakkara and the surrounding regions are characterized by laterite hillocks. Obviously, these were exploited for the construction of the monuments at Anakkara. The rocks are of a reddish colour as seen in figure 1.7. Generally, the laterite after the crystalline rocks is compact and the top crust is moderately indurated. The dark brown crust passes downward to pink and buff coloured soft laterite. Quartz vein joints and fractures can be traced from the top to the bottom of the laterite profile. Microliths in quartz were found during the excavations at Anakkara in the year 2008 (MGU 2008).

In tropical areas like Kerala weathering results in the formation of laterite with the removal of silica and fixation of certain oxides. The laterite formations of Kerala are Upper Tertiary. These are usually rich in oxides of iron or aluminum or both with or without quartz and clay (SOMAN 2002). The presence of Iron is indicated by the characteristic reddish colour. The interface of the coastal plains and lowlands abounds with laterite. The laterite zone is considered to be a good aquifer of ground water. During the excavations at Anakkara in 2009 it was brought to our notice that the construction workers working on an engineering college close to the site were using groundwater from a bore well dug nearby.



Fig1.7: Laterite formations at Anakkara exposed due to recent landscape alterations
(Photo: Author 2010)

In central Kerala extensive blanket capping by laterite can be observed. Laterite formation results in the formation of a hard duricrust on a surface that is flat giving rise to formations called ‘mesa’ and ‘butte’ along the Kerala coast. Horizontal retreat of the scarp face results in the development of a plain called ‘pediplain’ (PRASANNAKUMAR 2007). Laterite is an important building material. In recent years this aspect has led to the bulldozing of a number of laterite hillocks. This is a direct result of the construction boom in the region prior to the economic depression. In Anakkara the process is still continuing (see Fig. 1.7). The hills on the vicinity of Nasrānikunn have already been scrapped down to a large extent thus creating drastic alterations to the landscape. This has considerably affected the means of understanding the location significance of the sites in this study.

Quaternary Sediments and Soils

Recent to sub- recent sediments of coastal sand, sticky black clay with carbonized wood, silty alluvium and lagoonal deposits are observed mostly in the low lying areas from Kollam in the south, to Ponnani of Malappuram District in the centre, and between Kannur and Nileshwaram in the North. Alluvium is observed along the major river valleys.

Soil

Kerala has a thick soil cover over a large area with eroded pockets exposing hard laterite capping or crystalline rocks. The soils can be excessively drained to moderately well drained, with sandy to clayey texture, a major part being loamy. The soils of Kerala can be classified into eleven broad groups based on the morphological features and physico-chemical properties. These are Red loam, Laterite, Coastal alluvium; Riverine alluvium, Grayish Onattukara, Hydromorphic, Hydromorphic saline, Black soil, Kuttanad alluvium, Black Cotton soil and forest loam (PRASANNAKUMAR 2007). Laterite soil occupies about 60% of the total area of Kerala and a major part of the study area. It is mainly confined to 20 meters to 100 meters above MSL. On the hillocks of Anakkara, the laterite soils are shallow (with less than 50 cm depth) and are indurated with laterite outcrops. Laterite soils are poor in nitrogen, phosphorous and potassium and are acidic. The organic matter content is less than 1%. These have a low water holding capacity, and are prone to erosion. Soil of this kind is suitable for dry land crops. Local inhabitants at Anakkara recounted that less than fifty years ago, the major vegetation of the region consisted of cashew trees, *Njaval* trees and mango trees. These, more often, were in the form of untended vegetation. As the soils are poor in terms of their fertile qualities, one can assume that the monuments within the study area are constructed on marginal lands (marginal to agricultural production), similar to many other areas that has megalithic monuments around the world (JOUSSAUME 1985)

The Temporal Span

There is a dearth of absolute dating for Kerala megalithism. The chronological span of its spread, is a conjunct arrived in academic discourse based on the archaeological data from other parts of South India- both absolute dates and comparisons drawn on the basis

of associated artefacts- and on the non- archaeological sources with or without direct references to the phenomenon. Scholars differ in their opinion on the period of spread of megalithism, with dates as early as the first millennium BCE being suggested for its beginnings (PETER 2002; SATYAMURTHY 1992). The practices are seen to have continued up to mid first millennium CE (GURUKKAL and VARRIER 1999, PETER 2002, ABRAHAM 2002). This is a broad chronological span, which particularly in the absence of site specific dates, limit the general academic discourse on megalithism to a great extent.

The multiple source categories that are employed in this study are selected because their referents fall within this broad time span. In South Indian historiography this time span has been relegated to the late- prehistoric – early historic continuum. The division of history into successive, universally recognised periods is conventional in history writing. In the case of South India the above divisions are largely accepted by the archaeologists. The division between the two phases is not a clear cut one. However the assumption is of an Iron Age characterized by Iron smelting people which includes the early phases of megalithism followed by the proto/ early historic. The assignment of the second phase is based on the availability of textual (non- archaeological) sources that refer to it. Such divisions based on universal categories of periodization tend to be mechanical sometimes and this study expects to address this question in the course of the discussion.

The Sources

Archaeological

There are a number research projects that have embraced a megalithic culture as a world tradition. This implies that megalithic building their use and their demise seemingly follows a recognised pattern of events that is witnessed throughout the megalithic world (JOUSSAUME 1985). The megalithic monuments within my study area are no exception to this. Specific reports and mentions of the megalithic sites of Kerala region figure in the early colonial writings, Annual Reports and other publications of the Archaeological Survey India (ASI), the publications of the state departments of archaeology of the Travancore and Cochin states and a few independent studies

conducted by different university departments of archaeology in India. These works will be discussed in detail in the following chapter with a focus on the broad theoretical trends as well as their scope as source categories. The present study also takes into account some sites from the rest of Peninsular India, as megalithism of the sub-region is culturally and chronologically a part of South Indian megalithism as a whole.

Anakkara, our region of closer focus was excavated during two seasons in the years 2008 and 2009. These excavations were conducted by the Mahatma Gandhi University (MGU) of Kerala and directed by Rajan Gurukkal. The reports of these excavations are not yet published. As the excavations were constrained for time due to climatic and economic reasons, the analysis of the excavated material was not completed on site and is in progress. The information used in this study is based on the unpublished daily reports of the excavations (MGU 2008, 2009) and the input from the participants. Five trenches were laid out in the 2008 season. In 2009, excavations were conducted at Nasrāṇikunn, of Anakkara, which is the subject of the fieldwork conducted in this order as part of the present study. The author was part of the 2009 excavations and explorations. The detailed discussion of the excavations is included in Chapter 4.

During the months of October and November 2010, the author along with Sreelatha Damodaran, research scholar, Department of History, Calicut University conducted fieldwork at Nasranikunn, Anakkara. The methodology followed, and the information thus collected will be presented later in the course of the discussion. This fieldwork period was followed by one week of work as part of the musealisation project of the MGU in Kottayam, Kerala. A part of the project was associated with the excavated material from Anakkara and certain additional observations were made during the period.

While the focus of our discussion is the archaeological data from the region itself, there are other source categories that pertain to the period that are employed here in a limited way.

These are mainly of the following categories:

Numismatic

Finds of punch marked coins ⁴as well as Roman coins from the late centuries BCE to the early centuries CE have been reported from many parts of Kerala, like elsewhere in peninsular India. Two catalogues of coins published by the Department of Archaeology, Government of Kerala in 1965 and 1992 give the major portion of information in this regard (GUPTA 1965, SATHYAMURTHY 1992b). Roman coin hoards were recovered from a number of sites like Kottayam (Kannur District), Iyyal, Kumbalam and Valluvalli. Associated with the Roman *aurei* and *denari*, silver punch mark coins were also found. There are also stray finds of coins. The coin finds are often associated with prehistoric contexts. However a problematic tendency till now has been to study them independently. Hence the possibility to incorporate them in the present study is highly limited.

Textual

The textual sources pertaining to the period falls primarily under two categories. The first are the Greco Roman classical accounts including the the *Periplus Maris Erythrae* [PME] or The Periplus of the Erythraean Sea by an unknown author, the *Natural History* by Pliny and the *Christian Topography* by Cosmas Indicopleustes belonging to the first centuries CE. Their relevance to the present study is minimal.

The second group are early Tamil texts of poetics known as the *Sangam* anthologies. It consists of *Ettutokai* (the eight anthologies), *Pattupattu* (the ten idylls) and *Patinenkilkanakku* (the eighteen didactical texts). The ancient Tamil anthologies and poetics were compiled during the early centuries of the Christian era. The oldest among these could refer to an earlier period. Apart from direct references to the burial practices and the associated environmental motifs, the texts can be used to situate the life and culture of the period. The anthology that will be employed here mainly is the *Puranāṇūru* (in translation).⁵ The *Puranāṇūru* is an anthology of four hundred poems belonging to *Ettutokai* (the eight anthologies). These poems are among the earliest included in the early Tamil corpus of anthologies. While a detailed independent study of

⁴ 'Punch Marked' coins were issued between the 7th-6th century BC and 1st century AD in several parts of the sub continent. These coins are called 'punch-marked' coins because of their manufacturing technique. Mostly made of silver, these bear symbols, each of which was punched on the coin with a separate punch (RBI Monetary Museum)

⁵ The translations of *Puranāṇūru* used here are HART, George, and HANK, Heifetz (ed. and trans.) (1999) *The Puranāṇūru*. The USA: Columbia University Press, and PILLAI, V.R. Parameswaran (1969) trans., *Purananuru*. Thrissur: Kerala Sahitya Academy.

the texts is not within the scope of the present work, the effort would be to form an understanding regarding the integrated employment of multiple source categories which refer to the same spatio- temporal context.

The idea of *Tamilakam* and the *Tinai* – based Social Formation Paradigm

As will be discussed in detail in the following chapter the historiography of early south India relies heavily on the Tamil Sangam texts often at the expense of other source categories. The text based models of periodisation are co- opted into archaeological research as well (RAJAN 1994).

A dominant view in South Indian historiography is a characterization of social formation that can be called the *tinai* -based paradigm applied across an assumed geographical span, *Tamilakam*. Like current political boundaries, the assumed geographical spaces serve to frame the historical writings especially in defining the limits of their spatial span. Most of the writings on early South India assume that *Tamilakam* exhibits more or less uniform features that separate it from the rest of peninsular India. The idea of *Tamilakam* comes from the *Sangam* texts and is usually associated with the territorial limits of the chieftain's power.⁶ The *tinai* concept of social formation (see fig 1.8) regards the Tamil anthologies as central to the characterisation of social formation for the region (GURUKKAL 1989, VARRIER 1990). According to this view, the whole of *Tamilakam* that includes the present day states of Tamil Nadu and Kerala, exhibits more or less uniform features. It is held that *Tamilakam* consists of five types of landscape ecosystems or the *tinais*, viz, *kurinchi* (the hilly backwoods), *mullai* (the pastoral tract), *marudam* (the wet land), *neidal* (the littoral) and *palai* (the parched zone). Each *tinai* has produces, environmental correlates, behavioural patterns, deities and modes of occupation specific to it. This compartmentalization necessitates inter-*tinai* exchanges.

⁶ In this world massed together of earth that the wind/ cannot penetrate, dressed in sky and surrounded/ by the broad vast sea, of the three who rule over/ the cool land of Tamils... (*Puram*. 35, lines 1-4). See also *Puram*. 19 (Hart and Heifetz 1999)

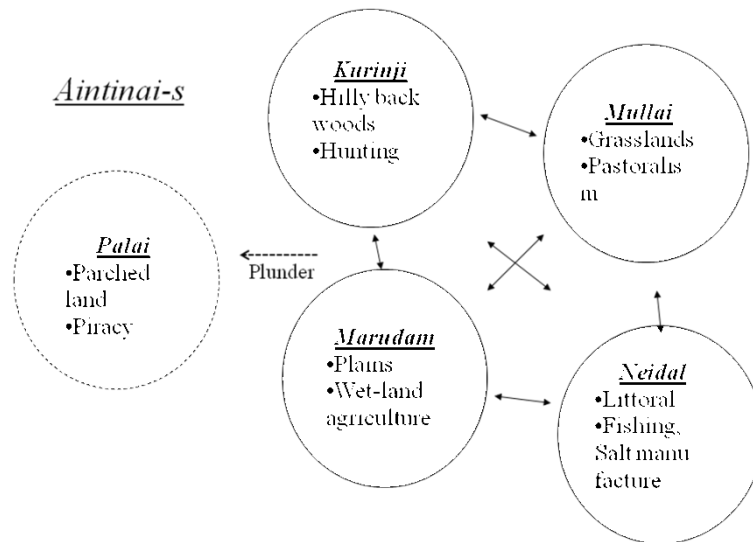


Fig 1.8: Diagrammatic representation of the *tinai*- based model of social formation

Vis- a- vis archaeological data, like the categorization of periodization, the tinai based model is also often un problematically applied. The inherent problem in these assumptions is the nature of the sources themselves. The ‘*Sangam*’ corpus of literature was collected much later than the period it refers to. The compilation itself is an act which involves mechanisms of filtering, mediation and selection that happened over a period of centuries and deeply ingrained within the temporal and ideological context in which it occurs. Hence, what is selected in the corpus of literature available to us is but part of a larger and possibly varied oral tradition. And the available texts themselves, rather than being efforts to characterize social formation are poetic expressions on themes like war and love replete with metaphors and motives. Hence their employment as a source category must be done with due caution and it is highly problematic to accept the geographical categories as given in the analysis of archaeological sources. As Shinu Abraham suggests, “Instead of accepting received notions of a region-based ‘Tamilness,’ it may be more useful to the archaeologist to consider smaller, resource-based distinctions as the more appropriate scale of analysis when examining the archaeological record of Kerala and Tamil Nadu.” (ABRAHAM 2003).⁷

The spatio temporal context has not been invoked here as a static backdrop. The present political boundaries have, no doubt, influenced the choice of the study area. Obviously,

⁷ Shinu Abraham’s arguments will be explored in further detail in the following chapter

such divisions had nothing to do with the imagination of space in an earlier period. The geological and physiographic features observed above are not conceived as categories or templates on which the life world of a community can be superimposed. Landscapes are constituted experientially, and in relation to humanly created locales that, in turn, may derive their meaning from the qualities and configuration of the landscape (TILLEY 1994). Thus there is no singularly defined landscape. Space, to follow Harvey, is dynamic and rather than being a passive frame, is an active moment in the construction of politico-economical, physical, ecological and social life (HARVEY 2001). Hence, the effort is to see how, given the limited nature of the sources at our disposal, the dynamics of a lived space can be conceived.

The next chapter attempts a review of the existing discourse on the megalithic tradition of Kerala and the way it has been employed in the historiography of the region. This should place the present study in a better focus by mapping the general trends and identifying the gaps in the available knowledge base.

CHAPTER 2: REVIEW

This chapter explores the nature and scope of the existing works on the megaliths of peninsular India, especially Kerala region and provides a comprehensive literary review. It looks at examines the way the monuments form part of the public perception of the region and how the local populace deal with their presence. The chapter also explores the major trends in the historiography of early historic Kerala focusing on the way in which history writing has dealt with the existence of multiple source categories corresponding to the same spatio- temporal span and the broader theoretical approaches that these works have taken. The effort is to bring together the multiple perspectives that have gone into our existing knowledge of Kerala megaliths and to identify the gaps therein.

Archaeological Studies on Kerala Megaliths: Nature and Scope

The colonial writings on the megaliths of South India date back to the early 19th century. They form the first corpus of published literature on the pre historic remains from South India. Prior to that and as can be delineated from these writings themselves, the burials were a part of the life-world of the local populace, who dealt with them in varying manners.

The first published report of the excavation of a megalithic burial in India was that of J Babington (BABINGTON 1823). It related to his excavations at Chataparamba of Kozhikode district of Kerala. This earliest description of the excavation of a '*kodeykal*'⁸, is also noteworthy due to a number of reasons. Babington gives the locational peculiarities of the site, describes the surrounding sites, and explains the methodology of excavation followed as well as supplemented the description with sketches. He also attempted to connect the site to the other sites that he had already encountered. The methodological rigor that is present in this first report however tend to be missing in the studies that followed. It should also be noted that Babington does not refer to the monuments as megaliths or draw short circuited comparisons with the European megaliths as many later studies tend to do.

⁸ Babington uses the term to describe a hat stone.

In 1882, Robert Sewell compiled a list of known inscriptions and antiquities from the Madras presidency. He was appointed on special duty with the Southern Zone of Archaeological Survey of India (ASI)⁹ by the Government of Madras. In three separate sections for Malabar, Cochin and Travancore¹⁰ regions Sewell notes 300 sites among which a good number are megalithic burial sites (DARSANA 2006). Sewell's list does not aim to provide more information than the place names where the sites are located (SEWELL 1882). However it remains significant as the first documentation of this kind from the region.

The Annual Reports of the Archaeological Department, Southern Circle of the early decades of 20th century, contain a number of descriptive accounts of monuments. In the report for the year 1910-1911, rock cut caves of Perungulam in Thalassery are described in details along with dimensions of the burial goods (REA 1911).

The narrative accounts of the colonial administrators of the prehistory of the region were primarily published as manuals and Gazetteers. These accounts tend to be descriptive, thus underlining the colonial order. In 1887, William Logan, an officer of the Madras Civil Service under the British Government, published *Malabar* (LOGAN 1887). As a colonial administrator, the understanding of Logan of the governed, and their sense of history was heavily prejudiced. "The genre of colonial literature with which Logan is linked" Kesavan Veluthat says, "constituted not only the description of the subject but a celebration and legitimization of its control" (VELUTHAT 2000). Logan assumed for the people a civil constitution that remained unchanged over centuries till the colonial interventions. "The Malayali¹¹ race has produced no historians because there was little or no history to record" (LOGAN 1887). His inability to effectively employ the above mentioned source categories and his exaggeration of the lack of indigenous sources have to be understood in this context.

Logan wrote *Malabar* when studies on the megaliths of Kerala had already been under way for a few decades and he recognised that this archaeological material is of 'historical interest'. But Logan fails to assign them along with the sources he mentions

⁹ The Archaeological Survey of India was founded in 1861 by the colonial administration. Post-Independence, the ASI is a department of the Government of India under the ministry of Culture.

¹⁰ The princely states of Cochin and Travancore and the Malabar district together formed the state of Kerala in 1956.

¹¹ Refers to the people who speak the language *Malayalam*, the official language of the present state of Kerala

in the section 'Early History from Other Sources'. This is because he understood their utility as limited to the study of religion. He regarded them as expressions of the earliest form of Hinduism, which was eventually replaced by a superior Brahmanism, in a process conceived as a unilinear transition even as some of its aspects survived.

Towards the end of the 19th century, a number of studies surfaced as short length articles in the different journals published by the *Royal Anthropological Institute of Great Britain and Ireland*. Some of them are primarily descriptive in nature and focus on drawing comparisons between sites and artefacts. (CAMMIADE 1930; FAWCETT 1896a; FAWCETT 1896b). Plenderleith, in 1896, published a short note on the chemical composition of the glaze on black polished pottery from urn burials in Wynad (PLENDERLEITH 1896). This is however the only study of the kind from the period. Codrington, in 1930, identifies the culture as part of one that spreads across South India and the Deccan based on his survey of the pottery from the urn and cairn burials (CODRINGTON 1930). Unlike the studies mentioned above Codrington examines at some length the ancient corpus of Tamil poetry called the *Sangam* literature as well as the burial practices of the time in India to reach his assumptions about the nature of the burials. He considers them to be of two types- primary and secondary. Also by this time there is the assumption, reached through the comparison of burial goods that the different burial types refer to the same cultural complex (FAWCETT 1896 a; CODRINGTON 1930).

The Archaeological Survey of India (ASI) as well as the State Departments of Archaeology of Travancore and the Cochin State conducted a few studies after the 1940s. The efforts of V.D. Krishanswami, Anujan Achen and others made these studies more systematic. By this time 'megaliths' had become the umbrella term incorporating a wide range of burial practices from South India. Hence, comparisons with practices across the globe that come under the term begin appearing in the studies. Many of these early writings on the megaliths of Kerala focused on the description of the monuments. Problems of nomenclature, chronology and origin were also taken up at different times.

In 1947, an article by Gordon Childe (CHILDE 1947) was published in the journal *Ancient India*. With function and plan as the bases of classification, Childe brought

together a vast amount of evidence from around the globe including that on the megaliths of South India. He found that complexes of traits, like collective burials and port holes, are regularly associated with the monuments. These differences and similarities form the basis of inclusion or exclusion of a category of monuments within the classification. The system of classification based on a complex of associated traits, thus cannot accommodate a wide range of monuments, including many of the subterranean rock cut caves of India. Gordon Childe proposes the likely origin of the megaliths to be around the Eastern Mediterranean and suggests a diffusion that was effected either by land or by sea by multiple possibilities of human agents (CHILDE 1947). Krishnaswamy observed that the megalithic monuments of South India belonged to an altogether different cluster. He attributed their difference to the different 'currents of migrations'. It was this 'contact' that led to the mixture of influences and rituals in these cultural regions (KRISHNASWAMY 1949). Changes are perceived not as products of processes operating from within but as imposed through outside influences either by actual contact or through a diffusion of ideas. Varying theories of diffusion have been proposed hence. Allchin and Allchin argued for maritime influence from the Middle East and B.B.Lal suggested Heliolithic diffusion. Haimendorf argued that that the builders of megaliths came from the near East (PARAPOLA 1973). Apart from pondering into the direction and channels of this possible diffusion, the studies based on the diffusionist approach have the limited scope of simple descriptive accounts. Explanations are not offered for the observed cultural similarities and differences.

Krishnaswami also attempted a 'scientific definition and standardization' in the use of megalithic terminology so as to effect an 'accurate planning of megaliths on conventions internationally acceptable' (KRISHNASWAMY 1949). He focused on the three regions that had been subjected to detailed ground survey since 1944 -- Chingleput, Pudukkottai and Cochin. He sought to describe the monuments from these regions in detail owing to the variations they exhibited while belonging to the same megalithic complex. While describing the physical attributes of the monuments of the Cochin region, he observed that the region as well as the whole of Kerala included three parallel physiographic strips that have yielded distinctive monuments. The architectural features of these monuments were thus determined largely by the material available.

Krishnaswamy also looked at the living megalithic cultures of the aboriginal tribes of Assam, Chota Nagpur and Bastar. He observed the structural features and functional utility of these monuments as well as the ethnological affiliations of the builders. However his major concern was the classification of monuments and hence he did not seek to elaborate upon these arguments.

The excavation of the urn burial site of Porkalam was undertaken by B.K. Thapar in 1948 (THAPAR 1952). Porkalam is a multiple monument site located in Talapilly taluk of Trissur district. In 1956, Y.D. Sharma undertook a detailed study of the rock-cut caves of Cochin (SHARMA 1956). His concern was that despite the significant numerical presence of this unique monument type “no systematic exploration or comprehensive study of them, geographically, architecturally or culturally has yet been attempted on an appreciable scale” (SHARMA 1956). He focused primarily on describing the general physical features and aspects of construction of these monuments. Sharma also took up the question of origin of the rock cut caves, that is, whether they could be assigned to the category of megaliths or not. He built up his argument through systematic comparisons of this monument type and associated burial goods with the other megalithic types from the region. The problem of chronology was also briefly taken up with specific reference to the caves. Rather than going deeply into the problem he accepted a general chronology for the megaliths from the earlier studies on South Indian megaliths to which the rock cut caves were also assigned.

During this period the local scholars on South Indian prehistory and history also are seen to be influenced by European models. Krishna Iyer’s assignment of the Kerala megaliths to the Neolithic reflects this trend. “It shall be my endeavour”, states Iyer, to sift from the scrap heap of information about the prehistoric antiquities of Kerala and arrange them in their proper perspective with the aid of ethnology on the basis of European methods” (IYER, 1948). He assumes that the Palaeolithic gave way to a Neolithic that was a period of innovations including megalithic tradition and South India acted as the emanating centre of Neolithic culture to other parts of India (IYER 1948). This is contrary to the evidence already available that that in South India megalithic tradition was a phenomenon primarily associated, not with Neolithic

implements, but with Iron using communities. Iyer, directly adopting the European models of the Neolithic, overlooks this.

Iyer also uses ethnographic information extensively. He is able to view the people of Kerala as a whole in a socio-historic perspective and the megalith builders are considered as the earliest settlers of the region. The thrust of the work is on describing the megalithic remains of the region with reference to the surviving ethnic groups and their landscape. The function of prehistoric archaeology, for Iyer, was to deal with people “who have not bequeathed their annals.” “Archaeology should therefore include all people and all those questions of man’s existence of which written records by people concerned are wanting” (Iyer 1948). The assumption was that the megalith builders who were the early settlers of the region were suppressed by the waves of immigrants and invaders who are represented in the historical sources. Hence his attempts were limited to tracing the tribal ancestry of the megalith builders through funerary practices surviving among certain modern tribes of India.

Elamkulam Kunjan Pillai was one of the first to realise the significance of megalithic burials in terms of social and political history” (GANESH 1999). Pillai’s essay titled ‘*Kurangukalude Pattada*’ from *Annathe Keralam* (PILLAI 1959) focused on the megalithic practices. Pillai’s writings are also among the earliest works on the early history of Kerala to be published in *Malayalam*. It should be noted that Elamkulam’s knowledge of megaliths was based on his direct participation in excavations and explorations. The author’s academic training was in language and literature. This orientation is reflected not only in his approach to the texts but also to the archaeological sources. The nomenclature assigned to the megaliths in the texts and in local parlance formed one of his major concerns. It is through a discussion of these that he reaches his assumptions regarding the ethnicity of the megalith builders.

The ASI has reported a number of megalithic sites from Kerala in the post-independence period. These reports came up in the annual reviews of ASI titled *Indian Archaeology: A review*. Here the volumes from the 1950s to 2000 are examined. The majority of the reports mention only the location of the site and type of monument. Some of them go on to describe the morphology of the monument. Among these sites

some are accidental finds encountered during land mining or construction activities. Some others have been found during explorations conducted by the department. In some cases these are supplemented with photographs. ASI has conducted a handful of excavations. There are no detailed systematic reports available for these excavations, except in the case of Cheramangad where the report is richer in detail in comparison to the others.¹²

Among the few megalithic monuments from Kerala that have undergone systematic excavations are Machad and Pazhayannur of the Talapilly *taluk* of Thrissur district. The excavations of Machad and Pazhayannur were undertaken by K.M. George and Mehta as part of the former's doctoral research (GEORGE, 1975) and the report was published by the Department of Archeology, M.S.University, Baroda as a short monograph (GEORGE & MEHTA 1974). George's doctoral thesis (GEORGE 1975) had a two-fold aim- two develop a systematic study of the material culture of Kerala and to try to understand the history of the region. This was deemed necessary in the absence of systematic explorations and excavations from the region (GEORGE 1975). George identified in the course of his research forty one new Megalithic sites. He gives short physical descriptions of the sites and goes no further. Three megalithic monuments were excavated, two in Machad and one in Nadappakund of Pazhayanur district. George examines the different diffusion theories on the origin of Kerala megaliths but refrains from reaching a conclusion. The relevance of George's work is in bringing together all the available information on the megaliths of Kerala. He is hence able to make suggestions on the nature of distribution of different monument types. George argues that the monuments directly reflect social ranking as can be deduced from the amount of labour that went into the construction of each.

From the early 1970s a number of monographs began to appear on the megaliths of South India. These works, based on already published information, seek to arrive at broad theorisations. The studies more often have broad regional scope including the entire peninsular India (PARPOLA, 1973; RAMANNA, 1983) or deal with a specific sub region within peninsular India (RAO, 1988) Theories of diffusion are still a

¹²Indian Archaeology 1990-91- A review. Vol.38, New Delhi: The Director General, Archaeological Survey of India, Govt. of India

dominant theme in these studies. In 1983, H.S. Ramanna produced a monograph that discusses the structural peculiarities of the megaliths of South India and South East Asia. In addition to morphology Ramanna also seeks to draw similarities between the two regions in terms of burial goods. On the basis of comparisons, he arrives at the conclusion that “there is considerable evidence to argue in favour of diffusion cultural contacts between the iron using megalithic builders of South India and various part of South East Asia extending to Philippines and Formosa¹³” (RAMANNA, 1983). The origin of South Indian megalithic tradition as we see above is a major concern. Parpola goes further in this regard, to suggest how the ‘diffusion’ is actually effected (PARPOLA, 1973). Parpola argues for “a fusion of earlier and intruding cultures” (PARPOLA, 1973). He assumes that the existing Neolithic populations adopted useful new techniques, while the “invaders” brought with them further extra elements. Parpola argues for an Aryan invasion by land bringing in new elements into the megalithic culture.

K.P. Rao’s *Deccan Megaliths* (RAO, 1988) focused on the region represented by the modern states of Andhra Pradesh and Maharashtra. There are about 40 excavated sites apart from nearly 300 explored sites in the area covered. Of these, 271 are listed and the discussion is based mainly on the forty excavated sites. The study, the author claims, involved extensive explorations and field work. One of the major assumptions of *Deccan Megaliths* is that Megalithic practices were introduced from other regions as a result of migration. He shares Gordon Childe’s view that the Mediterranean was the centre of origin for the megalithic culture in general. For the introduction in the Indian subcontinent, he suggests that there could have been more than one source and route. The diffusionist bend brings questions of ethnicity, migration and contact to the centre of works. Following this, inter-regional similarities and differences of monuments form a major tool of analysis in addressing problems other than the above as well.

However Rao’s work is significant in that it raises questions other than those on diffusion. It proposes to “study the excavated material with a view *to appreciate the way of life of the megalithians* (emphasis added)”, (RAO, 1988). The forty sites under study are divided by him into four zones. The basis of this division is not clear. But Rao

¹³ Formosa is the former name of Taiwan

recognises the “determinental (*sic*) role” of geographical attributes. Rao considers “attachment coupled with some beliefs” (RAO, 1988) as the singular reason behind ceremonial burials. Together with the idea of diffusion/intrusion discussed above, this determines the way in which the available information is utilised in the reconstruction of the ‘way of life’ of the megalith builders. Thus, the utility of the monuments themselves is limited to studying the funerary rites and death related beliefs of the people. Similarly the grave goods like tools, weapons and pottery are considered separately in terms of their functional utility outside the burial context and the discussion does not go much beyond assigning them to different occupational groups. The information presented in *Deccan Megaliths* has a number of limitations. For instance in most of the cases there is no data regarding the continuity of a site. In the case of some habitation sites where such information is available, Rao effectively employs it in addressing the problem of chronology through stratigraphic analysis. In Rao’s study the traditional pre-occupations, it appears, limit the extent to which the primary object of the study, which is to understand the way of life of the megalith builders, is effectively addressed.

After George and Mehta’s excavations in 1974, the next major excavation of a megalithic monument in Kerala was undertaken in 1992 by Sathyamurthy (SATHYAMURTHY 1992, 2000). Sathyamurthy’s *The Iron Age in India: A Report on Mangadu Excavation* is the report of the results of the excavation of the megalithic site at Mangadu, District Kollam, of South Kerala, conducted with the objective of solving the problem of chronology of Kerala megaliths. The scope of the study as stated by the author is two-fold “(i) to probe thoroughly into the cultural complex of a megalithic site in the vicinity of Western coast, (ii) to find out the chronology of Iron Age in Kerala, in order to trace the route through which Iron was introduced in South India” (SATHYAMURTHY 1992).

The author tries to place the study within the broader context of studies on South Indian megaliths in general and Kerala megaliths in particular. For this, from the already available information he formulates certain basic assumptions regarding the relative chronology of monuments and the introduction of Iron metallurgy. The results of the Mangadu excavation are then discussed around these assumptions. The problem of

chronology gets effectively addressed by this method. Here he employs the principle of hybridisation as a frame and through comparisons using earlier studies, radiocarbon dates from the site and nature of burial goods from different levels, brings out the chronological span of the site whereby it is assigned as a zone of first arrival and transition. Notably the radiocarbon dates from Mangadu are the only ones available for a megalithic monument from Kerala.

While the question of chronology is important, the narrowly defined scope of the study limits its possibilities to a great extent. To give an example, by way of entering into the central problem, Sathyamurthy attempts a brief sketch of the life of the megalithic builders. Here, the reconstruction is based on the evidence from the site alone, without reference to the information already available i.e., without any effort to place it in a broader context.

The excavation at Mangadu revealed the repeated use of the tomb over a long period of time. This offers the possibility of seeing how the megalithic builders related themselves to the site and to their past and can also give insights regarding the change in material culture over the period. It points also to the ritual significance of a burial site as one that is not limited to a single generation of builders alone, but as extending through time. For a region that lacks habitation evidence, an enquiry in these lines can give valuable insights. But these possibilities are not recognised in the study. While the pre conceived aim of the excavation might have limited the work, it should be noted that even a later work of Sathyamurthy based on the same excavation published eight years hence, does not move beyond the questions mentioned above (SATHYAMURTHY 2000).

The studies discussed above thus leave a major gap in that they rarely address the socio-economic structure of the megalithic society and focus themselves entirely on the burials. Udayaravi S.Moorthy addresses this lacuna in his *Megalithic Culture of South India: Socio- Economic Perspectives* which was published in 1994.

“Our knowledge of the socio-economic structure of the Megalithic society is rather sketchy. Although a vast body of literature on megaliths has accrued over the years, hitherto no comprehensive efforts had been done to collate the

data against an ecologic and systemic framework. There has been a singular lack of theory and the studies so far carried out are mostly typological devoting much of their attention to reconstruction of culture histories” (MOORTI, 1994).

He hence attempts to employ insights from processual archaeology so as to draw inferences regarding past culture systems. The thrust of his work is on modes and relations of production, aspects of social differentiation and societal organisation. Moorthy’s study covers a vast geographic span covering the entire South India and brings together information from a large body of, mainly, published material on both settlement and habitation sites. The tabulated information is then subjected to statistical analysis.

The study examines associations of the sites with environmental as well as cultural factors like exchange structures. The assumption here is that the analysis of location patterning of archaeological features helps to reconstruct past decisions regarding the use of environment, allocation of resources, social relationships and the like. This in turn comes from the processual understanding of culture as the extra-somatic means of adaptation of the human organism to his/her external environment. The analysis of social organisation is theoretically based on the associations made by Louis Binford (BINFORD 1962, 1971) between mortuary assemblage and the social persona of the deceased. On the basis of their primary functional context Binford proposes a three-fold classification of artefacts namely technomic, socio- technic and ideo-technic which is directly incorporated by Moorti in his study. The available information is tested against the correlates of ranked society proposed by Peebles and Kus (MOORTI, 1994). The quantification of goods assigned to functional subclasses associated with the graves allowed Moorthy to assign them to super-ordinate and sub-ordinate dimensions. This conformed to the archaeological correlate of ranked societies that there should be clear evidence of motivational ascribed ranking of the persons.

Significantly, Moorthy recognises the limitation of depending entirely on the funerary data to the exclusion of other available information in the study of social organisation. The funerary context might only partially signify the social structure. Hence, he extends

the study to include analyses based on settlement hierarchy as suggested by the type, size and location of settlements. It should be noted that evidences of settlement are absent till now from the Kerala region and in Moorti's work the region figures only in a limited manner with reference to the funerary remains as well. This is the case of all the works that had a broad regional scope and owes to the relative lack of data from the Kerala region in comparison to the rest of the peninsula.

Except for brief considerations, the research on Kerala megaliths seldom considered the environmental factors as Moorti does in his work (MOORTI 1994). Efforts in this direction were initiated by Jenee Peter in her doctoral research (PETER 2002). Peter studies the Iron Age sites of Central Kerala, taking for the first time the region as a whole. She lists out a total number of 658 sites and in the course of her work, identifies 30 new sites through survey. The major aim of the thesis is to form a typological distribution pattern for the megalithic sites of the region with a focus on the environmental factors at work. Peter calls these the geographical determinants of the site and seeks to see how they are reflected in the selection of the sites (PETER 2002). Peter attempts to compensate for the absence of habitation sites from the region by studying the burial sites along with their environmental setting so as to derive a pattern by which possible settlement areas could be hypothetically marked. The spatial extent of human settlements, she says, is delimited by the environmental and geographic factors. Peter also considers space as something given meaning to by human agency. However she does not expand this idea in terms of data or at a theoretical level.

Peter explores the possibility of analysis of sites at three levels- intra-site, inter site and inter- zone. Intra and inter site analyses had been hitherto absent in the studies of Kerala megaliths. On the basis of the analyses she reaches at important assumptions regarding the location peculiarities of the sites. However these remain at a speculative level due to the inadequacy of data at disposal. The available data on the megaliths of Kerala are not sufficient to identify their exact location or extent. This, points to the need of generating fresh data on the archaeological material from the region.

In comparison to the Kerala region, we have more information on the megaliths of Tamil Nadu¹⁴. A few sites in Tamil Nadu have habitation remains as well. This information can be logically extended to derive meaningful assumptions with regard to Kerala region. An instance is the study on the habitation *cum* burial region of Kodumanal in the Coimbatore district of Tamil Nadu by K. Rajan (RAJAN 1994).¹⁵ Rajan's monograph makes an exploratory enquiry into the megalithic culture of the Coimbatore region in general so as to contextualise his studies in Kodumanal. Kodumanal was a major industrial area with immense significance in the long distance trade networks of the period. In addition to that, the significance of Rajan's work lies in that it explores the region as a whole taking into account a large number of burial sites as well as the habitation area. The relation between the habitation and burial area is explored as well. This allows him to analyse the nature of choices exercised by the people in choosing the location for various activities. In the few excavations on Kerala megaliths that we have discussed above the spatial patterning of monuments has not been explored. These studies limit themselves to the monument that is excavated.

Another major gap in the archaeological studies on the megaliths of Kerala is the lack of a theoretical approach. This is not the case with historians of Early Kerala who employed the archaeological material as a source category. These works will be explored in the next section. The only work that focuses on Kerala megalithic tradition with a strong theoretical orientation is the doctoral dissertation by Shinu Abraham titled *Social Complexity in Early Tamilakam: Sites and Ceramics from the Palghat Gap, Kerala, India* (ABRAHAM 2002). She conducted archaeological field survey in the Palghat Gap and documented numerous megalithic clusters and other sites along with a body of ceramics (ABRAHAM 2002, 2004). Abraham argues that if there existed in early *Tamilakam*¹⁶ a system of sub- regional localized communities; these would be invisible when applying standard region-wide interpretations of the material culture. "The archaeological evidence for social groups in late Iron Age/Early Historic *Tamilakam* does not appear to conform to traditionally conceived forms of social organization; hence it is necessary to consider alternative models within which social

¹⁴ Tamil Nadu is the state lying East of Kerala and separated from Kerala by the Western Ghats ranges.

¹⁵ Kodumanal lies in a major trade route connection the West coast with the East coast of India via the Palakkad Gap and the site will be examined in detail during the course of this discussion

¹⁶ *Tamilakam* is conceived as a singular geographical entity represented by the present day states of Tamil Nadu and Kerala and is assumed to exhibit more or less uniform characters. This is an assumption that relies heavily on the corpus of early Tamil poetry called the *Sangam* literature. The concept of *Tamilakam* will be taken up in detail.

complexity can be addressed through an analysis of material remains and their patterning” (ABRAHAM, 2002). Abraham introduces heterarchy as an alternative model for social complexity. The concept of heterarchy was first introduced into settlement archaeology by Carole L. Crumley in 1979 as an alternative to band-tribe-chieftdom-state model of socio- cultural complexity. Heterarchy is defined “as the relation of elements to one another when they are unranked or when they possess the potential of being ranked in a number of different ways”(CRUMLEY 1995). She conducted two seasons of field survey in the Palakkad gap area two generate a fresh body of data pertaining mainly to the megaliths of the region. The data was complemented by a surface survey for ceramics which had not hitherto been attempted in Kerala. A significant outcome of the ceramic survey is that Abraham was able to identify possible location of non- burial/habitation sites on the basis of lack of association of certain pottery clusters with burial sites. Moreover, by limiting the regional scope of the study Abraham was able to do an effective distribution analysis taking into account environmental correlates as well as inter and intra site variability.

Monuments and People

Academic publishing on the archaeological remains of Kerala begins with the colonial initiatives. As noted above, the colonial writings assumed that the native population had little or no sense of history (LOGAN 1887) as they were guided by a sense of time that was non- linear as opposed to the occidental conception. This particular view has survived over time. However, the local populace negotiate with their past in multiple ways.



Fig 2.1: Local inhabitants gathered at the excavation site at Chuliparamb, Anakkara

The earliest references to South Indian megalithic tradition comes from the early corpus of Tamil poetry, the *Sangam* literature¹⁷. These ancient Tamil anthologies and poetics were compiled during the early centuries of the Christian era. The oldest among these could refer to an earlier period. The texts have direct references to the burial practices and the associated environmental motifs especially the *Puranānūru*. The *Puranānūru* is an anthology of four hundred poems belonging to *Ettutokai* (the eight anthologies). These poems are among the earliest included in the early Tamil corpus of anthologies.¹⁸

There are passing references, even from the colonial writings, on how the burial remains were perceived in the recent past. Babington (BABINGTON 1823) mentions the prevailing beliefs that the monuments were the work of the Pandavas¹⁹ or of other celestial beings. He also mentions the prevalence of a legend that the monuments were

¹⁷ The *Sangam* literature consists of *Ettutokai* (the eight anthologies), *Pattupattu* (the ten idylls) and *Patinenkilkanakku* (the eighteen didactical texts). “It is now well known that the chronology of the anthological collections is not uniform and they are not contemporaneous with the *San̄kam* (literally ‘a collective’) which collected, classified and redacted the poems.” (Gurukkal and Varrier 1999). Hence the usage of the term *Sangam* is largely a matter of convenience.

¹⁸ The *Sangam* literature is used here as a source category and further discussion on the same will be taken up in the following sections.

¹⁹ The five mythical heroes of the epic *Mahabharata*

abodes to old people who in the past diminished in size so much that they were not fit to live in the outside world. Hence these old people were to be placed inside the monuments along with the implements they used in real life. The myth that the micaceous sand in the pottery associated with the burials was pure gold that turned into sand on exposure to human eyes was also prevalent (BABINGTON 1823). Similar legends are also mentioned by Logan (LOGAN 1887). These early researchers, however, were not free from the colonial penchant for attributing ignorance to the local population. They tended to see these myths and legends as evidences of ignorance, and concluded reductively that the local population was not capable of informed awareness of the past.

The monuments also have local names that are recognised across the linguistic area. For instance a rock cut cave is called a *Muniyara* in many parts, a word that means ‘cell of a sage’ and associated with the tradition that sages used these cells to meditate. The word *Nannangadi* refers to an urn burial. There are also names for different monument types which signify their shapes. *Kudakkal* (Umbrella stone) and *Topikal* (hat stone) are two. These names are co-opted into academic writings. Curiously, *Kudakkal* and *Topikkal* were used interchangeably from earlier on. This possibly was due to the lack of grasp of the colonial writers of the native language. This early confusion in terminology has continued up to recent times, negatively affecting the efforts at typological distribution pattern analysis (PETER 2002; VARGHESE 2008).

During the course of the excavations in 2009 in the megalithic site of Anakkara in Palakkad district of Central Kerala, the author along with the excavation team interacted with the local inhabitants. Unstructured interviews were also conducted during the course of fieldwork in 2010. The stone circle ANK09VI, that was excavated (M.G.University, 2009) was assumed to be a well by many of the people. There was no fear of approaching it. During the course of the excavation many inhabitants narrated a story that had been passed on to them of an underground tunnel and assumed that the rock cut cave within the stone circle opened the entrance to the said tunnel.²⁰

²⁰ The stories of subterranean tunnels are prevalent in many parts of Kerala and are in many cases associated with escape ways in use during the occupation of Tipu Sultan, the ruler of Mysore in the late 18th century.

The public reaction to the excavations was multi-fold. In the year 2008 excavations were conducted in the property of Chuliparambil Aboobacker Haji of Anakkara (M.G.UNIVERSITY, 2008). The following year when the excavation team arrived in Anakkara, stories were told of how a fire occurred in the same plot of land which was attributed to the disturbance caused by the excavations of the previous year. Hence during this field season we were not able to access the site further to take GPS points and make other observations of that site. In the year 2009, only a week before the excavation of the monument, ANK09VI was partially damaged by construction workers who were building an engineering college on the site. Interestingly, these workers were not natives of the region. They suspected the existence of a treasure beneath the stone-circle, an idea that was foreign to the local population who have been familiar to the site over generations. It is possible that the excavations in the region in the previous year also contributed to the story.

However in addition to the myths, the academic interest of the community in the ongoing excavations was also strong.(See fig 2.1) The site was frequented by school children, media, as well as a large number of citizens from the area and far of places. The local television network made and aired a documentary on the ongoing excavations. The public demanded lengthy explanations from the archaeologists on site and a part of the workforce took up the task. At a point of time the number of visitors at the site was about five hundred per day. A similar show of public interest was also seen at Pattanam, an early historic port site in central Kerala where excavations have been going on since the year 2007. While participating in the excavation the author witnessed a strong interest on the part of the populace on the happenings at the site. While fears of land acquisition prevailed, the local population were also concerned about the excavated material being removed from the site as they considered it as being part of their local heritage.

Historiography of Early Kerala: Tools and Perspectives

Early writings on Kerala history rely heavily on origin myths and tradition accounts like the *Keralolpathi* and *Keralamahatmyam*²¹ for the early period. Colonial writings like Logan's *Malabar* (LOGAN 1887) use, primarily, the *Keralolpathi* narrative to discuss

²¹ *Keralolpathi* and *Keralamahatmyam* are tradition accounts that attribute the origin of Kerala to the mythical hero, *Parasurama*. These were prevalent as oral traditions for many centuries before coming into written form around the 15th- 16th centuries CE (GURUKKAL & VARRIER 1991).

the early history of Kerala. However Logan recognises the limitations of such accounts as the sole source for the period and makes a distinction between this ‘traditional ancient history’ and ‘history from other sources’. “What is substituted for real history of this period” he says, “is a farrago of legendary nonsense having for definite aim securing for the Brahmin caste of unbounded power and influence in the country” (LOGAN 1887, 244). In *Malabar* he makes a note of other source categories like the Greco- Roman accounts and the Bible for the period under concern. However he does not go beyond explaining the references from these sources to historical reconstructions using them. As noted above, the megalithic remains and archaeological evidence in general were not for Logan a source category for historical reconstruction and hence were dealt with separately in the work. Later works by those like Krishna Iyer (IYER, 1948) that emphasized the role of ethnology in archaeological interpretation, also did not consider the archaeological evidence as having a role in historical reconstruction. The megalithic remains were assigned exclusively to those without written records and hence there is no dialogue with history. Iyer (IYER 1948) relied on the account of early history given by Logan in his *Malabar*.

The understanding of Kerala region as part of a larger *Tamilakam* and the recognition of the corpus of Tamil *Sangam* works as a major source category for the region comes much later. In Kerala history Elamkulam Kunjan Pillai’s writings represent a major shift in this regard and also from conventional dynastic history. After Pillai, works on early Kerala history invariably employed the *Sangam* texts as a primary source category. *Annathe Keralam*, Pillai’s collection of essays was published in 1959 and *Keralam Anchum Aarum Noottandukalil* was published in 1961 (PILLAI 1959, 1961). Pillai recognised that, for Kerala region the entire body of *Sangam* literature is useful to understand the period of their writing as well as before it. He assigned the texts to the fifth-sixth centuries of Christian era. He offered a framework for the period that allows the incorporation of disparate evidences including the Greco-Roman accounts. What Pillai proposed to find in the texts is the life of the ‘ordinary person’ over that of the rulers, war heads and urban dwellers.²²

²² “On the basis of the *Sangam* texts, I intend to look at the state of the ordinary people of Kerala... let us ignore the kings, warheads, trade leaders and city dwellers for now”(trans.) (PILLAI, 1961)

Despite their highly stylised and symbolic expressions, Pillai assumed that the *Sangam* texts directly and completely reflected social reality. The way the socio-economic processes of these regions interacted, as well as the social formations through which they were organised does not become his concern. The picture as presented by the texts is of a war loving and superstitious community. The changes that occurred in the society by the 8th century is assumed by Pillai to be imposed from outside by the Brahmin missionaries owing to their superior intellectual capabilities. These were not seen as the result of social processes of transformation operating from within.

Pillai's employment of archaeological material in historical reconstruction had limitations. For him the archaeological survivals from the period were useful because they 'directly reflect' the 'reality' of the texts. Their relevance in historical reconstruction was not recognised.

M.G.S. Narayanan shared Kunjan Pillai's view that the Kerala region formed an integral part of *Tamilakam* in the early period and considered the region of Tamil language, culture and society as a separate unit from then. He favoured a materialist interpretation with constant reference to the class basis of the given data. Hence he did not approach the textual sources with a view that reality was truthfully represented in them. The focus had to be on the general mould or frame rather than on specific incidents. Narayanan's work, *The Foundations of South Indian Society and Culture*, came out in 1994 (NARAYANAN 1994). The difference in his approach to the early Tamil sources is evident in his understanding of the different socio-economic institutions of the period. His analyses of warrior settlements and the institution of cattle raids²³ deserve mention in this regard. He is also able to conceive the peasantry and the warriors as existing in interaction and struggle with each other.²⁴ "The function of different groups, their mutual relations, their expectations about the role of the groups, the beliefs, aspirations and fears of different sections of people and general environment of their lives," he says, "can be reconstructed with the help of *Sangam* literature" (NARAYANAN 1994).

²³ These are dealt with in the essays titled, 'Cattle Raiders of the *Sangam* Age' in the volume (Narayanan 1994: 83-96) and 'The Warrior Settlements of the *Sangam* Age' (NARAYANAN 1994: 97-105).

²⁴ See his essay 'Peasants and Warriors in the *Sangam* Age' (NARAYANAN, 1994: 106-131).

Narayanan defined regional history within a pan-Indian scenario which he conceived as exhibiting certain general trends and character. Thus the early epochs of South Indian history were seen within a process of transformation from a semi-tribal society to a 'classical Indian type' or as a unilinear transition with 'Indian feudalism' at its end. With a general Indian context in mind his focus centred on the Mauryan Empire.²⁵ As a result of this the Tamil society was primarily understood as 'frontier kingdoms, tribes and people' of the empire. He perceived the Tamil heroic age as one in which a vigorous culture with regional identity is established under the stimulus of north Indian empires and their successors. Thus while being aware of the conflicts and tensions operating in the socio-economic processes within *Tamilakam*, he fails to elaborate on them. The transformation process is understood in qualitative terms and as induced primarily from outside. Thus he suggested that the Mauryan influence and the resultant process of Aryanisation "explains *the sudden emergence... of megalithic building* (emphasis added), tank irrigating, black and red pottery making, horse using, cattle breeding, Iron working, bead and bangle wearing society in the archaeological record of South India" (NARAYANAN 1994). The argument was against any independent, gradual evolution in the region from the Palaeolithic-Neolithic stages.

It is important that Narayanan made note of pre-history and proto-history as recognizable stages in the social development of early *Tamilakam*. He also underlined the need for the integrated employment of source categories, for the period that follows. However he is unable to employ the available archaeological material effectively in this regard. By the time his work came out, a number of monographs on South Indian Megaliths had already been published. In the Kerala region, at least a handful of sites had undergone detailed excavation as mentioned above. However, the potential of this material in the study of the socio-economic processes of the region was not utilized in the work. This could partly be explained by Narayanan's assumption of a sudden break from the pre-historic and his reductive perception of megalithic tradition as a direct result of the Mauryan influence. For the *Sangam* age, he considered a comparative study that focuses on the archaeology of those sites that are mentioned in the literary sources,

²⁵ A geographically extensive and powerful polity from the northern part of India under a dynasty of rulers called the Mauryas of the period 321 to 185 BCE.

as necessary. Here what he seems to look for is a direct corroboration for the literary sources in the archaeological records.

Rajan Gurukkal's studies focus on the early phase of history till the advent of wet land agriculture as the dominant mode of production for traditional *Tamilakam* and also with particular reference to the Kerala region. He conceived social expansion and transformation as a continuous process. The article 'Forms of Production and Forces of Change in Ancient Tamil Society' published in 1989 (GURUKKAL 1989) dealt with *Tamilakam* in general. The article 'Historical Antecedents' which was part of the edited volume *Perspectives on Kerala History: the Second Millennium* published in 1999 by the Kerala Council of Historical Research (KCHR) looked at Kerala region in particular (GURUKKAL 1999). In these works Gurukkal emphasizes the need for the integrated employment of five overlapping source categories viz., archaeological; the relics of Iron Age burials and habitats; epigraphic, a host of Tamil Brahmi Characters; numismatic; classical accounts by Greco-Roman geographers and navigators; and ancient Tamil literary anthologies. *Keralacharitam* (in Malayalam), published in 1991 which he co-authored with Raghava Varrier expressed a similar concern (GURUKKAL & VARRIER 1991).

The chronological span of the megaliths was assigned roughly to mid first millennium BCE to mid first millennium CE. Each of the source categories mentioned above, he said, came within the accepted chronological span of the megaliths. Hence in order to understand the successive expansion or changes within the subsistence activities over a broad time span these different categories needed to be employed together. Gurukkal employed a conceptual framework that defined social formation as a combination of several unevenly evolved forms of production co-existing and interacting with one another. This is structured by the domination of one form of production that may or may not be superior to the rest in terms of productivity and technology. From the nature of the ideological base, power structure and social institutions it becomes possible to understand which form of production had the upper hand in the system.

In these studies Gurukkal's main concern was the period extending from roughly third century BCE to third century CE. For this period, he considered the *Sangam* texts as

giving the maximum details in terms of descriptions and symbolic expressions. Hence he focuses primarily on the texts, employing the other source categories mainly to reinforce or strengthen the textual sources. From the text the picture he derives is of a social formation characterised by an ideology of heroism, a power structure operating through plunder and institution of redistribution. From this, pastoralism combined with segmentary agriculture comes up as the dominant mode of production of the society, which was technologically and productively inferior to wet land agriculture. The interaction of the unevenly evolved forms of production was seen to generate a series of contradictions. It is this process that led to the gradual dissolution of the social formation. Unlike the studies till the time, Gurukkal tried to locate the process of transformation within the social structure itself.

The phase of Iron Age which precedes the early historic period and for which the burial relics form the main source category is not taken up in detail in these writings. However, unlike the works discussed above Gurukkal employed the archaeological evidence from the megaliths in order to address, though briefly, aspects like subsistence activities, social hierarchy and exchange relations. For instance he pointed to the numerical predominance of hunting and war related objects associated with the burials in comparison with the agricultural implements. Significantly, Gurukkal does not assume that archaeological survivals must always corroborate with literary references. However, rather than engaging in any detailed discussion with reference to the archaeological material, he stops at suggesting certain possibilities regarding their employment as a source category.

A work that needs attention is the edited volume *Cultural History of Kerala* published in 1999 (GURUKKAL & VARRIER 1999). The volume is a collection of essays that piece together the contribution of scholars from multiple disciplinary backgrounds into a holistic perspective. This is attempted through a central conceptual framework of history “that captures its processual dimension” (GURUKKAL & VARRIER 1999). Here cultural history is conceived as a continuous process and “an explanatory narrative on the material processes broadly of the cultural transition from the tribe to the caste or the peasant is attempted” (GURUKKAL & VARRIER 1999). Social formation is conceptualised in terms of the forms and relations of production and corresponding

aspects of social differentiation and organisation. A significant note that the work makes is of the necessity to focus on the 'human-ecosystem' interface. Representation of cultural history is sought through the focus on the human-ecosystem interface for the total span of the time covered. Hence, a consolidated account of the environment of the landmass forms an important backdrop for the discussion.

The span of about a millennium in which megalithic tradition was prevalent in the region is divided into two phases - the Iron Age and the Early Historic. The latter phase, discussed under the title 'Culture of Clans and Chiefdoms', more or less reproduces and elaborates the frame and content of Gurukkal's earlier works discussed above (GURUKKAL 1989,1999). The section on Iron Age needs to be considered in detail because it relies almost entirely on burials and burial goods.

The study provides a detailed typological classification of the monuments and discusses the categories of associated burial goods. The authors aim at a "problem oriented approach" that involves "a serious attempt at conceptualising the material culture and social formation behind the megaliths" (GURUKKAL & VARRIER, 1999). Archaeological data is employed to draw inferences regarding the economy, knowledge and technology, trade and exchange network, political power as well as belief system and ideology. Regarding the archaeological survivals, rather than taking a 'particularistic view' the attempt seems to be to bring out the human-nature interaction by explicating material processes, level of technology and strategies of subsistence. For instance, architectural knowledge employed is seen as offering possibilities to look into the level of contemporary domestic architecture. Similarly, rather than sidestepping the issue of habitation altogether, in the absence of archaeological survivals of the same, by looking at 'formation process of archaeological record,' the issue gets addressed to an extent.

The authors are aware of the problem of defining the society in terms of the burials and burial goods alone. Hence the attempt is also to reach towards what has not survived archaeologically. Megalithic tradition, they say, is not a pantheon in itself, but only part of a pantheistic life world shared extensively and articulated variously by humankind. It is with this view that they seek an integrated employment of sources with regard to

questions like economy, social structure and trade and exchange network. However, here there is no assumption of a one to one correspondence among the source categories.

How are the burial practices themselves discussed in this volume? Rather than regarding the burials as mere reflections of the social process and signifying the beliefs of the people concerning death alone, the authors recognised that they participate in the structuring and transformation of social conditions. For instance, it is suggested that “the megaliths and associated death rituals should have been a process through which heirs could assert their right to inherit the power and authority of the dead” (GURUKKAL & VARRIER 1999). Apart from suggestions as above, this line of enquiry is unfortunately not pursued further in the study.

Text and Archaeology: Negotiating Multiple Source Categories

Other than the efforts initiated by Rajan Gurukkal and Raghava Varrier (GURUKKAL & VARRIER 1991, 1999; Gurukkal 1999) in the writings on the early history of Kerala the employment of the archaeology and non-textual sources have been minimal. And these were most often looked at for corroborating literary references. “The common tendency is for the South Indian historians to appropriate the archaeological data as a source of correlates for information gleaned from the texts...Archaeologists are equally culpable; it has become customary for South Indian archaeologists to label sites and objects in Kerala and Tamil Nadu as “Tamil” without considering whether signifiers exist in the material record that substantiate or refute this notion of cultural separateness” (ABRAHAM 2003). The late Pre-historic period for which the megaliths form the major category of evidence is not characterised effectively in these studies. The specific studies on the Megaliths of Kerala seldom undertook a problem oriented approach that sought to conceptualise the social formation underlying the burials. They generally limited themselves to questions of classification, chronology and origin. The exceptions to this are the works of Shinu Abraham. (ABRAHAM 2002, 2004).

Abraham critically evaluates the employment of multiple source categories in South Indian historiography (ABRAHAM 2003). The acceptance of *Tamilakam* as a distinct geographical entity in a conception that is primarily text based. Abraham notes that

other source categories like the archaeological data do not necessarily correspond to a distinct regional identity. However, in South Indian historiography such a correspondence is assumed as a result of primacy attributed to textual evidence. For Abraham, the first step in South Indian historiography to address the question of multiple sources is considering the early Tamil written and material records separately through which “one may begin to understand the informational gap between the two data sets and suggest possible ways to narrow that gap.” (ABRAHAM 2003)

Another work that poses similar concerns is a paper by Manu V. Devadevan (DEVADEVAN 2006) that questions the idea of *tinai* as constituting the geographic basis of early economic practices. Devadevan points out certain lacunae in the *tinai* based paradigm. One is of loot and plunder, the occupation associated with *palai tinai*, transcending the landscapes visualized in the name of *tinai*. Another is the case of pepper, a major item of export from the peninsula. Pepper grows in *kurinji* and *mullai tinai*s that are regarded as domains of hunting-gathering and pastoral communities respectively.

To build his argument, Devadevan uses the excavations carried out at Kodumanal (RAJAN 1994). The evidences from Kodumanal are juxtaposed as an archaeological case *vis-à-vis* the *tinai* model of economy. In a *tinai* based classification, Kodumanal would come under the *palai tinai*. However the site gives evidence of being an active centre of craft production. The location of Kodumanal on the Puhar-Muziris trade route and its proximity to mineral resources are seen as responsible for the economic character of Kodumanal (DEVADEVAN 2006). A force like trade, it is argued, operates assiduously underneath the apparently self-sustaining and isolated nature of different systems, foisting changes and disturbing their seemingly simplistic constitution.

K.N. Ganesh notes that “the discussion on early Tamil society is an excellent demonstration of the possibilities and limits of a corroborative understanding of archaeological and literary evidence” (GANESH, 2009). In the course of the discussion he seeks to formulate ways of looking at the different categories of sources in conjunction. Theoretically based in concepts of human geography, he introduces the idea of ‘lived space’ in early south Indian historiography. It is the first work that seeks

to define space conceptually in theoretical terms. Location studies in processual terms, while explaining the process that give rise to archaeological evidence, miss out meanings given by human beings to them as well as their economic and social movements. To address the issue, location is treated at the position occupied by an artefact in movement. “The term locality becomes the thing or quality having a place and position in space” (GANESH, 2009). Localities constitute the possibilities and limits of a social activity. As social activities are diversified and occupy multiple trajectories of position and movement, localities are constituted by multiple spaces. These are for Ganesh “lived spaces’ created by human beings as a part of their life activity. Conceived thus, a site such as a burial site cannot be seen as existing as a locality independent of others.

Ganesh’s analysis is primarily text based. He makes a three-fold division of positions within the lived space - namely habitational, operational and cultural - and seeks, through an analysis of selected poems and specific terminology of Sangam texts, to mark these spaces in the early South Indian life-world. While cultural space is seen as embedded within the habitational and operational spaces or as existing as dead spaces, the three-fold division needs to be problematized as they are categories that necessarily overlap.

For Ganesh the archaeological and literary sources are similar in that any humanly produced artefact occupies a space-time. Space-time is here conceived in the sense that David Harvey uses it (HARVEY, 2001) as a dynamic concept of spatial form and ordering as opposed to a static one. Without such a conception, says Harvey, geographical knowledge becomes dead and immovable. However for Ganesh, the space- time appears differently in different sources and hence archaeology and literature for him have essentially different functions in historical reconstruction. Literary texts are seen as perceptions or experience of the lived space and archaeological sites as occupying the living space in a representational manner. Thus the intent or meaning of the artefact is not expressed in the archaeological material. The point where the opposition between the two sources is resolved is by relating it to spatial categories - either the actual landscape or literary concepts of space.

From the above discussion it emerges that the prevalent trend in the history writing of the region is to assign primacy to the textual sources, especially to the corpus of early Tamil anthologies at the expense of the other source categories in the study of the early historic phase. In the absence of textual evidences, the phase prior to it is assigned as the Late Prehistoric and the body of archaeological data becomes the primary signifier of the period. When there is an overlap of source categories, archaeological and textual, as in the case of Early Historic South India, the textual sources are privileged in comparison to the archaeological or the numismatic. The archaeological sources are in most cases seen as useful in so far as they corroborate the textual references. A few exceptions to this have been discussed above (ABRAHAM 2003, 2004; GANESH, 2009). Very often the choice of sites by historical archaeologists is dictated by a desire to complement the information provided by the written sources (INDUCHUDAN 1970; SELVAKUMAR *et.al* 2005).²⁶ While such exercises are relevant, they could predicate a disproportionate focus on corroboration. As a result, aspects of archaeological evidence that do not corroborate the written accounts tend to be ignored. Another problem is the selective assignment of sources to address different questions. As we have seen there is clear prioritisation of textual sources over archaeological material in addressing questions of social formation in the historiography of early Kerala. Within the textual sources themselves, different types of texts are seen as relevant in addressing specific questions. For instance, the Greco- Roman texts are seen as primary in the study of long distance exchange mechanisms.

The question of the integrated employment of archaeology and text or multiple source categories to address the same spatial and temporal context has been a major concern of the academia. If one moves from a processual to a more contextual approach and sees both texts and objects as human creations, both represent active intervention in the social production of reality (MORELAND 2001) Seen thus, it is evident that prioritisation of texts over objects is not rational. However the integrated employment of sources is dependent on the nature of the sources themselves. Hence there cannot be a singular guideline in using multiple source categories.

²⁶ To mention a few instances, the archaeological explorations and excavations in the Kodungallur region since the 1970s were intended to identify the places referred to in the texts as centres of *Cera* political and ideological power (INDUCHUDAN, 1970). The excavations at the port site of Pattanam come under the Muziris Heritage Project of the Government of Kerala and as the name indicates the identification of the site with the early historic port of Muziris, that finds mention in the Greco-Roman and the Tamil texts, form one of the main objectives of the venture (Selvakumar *et.al*. 2005).

In Chapter 3, I will explore in more detail the data generated by the above studies regarding the megalithic tradition of the region. The focus will be specifically on those studies that refer to the study area. The analysis aims at deriving certain generalised assumptions regarding the megalithic tradition from the area and also at identifying the major gaps in the studies so far. This is expected to frame the discussion that follows that focuses on a single group of sites from the study area.

CHAPTER 3: IRON AGE BURIALS OF CENTRAL KERALA: AN OVERVIEW

We have seen that studies on the megalithic burials of Kerala are fragmentary in nature. There are major gaps at the theoretical level and there is also a dearth of data. It is hoped, however, that an examination of the available information will yield a generalized idea of the megalithic tradition. This will be attempted through a survey of the published sources and through the author's personal observations, and insights shared by experts.

The burial remains/ memorials from the late pre- historic early historic period in South India are included in academic discourse under the umbrella term 'megaliths'. The term denotes the different types of burial/ memorial architecture and modes associated with the iron using population of peninsular India.

For the Kerala region, these remains constitute the single major category of archaeological sources for the pre- historic period. There are a few sites from Kerala which are identified as belonging to the Palaeolithic and Mesolithic periods. The Mesolithic rock shelter at Tenmalai, Kollam district, has yielded implements and wood charcoal in stratified primary context and has yielded two C14 dates of 5210 +/-110 BP and 4420 +/- 110 BP. (IAR 1985-86). In all the other cases, the identification is primarily based on tool typology. Except for a few polished hand axes there is hardly any evidence for the Neolithic (GURUKKAL and VARRIER 1999, IAR 1989-90), PETER 2002). The absence of evidence is primarily due to a dearth of systematic studies in the region. Gurukkal and Varrier point out that the blind acceptance of the hypothesis put forward by Bruce Foote, that the environmental factors might have made the region less attractive to prehistoric populations, has contributed to this neglect (GURUKKAL and VARRIER, 1999) There is no discernible Chalcolithic phase or Bronze Age for the region. These metals are found in association with the Iron Age burial evidence (IAR 1989-90, PETER, 2002).

For Kerala, like the rest of Peninsular India the term megalith is a misnomer. The types included in the category may or may not have lithic appendages. All these types belong to the same period, as indicated by the similarity of the associated burial assemblages. They also occur in combination and association in many cases. Hence it is not logical to separate them on the basis of their architectural forms. While, Iron Age monuments would be a more appropriate term to define these types collectively, the term megalith

has been the accepted usage in the academic discourse on early South India for about a century.

Typology

The Iron Age monuments from the west coast can be categorized into certain major types. Some of these are present in the rest of the peninsula. The distribution of some other types is confined to certain areas within the boundary of the state. The monuments display both over ground (See fig 3.1) and subterranean (See fig 3.2) features occurring in different combinations.

The major surface markers found in Kerala are:

Dolmens and Dolmenoid Cist: A dolmen is constituted by stone slabs of granite arranged above ground in a square or rectangular shape with a capstone. The subtype dolmenoid cist is sometimes used to refer to those dolmens that are partially buried in the ground.

Menhir: A menhir is a monolithic slab generally of granite. There are exceptions to this as in the case of monument ANK10VIII at Anakkara which is laterite.

Kudakkal: Translated as umbrella stone, *Kudakkal* is a laterite monument whose distribution is confined to the Kerala region. The monument is mushroom shaped, with an umbrella-like stone supported by clinostats erected in a slanting position over-ground.

Topikkal: The term hood stone is also used for *Topikkal*. These are hemispherical stones of laterite used as lids on burial urns and are unique to the region. A variant is the multiple hood stone which is a hemispherical laterite rock structure like *topikkal* made of more than one stone.

In many publications the English terminology is used interchangeably. This is especially so in instances of *Kudakkal* and *Topikkal*. This is problematic as descriptive evidence is absent in the case of many of the sites.

Stone/ Slab circle: These are circles made of dressed or undressed stones of granite and laterite, marking the location of an underground burial feature. The stones are arranged in the form of single or multiple circles.



Fig 3:1: Major Iron Age surface markers from Kerala:

- a. *Kudakkal* (Padinjarangadi),
- b. Dolmen (Marayur)
- c. Menhir (Villadam)
- d. Multiple Hoodstone
- e. *Topikkal* (Cherumangad)



Cairn: Cairn is a circular packing of rubble which is often associated with the stone circle marking the place of a burial. These are more often covered by soil and vegetation so that only the mound is visible over ground.

Capstones: Dressed cap stones of varying forms are often found associated with urn burials, or without such association in a disturbed condition

The major sub surface indicators from the region are:

Cists: Cist is an architectural variant of dolmens with the difference that it is found underground.

Rock Cut Caves: The rock cut caves are another unique laterite monument type found in the West coast. These subterranean caves may have singular or multiple chambers. Stone benches are carved into the sides of the monument on top of which and under which the burial goods are placed. Some rock cut caves have port holes.

Urns: Urns are pyriform jars which are usually hand- made and buried inside a pit along with burial goods.



Fig 3.2. Major Iron Age subsurface indicators from Kerala:
a. Cist((Kadanad)
b. Rock Cut Cave (Kattakampal),
c. Urn (Anakkara)

Pits: A pit is a cavity dug into the earth and functions like a burial urn.

Sarcophagus: A sarcophagus is a legged coffin made of terracotta (GURUKKAL and VARRIER, 1999). Pits and sarcophagi are rare in occurrence, compared to the frequency and distribution of urns.

The monuments display architectural variations and are often found as combinations of two or more types. As we have seen, urns, pits and sarcophagi are not made of stone. They are considered in conjunction with the other monument types owing to the similarity in burial assemblage as well as their association with megalithic over-ground features.

Megaliths of Central Kerala: Trends

Three districts of central Kerala, Palakkad, Thrissur and Malappuram are selected for a closer analysis. There are 16 administrative sub- divisions or *taluks* within these three districts (see fig 3.3). The drainage basin of river Bharatapuzha falls within these districts. The sites of the village of Anakkara that will be examined in detail in this study lie on the border of Malappuram and Palakkad and close to Ponnani, a branch of Bharatapuzha. Bharatapuzha cuts through the parallel physiographic zones of the state and links them to the Coimbatore district of Tamil Nadu. Thus the area of focus also includes a major trade route between the eastern and western coasts of India as well as resource areas of the Western Ghats. Central Kerala has received most attention in terms of studies on Iron Age. Except for the excavations in Mangadu of Kollam district and Ummichi poyil in Kasargode district, all published reports on excavations of megaliths are from Central Kerala. Given this also, the total number of excavations is a handful and the data we have has major gaps and is sketchy in many respects.

The total surface area of the three districts is 10862 sq.km. This is 27.95% of the total area of the state. As the first part of the enquiry, the published information on Iron Age remnants from this area was collected. Appendix 1 compiles this information. The data given as Appendix 1 exhausts in most cases, all the information available. It is impossible to identify overlaps in the data from different reports due to insufficient details. Recent studies also reveal that a large number of previously reported monuments have been destroyed over the years (PETER 2002, ABRAHAM 2002).

During the fieldwork, this author too, failed to locate the four rock-cut caves of Anakkara mentioned by Sewell (SEWELL 1882) in his report.

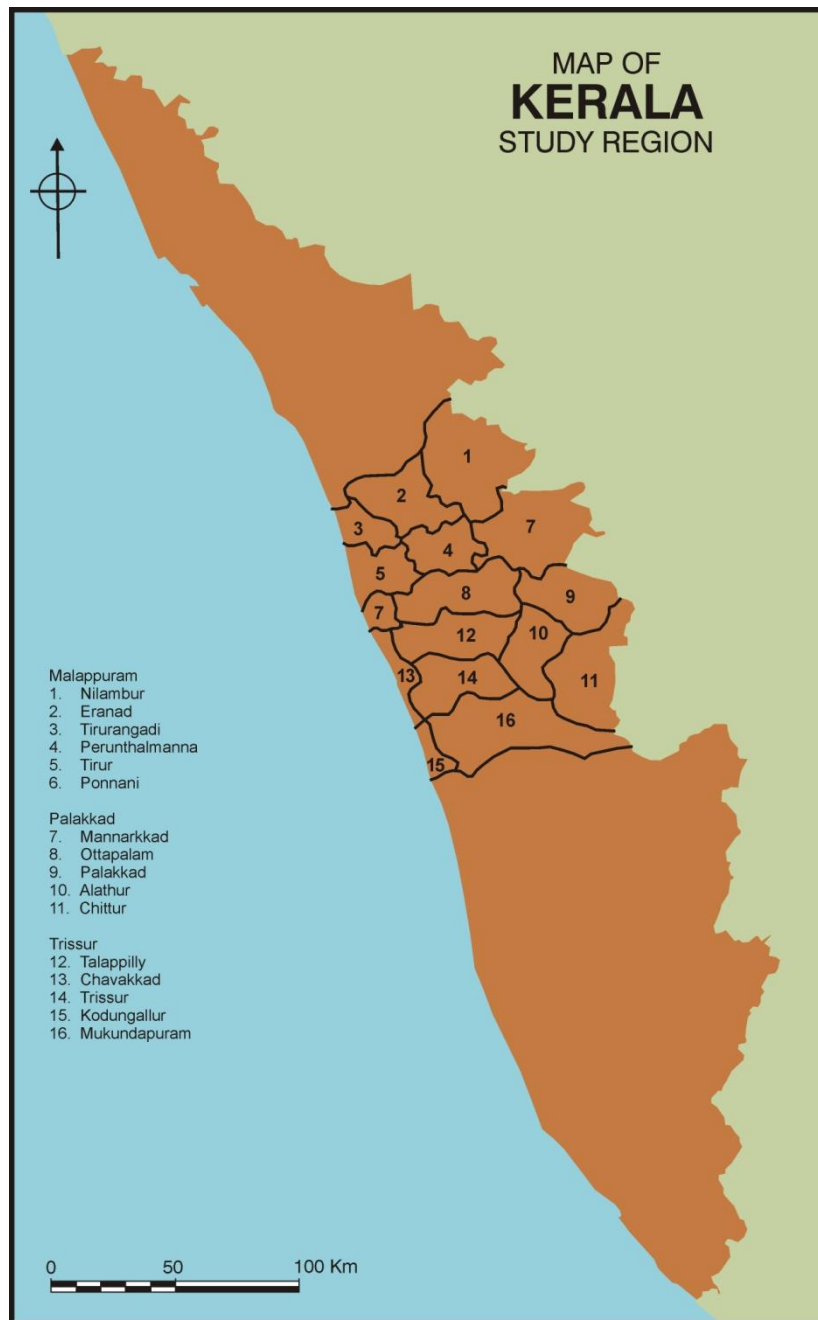


Fig 3.3. Map of Kerala showing the *taluks* under study (Illustration: A. George)

The study region has so far not yielded any habitation evidence. The place names usually indicate the name of the village from where the sites have been reported. GPS readings are available only for a handful of sites studied in the recent years. Hence I

choose to use the term locale rather than site or cluster for the places unless otherwise specified in the data. The district wise- distribution of the locales is as below

Table 3.1: District- wise distribution of locales with Iron Age remnants

District	Number of locales	Number of locales from where more than one monument is reported
Malappuram	47	16
Palakkad	102	72
Trissur	63	22
Total	212	110

From fifty two percent ²⁷ of the locales more than one monument has been reported. In most cases, it is not possible to ascertain whether these are close enough to each other to be considered as groups or clusters. However, it is argued here that the numbers are merely suggestive of an absence of data and do not indicate any general tendency.

The number of cases where we can ascertain that the monuments occur as cluster is 54. For most of them the data comes from comparatively recent studies. The recent study of Shinu Abraham (ABRAHAM 2002) has followed a strict radial survey methodology in the case of Palakkad Gap. Among the 17 cases she reports, in 13 locales the monuments occur as clusters of varying sizes. For the four remaining sites there are local reports of monuments in the vicinity having been destroyed.

Some of the poems in *Puranānuṛu* describe the grave yard or cremation ground, and some refer to practices and objects associated with death. Poems are being invoked here not to suggest a one to one correspondence with archaeological sources. The text does not encompass all the existing practices of burial. But, the poems serve to identify interesting points of comparison. There are a number of descriptions of the burial ground as being a locale separate from the habitation space. There are also references to the cremation ground. The following poem illustrates some of these aspects:

....the burial ground in the forest where the male
of the kite with its red ears and the *pokuval* bird and the crow

²⁷ It is should be noted that the number could be more than indicated. The reports especially the, IAR reports are not clear about the number of the monuments even while they indicate the presence of more than one monument. Only the cases where the information is sufficiently definitive are taken into account.

with its strong beak and the owl perches without fear near the curving surface of the red burial urn set down into the earth.

Puram 238, lines 1-4 (HART and HEIFETZ 1999)

The burial ground is described as being away from habitation. The mood of exclusivity is accentuated by the description of the scene. Nocturnal birds, and those symbolically associated with death, are shown as fearlessly frequenting the site. The description of the cremation ground also conjures a similar mood.

As habitation evidence is virtually absent in Kerala, the analogy of Kodumanal of Coimbatore should be instructive. Kodumanal has yielded habitation and burial evidence from the megalithic period. It is strategically located on the banks of river Noyyal, on the trade route that connects Kerala to the region east of the Ghats via the Palakkad Gap. This is the region that has had maximum contact with the Kerala coast and hence is most suited for comparison. The habitation area of Kodumanal is a mound spread over 0.20sq.km. The excavators have identified two distinct phases of habitation from the site labelled phase I: Megalithic, and phase II: Early Historic (RAJAN 1997). They argue that the material evidence suggests the domination of the industrial mode of production in phase I and the agricultural mode in the second. Phase II was dominated by articulated burial within the habitation area. This is a pronounced difference from the megalithic phase. Here the burial complex is separated from the habitation area, and is situated on its eastern and north eastern side. The burial area has a spread of about 0.4sq.km., and encompasses over 150 monuments. The monuments are cairn / stone circles with a cist or urn in the centre. This author reviewed the details of some of these monuments in December 2010, and the observations conformed to the inferences of the excavators.

Based on these indications, it is tentatively argued that the megalith building communities assigned specific separated spaces for burials that were consciously chosen. We will explore the argument further when we examine the case of Anakkara.

The preliminary step in organizing the data was to locate the place names in relation to the *taluks* (see fig 3.1) that they belong to. This was not possible in some cases, primarily because many of the place names have changed over the years and the surveyors have noted only the local names without reference to the nearby

administrative divisions or landscape markers. The *taluk*-wise distribution of monument types is summarized in Table 3.2

Table 3.2. Taluk-wise distribution of monuments

	A	B	C	D	E	F	G	H	I
Malappuram									
Nilambur	-	-	-	-	-	-	-	-	-
Ernad	2	-	-	-	2	4	4	1	-
Tirurangadi	-	-	-	-	-	1	-	-	-
Tirur	-	2	-	4	6	4	-	5	-
Perunthalmanna	1	-	-	-	2	3	-	1	-
Ponnani	-	-	-	-	4	1	1	1	1
Unidentified	-	1	-	4	2	5	-	4	-
Palakkad²⁸									
Mannarkkad	2	-	-	3	1	1	1	-	-
Ottappalam	1	-	-	2	5	3	4	2	2
Palakkad	9	12	-	10	-	-	2	4	-
Alathur	11	12	1	5	-	-	3	7	1
Chittoor	22	6	2	6	-	-	6	7	1
Unidentified	2	1	-	2	2	2	1	1	-
Trissur²⁹									
Talappilly	8	2	4	4	10	6	10	1	-
Chavakkad	-	-	-	-	1	-	1	-	-
Trissur	1	-	-	3	3	-	5	-	-
Mukundapuram	-	1	2	1	-	-	4	-	-
Kodungallur	-	-	-	-	-	-	-	-	-
Unidentified	-	2	-	1	1	-	1	-	-

- A. Cist/ Cist Circle
- B. Dolmens/Dolmens with circle
- C. Dolmenoid Cist
- D. Menhirs

²⁸ Pallatheri of Palakkad taluk has yielded a jar burial

²⁹ Perunkulam of Trissur district has yielded sarcophagus.

- E. Rock Cut Cave
- F. *Kudakkal/Topikkal*³⁰
- G. Urn with or without lithic appendage
- H. Stone/Cairn Circle³¹
- I. Cap stone found with or without urn association

The tabulated details indicate considerable variability in the distribution of the monuments among the *taluks*. Palakkad, Alathur and Chittur in Palakkad district and Talapilly in Trissur district show a high concentration of monuments. These are also the areas that have been most studied. On the other hand, Kodungallur and Nilambur *taluks*, from where no find has been reported, have not undergone any detailed study so far. As there are major gaps in the data, it would be methodologically inappropriate to use statistical analysis to understand the distribution pattern of the monuments. But certain general observations could be made on the basis of the data, and comparisons drawn from neighbouring regions.

The preferences of burial architecture point to the nature of raw materials readily available. For the Coimbatore region, Rajan notes that easy availability was a key factor determining the location of the monument (RAJAN1997). The three laterite monuments-*viz.*, rock cut caves, *kudakkal-s* and *topikkal-s* are concentrated on the western part of the study region. This corresponds to the midlands and lowlands that are dominated by laterite formation. The absence of these monument types in the well-studied areas of Chittur, Alathur and Palakkad reinforce this observation. The monuments are confined to the west coast. Rock cut caves have been reported from other districts in north and south Kerala. And in all the cases where information is available, these have been carved into laterite (PETER 2002). In the table (Table 3.2), *kudakkal-s* and *topikkal-s* have been categorized together even though they are structurally different. This is because the reports on these monuments use the terms interchangeably making it difficult to ascertain the monument type in many cases. In Northern Kerala these monuments have been reported up to the Kannur district (PETER 2002, VARGHESE 2008). However unlike rock cut caves, both the monument types have not been reported from further south of the study area. Thus, even as these monuments are clear adaptations to the physiographic conditions of the region, their

³⁰ Includes multiple hood stones

³¹ Cases where there is no mention of what is enclosed within the circle

distribution is not uniform across the laterite zone. This interesting tendency in the distribution pattern has not been explored in detail so far.

Dolmens, cists and dolmenoid cists are made of granite slabs and, as can be deduced from the table, there is a preponderance of these types towards the eastern part of the coast where granite is more abundant. The tendency is not as clear cut as in the case of the laterite monuments. The eastern parts of Central Kerala, especially regions close to the Palakkad Gap have been in regular contact with the Coimbatore region since prehistoric times and they have yielded burials of similar architectural forms (RAJAN 1997) indicating a shared tradition and exchange of ideas. It was observed while examining the reports that, scholars tend to use the terms interchangeably in the case of these three monument types as well. Hence, as in the case of *kudakkal*-s and *topikkal*-s, it is difficult to isolate these three types for study. Menhirs show a similar distribution pattern as these; but as observed earlier, there are menhirs in laterite also.

Urns and surface markers like stone circles and cairn circles have a more equitable distribution in the study region. Even so cairns and stone circles have notable concentrations in the Coimbatore region of Tamil Nadu and the Trissur region of Kerala (ABRAHAM 2002). This further points to the nature of contact that existed between regions lying immediately to the east and west of the Palghat Gap (RAJAN 2007). Even though we do not have comprehensive data we know that stone/ cairn circles employ both granite and laterite.

While this is the broader pattern elicited from the data, the choice of raw material is not solely a function of ready availability. In both Chitalancheri and Pazhambalicode, laterite, which is not readily available in the region, has been used for the construction of monuments (PETER 2002). In the case of Chitalancheri we also know that dressed laterite blocks have been used. There are instances of intentional deposition of sand brought to the site from another location inside urns and burial pottery (BABINGTON 1823, IAR 1990-91). Here the choice of raw material goes beyond economy of effort and it can be assumed that they are ritually or symbolically relevant choices. This aspect will be discussed with reference to the specific context of Anakkara in the following chapter.

Modes of Interment

Complete skeletons have not been reported in association with the megaliths of Kerala. This is unlike the rest of peninsular India from where there are a few cases where “bones are arranged in a simulated, extended, or articulated manner” within a cist or an urn (RAJAN 1994). Charred fragments of skull, radius, femur and ulna have been reported from the rock cut caves of Machad and Pazhayannur (GEORGE and MEHTA 1974). The urn burial at Porkalam yielded badly crushed bone fragments (SRINIVASAN and BANERJEE 1953). The burials of Anakkara have also yielded bone fragments (MGU 2008). The practice of cremation has been suggested on the basis of ashes and charcoal remains as well as charred bones as in the case of Machad and Pazhayannur (GEORGE and MEHTA 1974, GURUKKAL and VARRIER 1999). Thus the burials from the Kerala region are generally either fractional or post cremation type. The erection of monuments and deposition of grave goods is one stage in a ritual sequence. In some cases neither ashes nor fragmentary bones are associated with the megalith, suggesting that they were intended as memorials. Megalith III from Cherumangad is a *kudakkal* and a “multiple hood stone” of this kind (IAR1990-91). Monuments that yielded bone fragments have been found in association with others that did not yield any. This suggests that the same community can have multiple modes of treating its dead.

The different monument types do not indicate different groups nor does the data suggest any clan based association. We have evidence of reuse of a burial in Mangad of Kollam district in south Kerala. The urn Megalith 2 of Mangad shows evidence of continuous use for period of over 900 years extending up to 1st century CE (SATHYAMURTHY 1992a).³² Megalith V from Cherumangad (IAR1990-91) is a laterite stone circle enclosing three urns. Similarly ANK08II from Anakkara is a multiple hood stone circle enclosing three urns separated from each other by stone boundaries (MGU 2008). Clearly, these monuments are intended for more than one individual even though we do not have skeletal remains to confirm this.

³² It cuts across the late prehistoric- early historic divisions employed in south Indian historiography that we discussed in chapter one. This calls the unproblematic application of universal chronological frames into question

Burial Goods

Twenty four monuments from the study region report associated burial assemblages. For two other locales, the natives report the presence of burial goods. But as mentioned earlier, the majority of the reported burials remain unexcavated. Almost all the excavated burial monuments have burial goods associated with them except for the two megaliths of Cherumangad discussed above (IAR1990-91) which seem to have been intended as memorials. The burial assemblage is constituted by different ceramic types, iron objects, beads and skeletal remains. We do not have details of the nature of the burial assemblage from all the 24 sites.

Ceramics: Systematic and comparative studies of the ceramic types associated with megaliths are far and few. But the available data shows that the major types of ceramics are shared across the peninsula. These include Black Ware, Red ware, Black and Red Ware (BRW) and Russet Coated Painted Ware (RCPW).

Black Wares and Red Wares display considerable variety in terms of form as well as the presence and absence of slip and polish. The burial urns are invariably of red ware. They can be slow-wheel turned³³ or in the cases of large urns and storage jars, hand-made (PETER 2002). So far there has been no effort to categorize them chronologically. BRW can be considered as the most representative of Iron Age ceramics. Its most distinctive feature is the inverted firing technique, that turns the upper portion of the pot black as a result of contact with reducing agents, and the lower portion red from being exposed to the air and oxidization (ABRAHAM 2002). From the study region, excavated monuments of Porkalam (THAPAR 1952) Machad, Pazhayannur (GEORGE and MEHTA 1974, GEORGE 1975) and Anakkara (MGU 2008, 2009) have all yielded ceramics of the BRW variety. The usual shapes they take are bowls, dishes, vases, lids, tulip shaped vases and ring stands (PETER 2002). BRW is associated with megalithic

³³ O potter who fires pots, potter who fires pots
In a kiln which shoots up a mass of blackened smoke
Across the sky as if all darkness had been gathered
Into the broad and ancient city, potter who fires pots!
You are to be pitied! How can you do what you must do?
....., the great Valavan has reached
The world of the gods and now you want to fashion an urn
Large enough to enclose him! With great Mount Meru
For your clay and the wide earth,
For your wheel, will you be able to somehow throw that vessel?

Puram 228 (Hart and Heifetz 1999)

burials and habitation sites of Tamil Nadu as well as the rest of the peninsula (RAJAN 1994, 1997, ABRAHAM 2002). Wheeler set the lower chronological limit of this ceramic type to 300 BCE and we have radio carbon dates from associated strata that date it to mid 2nd century BCE (ABRAHAM 2002). However, the ceramic is widespread and shows variability in terms of paste and decorations. Hence it is not a suitable chronological or regional marker (ABRAHAM 2002).

RCPW is another major ceramic type found in association with megaliths of South India. It is not as widespread as BRW. In the study region, an RCPW bowl of concave profile and featureless rim has been reported from Megalith 1 of Cherumangad (IAR1990-91) and numerous RCPW vessels have been reported from Nasranikunn, Anakkara (MGU 2009)³⁴



Fig 3.4: RCPW bowls from ANK09VI, Nasranikunn, Anakkara

From Tadukuśseri (ABRAHAM 2002) and Ponnani (IAR1970-71) we have RCPW finds. It is near a burial context in the first case, while in the second case, the context is unknown. Presence and absence of RCPW is used as a chronological indicator often (GEORGE and MEHTA 1974). Dates for RCPW range from third century BC to third century AD (ABRAHAM 2002).³⁵The ceramic may be either Red Ware or Black and

³⁴ In the case of Anakkara, we do not know the exact number of RCPW vessels and further details regarding them as their study and classification is still in progress.

³⁵ George and Mehta assigns the excavated sites of Machad and Nadappakund to the time bracket 2nd century BCE to 2nd century CE on the basis of absence of RCPW. This is in-turn based on the chronological span assigned to RCPW by Wheeler (1st century CE to 3rd century CE) on the basis of its association with Arretine and roulette ware in stratigraphic context. Raman, however, reported a RCPW

Red Ware, with a red slip that becomes highly polished or shiny red after firing. White-painted designs are seen on the exterior, generally in rectilinear or slightly curvilinear patterns (ABRAHAM 2002). Fig 3.4 shows the russet coating and faded yellowish curvilinear patterns on the sides of the bowl that is used as the lid.

Iron: Iron is associated with megalithic burials over the peninsula. 14 locales from this study region report the presence of Iron implements. These include daggers, swords, axes, nails, sickles, agricultural implements and objects of indeterminate use. The rock cut cave at Porkalam has yielded a sickle and nails. Ploughshares, miniature model of a plough, a pair of bulls and a yoke made of iron were retrieved from a burial, probably of the turn of Christian era, from Angamali in Aluva taluk of Ernakulam district (GURUKKAL and VARRIER 1999). Angamali lies further south of the study area. The iron objects from Machad and Pazhayannur include daggers, chisels, hooks and nails. Physical and chemical analysis of these objects point to highly evolved techniques of extraction and production of Iron objects. Both moulding and welding of sheets were employed and the tools were found to be compact with minimal presence of air bubbles. They had a high purity of 99.62%. (GEORGE and MEHTA 1974). All the excavated monuments of Anakkara yielded iron implements (MGU 2008, 2009).

Major occurrences of iron ore in Kerala are at Cheruppa, Eleyettimala, Nanminda, Naduvallur, Alampara and Korattimala (SOMAN 2002). The first five are located in Kozhikkode District that lies to the immediate north of the study region, while the sixth one is in Malappuram in the Nilambur-Manjeri area. Bands of magnetite-quartzite occur in many parts of Idukki and Kottayam districts to the south and also in parts of the Palghat District and the Manjeri area (SOMAN 2002). Iron ores are also present in the proximity of Coimbatore. Iron was manufactured in the *taluks* of Talappilly, Chittur, Kunnathunad and in the Kochi region during the 19th and the 20th centuries (MENON 1973). From the study region there are no references to the local manufacture of iron from the period prior to the 19th century. Iron slag is reported from the vicinity of the megalithic sites of Manjalloor, Nalancheri (ABRAHAM 2002) and Anakkara (MGU2008). Evidences from Tamil Nadu point to the existence of an artisanal class

bowl (possibly from Uraiur), which has a Tamil Brahmi inscription dated to second century BCE and Morrison, based on her re-analysis of the Brahmagiri ceramic assemblage, has suggested that production of R CPW may have continued into the medieval period (ABRAHAM 2002)

with specialised knowledge in Iron production (RAJAN 1994, SASISEKARAN 2004). Habitation mounds of Kodumanal and nearby sites like Nichchampalayam, Chavadipalayam, Idayapalayam and Sular have yielded evidence of iron smelting. We see that separate locations were assigned within the habitation area for various craft activities like Iron and steel production (RAJAN 1994). Given the wide distribution of iron implements, it may be assumed that the local manufacture of iron was practised in an earlier period also on the West Coast. The procurement of the ore might have occurred through intra regional networks of exchange operating in the region.

Beads: Burials with associated finds of beads are distributed across Kerala state. Beads are one of the major indicators of the pre-historic – early historic systems of contact and exchange. Many of the bead types have been of non local origin and had to be transported across long distances. These have figured in the maritime exchange networks of the period from the prehistoric times.

The majority of the finds in Kerala are from the midlands and low lands. Appendix 2 summarises the evidence we have from the study region. A number of sites to the west of the Palghat gap have associated bead finds. However, the distribution of such sites is not restricted to the vicinity of mountain passes. There do not seem to be any marked difference among monument types with regard to associated bead finds. Among the beads recovered from Kerala, carnelian is the most common type. A good proportion of them are of the etched variety. Other varieties include quartz, agate, feldspar, crystal, terracotta, jasper, etc. Quartz veins occur in many parts of Kerala.

The nearest source of carnelian is the western state of Gujarat. Gujarat is a coastal state and there is the possibility that the transport of raw material occurred via sea route as well. Agate also needs to be brought from a long distance because there are no sources of this semi precious stone identified in South India. Quartz is seen in different parts of Kerala in the form of boulders, cobbles, pebbles, gravels and veins. We have occasional finds of microliths as well (GURUKKAL and VARRIER 1999, MGU 2008). . Quartz and feldspar occur in good quantities around the Coimbatore region and we may assume that these were explored for bead manufacture at Kodumanal (RAJAN 1994). Evidence of bead manufacture comes from the port site of Pattanam in central Kerala (CHERIAN, P.J., et.al. 2006) and from Kodumanal (RAJAN 1994). Both these sites functioned within the maritime and inter-regional exchange networks of the period. It is possible

that some of the beads found associated with the burials were manufactured in these sites. As bead manufacture is a non-labour intensive industry, it is also possible that there were many local sites of manufacture. In any case, the non-local raw material must have reached these sites from their sources through the well established routes of exchange that existed in the region.³⁶

We see that certain general tendencies can be observed in the case of Iron Age burial assemblage across peninsular India. These point to a unity in the tradition that cuts across sub regional variations expressed in terms of architectural forms.

The observations made above allow us to form a broad frame for the understanding of megalithic tradition from the west coast. While these observations remain relevant, we need to make allowance for certain major gaps in the data. This is sometimes due to actual dearth of information as in the case of habitation evidences or direct dates. But a major drawback lies in the manner in which available information was recorded, as illustrated by Appendix 1. The monuments have been studied out of their spatial context in most cases. We do not have indications of the associated landscape features or of the spatial organisation of sites within a locale. Such information would have facilitated important conclusions, as in the case of the Palakkad Gap Survey (ABRAHAM 2002). The disproportionate reliance of historians on the textual sources in social formation studies, as discussed in Chapter 2, may be attributed partly to this lack.

Hence, the next part of this study seeks to generate and examine a fresh body of evidence to directly address this gap. The area chosen is the hillock of Nasranikunn, in the village of Anakkara of Ottapalam *taluk*, of Palakkad district. Nasranikunn is chosen primarily because it allows analysis at different levels. We have other monuments in the vicinity of Nasranikunn that allow a better definition of its location within the

³⁶ An important category of sources that needs mention in the context are coin finds from the region from the chronological span under concern. Like elsewhere in peninsular India, we have finds of Roman coins dating from the late centuries BCE to the early centuries CE, from different parts of Kerala. Associated with the Roman *aureus* and *denarii*, silver punch mark coins were also found (GUPTA 1965, SATHYAMURTHY 1992b). From the study region Eyyal of Talapilly taluk in Trissur has yielded 34 punch marked coins, 12 *aurei* and 71 *denarii*. The proximity of the find to the megalithic burial area of Eyyal is not known. Another site from the study region from where Roman coin finds were reported is Kodungalloor. No detail of this find is available. Coimbatore region has a concentration of coin finds as expected from its major role in the long distance exchange network. From the Coimbatore region, there are reports of coin finds from megalithic burials. Till date coins have not been reported in association with megalithic burials in Kerala.

landscape. The locale has a cluster of monuments that allows us to examine the organisation of space within a cluster. Finally, the rock cut cave ANK09VI is an excavated monument. This permits the understanding of spatial organisation within a single monument. The methodology employed and the conclusions that were reached are discussed in the following sections.

CHAPTER 4: THE IRON AGE BURIALS OF NASRĀṆIKUNN

In this chapter, the following discussion focuses on the Iron Age burial site of Nasrāṇikunn. It summarizes the observations made as part of the field study in the region between September and December 2010 and also during the participation of the author in the excavation of the site ANK09VI and documentation of ANK09V during April-May 2009. The discussion is supplemented by the information obtained from unpublished reports of the excavations at Anakkara by the Mahatma Gandhi University (MGU) in the years 2008, 2009 as well as through personal communication with the individuals who were directly or indirectly involved in the excavations. This chapter will identify the spatial relationship between site, landscape and the burials of Nasrāṇikunn. I will also explore how space was organized by the builders of the monuments and how these might be assessed at inter regional, inter-site and intra site levels.

The burial sites can be considered as architectural spaces within the prehistoric landscape. To follow the theoretical work of Christopher Tilley, for example, any architectural space “involves a deliberate attempt to create and bound space, create an inside, an outside, a way around, a channel for movement” (TILLEY 1994). An architectural space would be defined and influenced by its surroundings. The reverse is also true. Structured space, by virtue of its dominion, may incorporate and define the surroundings as well. Such a space would have differential impact on individuals within the community and those external to it. Inclusion and exclusion are the expressive attributes of power. This sense of power is expressed through a number of components. At a primary level one must consider landscape setting (what can and cannot be seen; who see what and who does not), geology (stone shape, fracturing qualities, shaping qualities, colour and luster), visibility (what can be seen and what cannot, when things can be seen and by whom) and ambiance (the power of place). Based on the fragmentary archaeological evidence and the ethnographic evidence associated with many World religions these elements would be considered essential in controlling and manipulating small agricultural communities; in essence knowledge is power.

Spaces, especially symbolic architectural spaces like the sites under study, may represent power in terms of visual dimensions of domination, through visibility, by the

division of space, by the privilege of inclusion, or by exclusion from the knowledge represented by them.

“Knowledge and experience of particular locales and tracts of landscape may be restricted and hidden from particular individuals or groups” (TILLEY 1994). An important tool to analyze these perspectival aspects of space is visibility. Aspects of visibility, inter-visibility and restrictions on visibility are important concerns in recent landscape studies (TILLEY 1994, CUMMINGS and WHITTLE 2002, VAVOURANAKIS 2006, NASH 2008). The only study on Kerala megaliths that touch upon the question of visibility is that of Shinu Abraham (ABRAHAM 2002). The following discussion brings the question of visibility to the centre of the discussion surrounding the spatial organization of the sites of Nasrāṇikunn.

Nasrāṇikunn is located in the village of Anakkara (see Fig 4.1) within the administrative division, ward XIV. The village of Anakkara is located in Ottapalam taluk of Palakkad District close to the border of Malappuram district. The region falls within the physiographic division of lowlands. The landscape of the region is characterized by gently sloping laterite hillocks interspersed with small stretches of plain land suitable for coconut and paddy cultivation



Fig 4.1 Location of Anakkara

The hills have an altitude range of 40- 70 m above Mean Sea Level (MSL). The slopes and rises of the hillocks are of a very low inclination and it is difficult to define where

one hill meets another. The low lying areas lie within 5-15 m above the MSL. Anakkara lies about 1.5 km to the southern bank of Ponnani (river Ponnani) Ponnani is the name acquired by the river Bharatapuzha in this region. The name comes from the coastal town of Ponnani that lies about 7.2 km east of the study region.

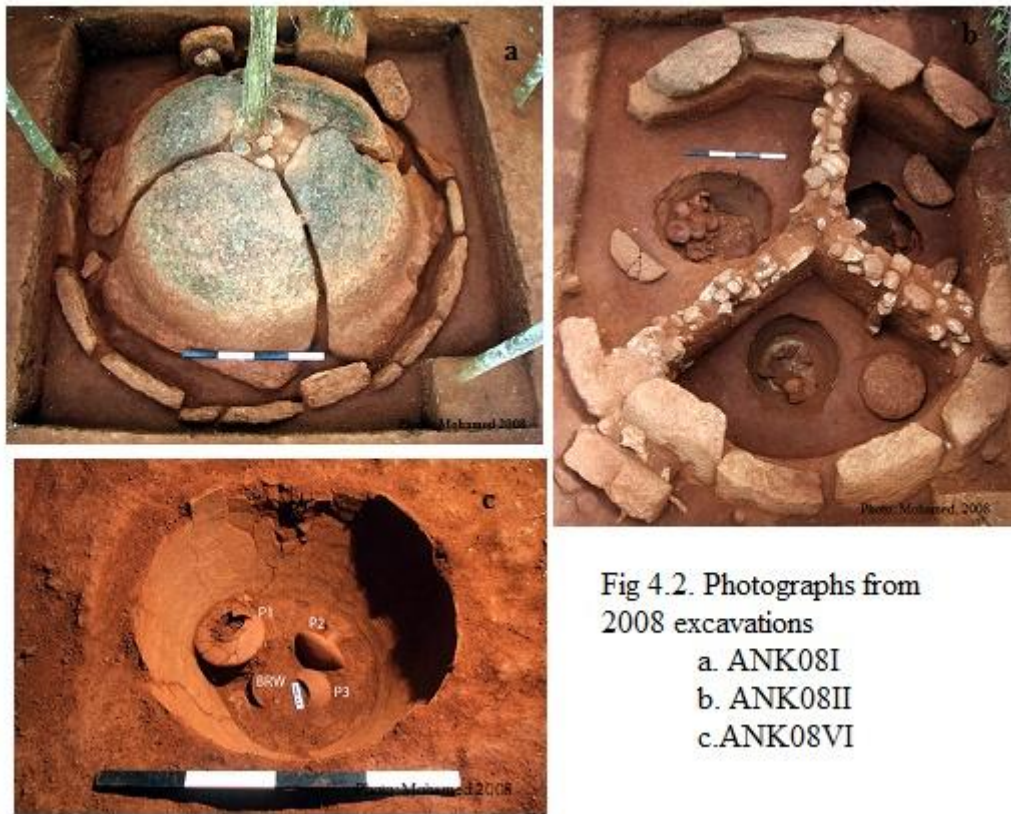
Previous Archaeological Research in the Region

Nasrāṇikunn was chosen for field study in 2010 following the indications derived from previous studies in the region. The results of these studies are summarized below.

Robert Sewell's *The Antiquarian remains of Madras Presidency* reports four rock cut caves from Anakkara (SEWELL 1882). No further detail of the monuments is given. Two seasons of excavations and fieldwork were conducted in Anakkara during the summer months of the years 2008 and 2009 by the MGU (MGU 2008, 2009).

Field Season 2008: Summary of Finds

Three trenches were laid out in the 2008 excavations, two in the private property named Chuliparamb and one in the adjacent private property under the ownership of Sainudeen. The properties lie at the lower part of the south eastern slope of a laterite hillock. The hillock has the local name *Tonikkunn* and we call it Hill 3 in this study. Hill 3 lies close to Nasrāṇikunn, to its north eastern side. The slope of Nasrāṇikunn meets Hill 3 at an altitude of about 30 m from the MSL. The trenches correspond to three monuments, one *kudakkal* (ANK08I), one multiple hood stone circle (ANK08II) and one urn burial, (ANK08VI) the lid of which was accidentally spotted by the land owner while taking out soil for construction purposes.



The *kudakkal* (ANK08I) (see fig 4.2 a) was found to have four clinostats placed in a slanting position so that they taper to meet at the end. The mushroom shaped capstone was found missing. A circle made of dressed laterite blocks was found surrounding the clinostats on excavation. At a depth of 41 cm from the trench datum point on the eastern side facing the junction of two clinostats a dressed laterite stone was planted vertically like a headstone. A triangular dressed granite boulder was placed between the headstone and the clinostat. Excavation of the area enclosed by the clinostats revealed a burial chamber with a level floor of laterite pieces and gravel. Above the floor on loose soil 11 iron objects, 6 fragments of bones, and sherds from three bowls were kept (MGU 2008). The iron objects include a chisel an arrow head, a cobbler's knife (?) a tripod and a trident. The bone pieces did not bear any trace of cremation. But they had clear cut marks on them. The pottery types included BRW and Black Ware.

ANK08 II is a multiple hood stone circle with large stone slabs and is divided into three chambers using granite boulders. (see fig. 4.2 b) Each chamber yielded an urn burial with typical Iron Age burial assemblage. The three urns had either single or double thumb impressions both on the rim portion and on the body part. Urn 1 yielded seven iron objects that included one trident, one tripod, a hanging lamp, a sickle, an arrow and

two rods. The pottery finds included RCPW, BRW and Red ware in one case with graffiti. Eight bone pieces were found with one placed within an RCPW bowl. From Urn 2 a hanging lamp, a dagger, an arrow, a tripod and an Iron rod were obtained. Four bone fragments and ceramics of the same nature as Urn 1 were also found. The iron objects from Urn 3 included a hanging lamp, a tripod, a spearhead and two arrows. Seven fragments of bone and ceramic finds similar to urn 1 and urn 2 were also obtained. All the burial goods were placed on river sand. Below the layer of sand there were in all cases another layer of clay mixed with sand. The bone pieces in the two urns had cut marks on them. In the third urn some of the pieces were found to be charred. Within the urns there is a clear organisation of space in terms of placing of the different categories of burial goods (MGU 2008).

The urn burial, ANK08VI, is an urn placed within a pit (See fig. 3.2 & fig 4.2 c). The urn had a dressed laterite capstone. Its rim and neck portions were found to be in a highly damaged condition. An intentional laterite fill was found in the area surrounding the pit. The sides of the pit had four hemispherical bulges cut into the laterite fill, possibly to facilitate the placing of the urn. A cobbler's knife (?), two pots of Red Ware, a globular pot of undefined typology, a BRW bowl and sherds of BRW were reported from the urn.

The excavators also laid out a 90x100 cm trial trench ANK08TT, at the eastern corner of ANK08I. The excavation yielded pottery sherds up to a depth of 70 cm from trench datum point. Below this level up to 220 cm the soil showed traces of charcoal. From a depth of 90- 220 cm quartz microliths were obtained. This level is earlier than the Iron Age context. There are no ceramic finds from this level. This suggests previous occupation of the study region. However the available data is inadequate to determine whether the occupation had been continuous.

All the excavated burials of 2008 are close enough to each other to be considered a cluster. As we have seen, there is considerable variation within the complex in terms of architectural forms. There is also some variation in terms of burial assemblage. Only ANK09 II yielded RCPW. If we use RCPW as a chronological indicator, it is possible that the burials are from a later period. But there is no definite way except direct dating to ascertain this. ANK08II is a multiple hood stone circle enclosing three urns. These were probably intended for three individuals. Within the urns the burial assemblage does not show a significant variation. However there are slight differences in terms of

the size of the urns. A good number of the implements recovered from the urns are intended for combat or hunting. This is true for ANK08I also. ANK08VI is relatively less rich in terms of burial assemblage.

We also notice choices of raw material used that go beyond ready availability. In the case of both ANK08I and ANK08II we find the use of granite in the construction of specific parts. Granite is not locally found and had to be brought from a distance. In ANK08II we also find that the burial goods are placed on sand. The sand is river sand³⁷ and had to be brought from Ponnani, which lies roughly 1.5 km north of the site.

Let us look at the mode of treatment of the dead. ANK08VI has not yielded any bone fragments. But this is a very disturbed burial and there is the possibility of bones having decomposed. Bone finds from ANK08I and ANK08II evidently show that the burials are secondary burials and that the bones have passed through a ritual phase prior to their deposition within the burials. In the case of ANK08I and Urn1 and Urn2 of ANK08II the bones have cut marks. In Urn 3 some of the fragments show traces of burning suggesting cremation. Thus within a single burial there are differences in the treatment of bones. The presence of river sand suggests that the pre-depositional rituals were linked with the river in some manner. It is also possible that the river bed was the location of some phase(s) of the treatment of the dead.³⁸

Field Season 2009

This author was part of the 2009 field season of the MGU at Anakkara. The focus of the season was Nasrāṇikunn. The team excavated ANK09VI, a rock cut cave enclosed within a slab circle. There were also efforts to understand the nature of the quarry/ ritual (?) area ANK09V. The details of the finds from the season will be discussed in the following sections.

³⁷ Personal communication with Dr. Shajan Paul, geologist and co- director of excavations at Anakkara 2008,2009 , dated 10/05/2011

³⁸ On an ethnographic note, at the present times, among many communities in Kerala river is an important location for the rites of passage, including funerals. Funeral pyres are often located on river banks and the river is a site of post cremation deposition of the ashes as well as other post death rituals for the departed soul.

Field Season 2010

The preliminary indications we get from the report of the excavations of 2008 at Anakkara point to the choices made by the prehistoric communities in terms of architectural and spatial organization of the sites. Hence, it is important to see whether a more systematic collation of data regarding these aspects can generate fresh insights into the study of Kerala Iron Age. Nasrāṇikunn, the laterite hillock that was also studied and excavated in the previous year, was chosen as a case to examine the viability and use of spatial pattern studies for the Iron Age burials of Kerala.

During the months of October and November the author with another researcher collected as much information as we could from Nasrāṇikunn.³⁹ The fieldwork was delayed by the unexpected extension of the south-west monsoons into September. During October and November also heavy rains continued in the region. As a result only a few hours of work could be done on many field days and often the work had to be stopped at a stretch for several days.

Prior to discussing the methodology employed on field it is necessary to look at the limitations we had in terms of collecting and analyzing data. It was after taking into account these limitations that the methodology on field was finalized.

1. As we have seen there are very few studies from the region that examine the Iron Age monuments in the context of their landscape setting or in terms of their architectural mapping. Thus we do not have a model from the region to base the study on.
2. A severe limitation for any studies in Kerala is that no detailed mapping of the region has been done so far. The best map that was available for the study is toposheet number NC 43-7 prepared from the U502 series compiled by the Army Map Services, U.S. Army in 1954. This map is of the scale 1:250000 and is not of much use for the study of a set of closely distributed elements. Hence GIS and similar programs cannot be used effectively. Satellite images on 'Google Earth' were used as a compensatory tool. But the images have limitations in terms of accuracy.

³⁹ The fieldwork was assisted by Sreelatha Damodaran, research scholar, Department of History, Calicut university Kerala who also took part in the excavations at Anakkara in 2008 and 2009.

3. While we have a generalized picture of the geology of Kerala, no detailed study specific to Anakkara is available. A closely related problem is the topography of the region. We do not have ready information on features like relief and slope
4. No studies have been done so far on the palaeo-vegetation of the region. Hence our assumptions on the land utilization pattern are speculative in nature
5. Like the rest of Kerala, Anakkara also has a pattern of small landholdings. As it is a rural area the landholdings tend to be slightly larger than in the nearby urban centres. The landscape has suffered drastic alterations, especially in recent years. This is primarily due to the exploitation of the hills for laterite blocks for construction. Hence the landscape changes are of a considerable magnitude and have occurred within a very short chronological span. As our effort is essentially to locate the archaeological remains within the landscape, this is a major problem.

Methodology

The major component of the fieldwork was a walk- over survey that recorded information on the sites on data sheets (See appendix 3). Each monument on Nasrāṇikunn was considered a separate site.⁴⁰ Three sites were recorded in this manner. The main components of the walk- over data sheet are as follows.

- a. **Landscape and environment:** The first four columns record information on the landscape context of the site. This includes definition of the landscape type on which the monument stands, its orientation *vis-a-vis* other prominent landscape features like hills and water-bodies in its vicinity and the soil type of the region.
- b. **Monument orientation:** The fifth column describes how the monument is oriented in space. If the monument is composite in nature, the orientations of the different architectural components are recorded.

⁴⁰ It was not possible to record the sites from Chuliparamb that were excavated in 2008 in a similar way. This was because the landowner did not favour further studies in the area which he thought was resp

c. Visibility:

- Viewshed: The viewshed of each of the sites was recorded. Viewshed implies a 360⁰ view of the landscape with the site as the center. Viewshed analysis is most effective in conjunction with GIS and other related computation software. This, as discussed above, is not possible in our case. Hence the author recorded the viewshed of each site on circle plotted on a graph paper with the site as the center and supplemented it with notes based on visual observations and cross references using satellite images generated by ‘Google Earth’.
- Monument Inter-visibility: The inter-visibility of each of the sites was recorded. Inter-visibility of the cluster at Nasrāṇikunn with the other sites at Anakkara was also noted.
- Reverse Viewshed: Recording of the reverse viewshed was not easy in the case of Nasrāṇikunn especially due to human induced landscape alterations and division of the land among private individuals as small land holdings. For each site the reverse viewshed was recorded by walking in the four cardinal directions with the site as center and making observations at every ten meters, or when a significant feature was encountered. This was done until the monument went out of visibility or till when further access to the landscape was made impossible due to reasons cited above. In the latter cases logical assumptions were made on the basis of available visual record. From each of the prominent landscape features that were recorded in the viewshed analysis, the visibility of the sites was examined.

d. Recording of the Site

- GPS points for each of the sites were taken using a ‘Garmin e-Trex Vista H’ model GPS equipment. For the region the equipment does not have a suitable base map. The satellite strength also was poor for Nasrāṇikunn. Hence the points primarily are for the purpose of record.

- Photography: Scaled and unscaled photographs of the sites were taken looking at the sites from the four cardinal directions. The landscape as viewed from the sites was also photographed. In the case of ANK09VI, which is a composite site, a more detailed photo documentation focusing on the visibility aspects of each element was done. These records were supplemented by the file photographs of the 2009 excavations.
 - The present pattern of land use at the site and the degree of preservation of the monument were observed.
 - Previous records of the site as well as analogies from the region if any were recorded
 - The tentative chronology of the sites was assumed
 - A brief visual description of the site followed by a full description with dimensions of the architectural features of the monument was done.
- e. Plotting: The plotting of ANK09VI had been done by the excavation team in 2009. The other two sites were plotted in 2010 as part of the fieldwork. This was done by fixing a single datum point. The same datum point as the one fixed for the excavation of ANK09VI in 2009 was chosen. With the datum point as the base, measurements were taken manually with the aid of tape measure, string, plumb bob and spirit level. The measurements were plotted on a graph sheet along the XY plane. The height of the monuments at different points was also taken with the same datum point as the base. This was to form an idea of the elevation of the landscape as the elevation obtained with the aid of the GPS was found to be inaccurate and fluctuating.
- f. Recording of the Quarry/ Ritual area: The spread of the visible area of the quarry/ ritual site ANK09 V was recorded. This was done manually by fixing a point to the extreme north east of the area as the centre and measuring the spread using a tape measure. The relation of this point to the datum point fixed for the plotting of other sites was also determined. A detailed mapping was made impossible due to disturbances on the site in the past one year. This record was supplemented by file photographs from the 2009 excavation season.

- g. Measurements: As the satellite reception in the area was poor, it was decided that key measurements like distance between the sites are to be taken manually as a control to the GPS points.

Nasrāṇikunn: Site Description

Nasrāṇikunn is roughly flat-topped. It has a maximum height of about 70 m above the MSL and covers an area of approximately 1sq.km. Except towards a narrow north-facing gap, Nasrāṇikunn slopes down to meet other laterite hills at 30-40 m above the MSL. The north-facing gap lies towards the western side of Nasrāṇikunn, between two hillocks. We call the hill to the west Hill 2. To the east lies Hill 3 where excavations had been carried out in the year 2008. At this gap Nasrāṇikunn slopes down to reach low lying plain land currently used for paddy and coconut cultivation. This stretches until it meets the Southern bank of Ponanipuzha at 1.3 km from Nasrāṇikunn. To the north of the river is the town of Kuttipuram with a further lowland stretch that extends to a distance of over 1 km till it meets a further stretch of laterite hillocks.

Nasrāṇikunn literally means the hill (*kunn*) of the Christian (*nasrāṇi*). The present name came after the area was purchased by a Christian about 40 years ago. The owner used the area for pine-apple cultivation after clearing it of the existing vegetation. According to local inhabitants, within their living memory - that is about 40-45 years - the area had been filled with grass, cashew (*Anacardium occidentale*) trees, *Njaval* (*Syzygium cumini*) trees and mango (*Mangifera indica*) trees. They remember this as untended growth, rather than organized plantation. The area at this time belonged to a family called *Kattookarans*. Prior to the origin of the name Nasrāṇikunn, the hillock was called *Ponnitannira*. Literally this means “the ranges where gold was put” (*Pon* = gold; *itta*=where was put; *nira*= ranges). This could refer to the gold washing practices that existed in the region, which gave the river *Ponnani* its name.⁴¹

At present the land is owned by a Non-Governmental Organization (NGO) that started an engineering college there in 2008. The construction of the engineering college building is still in progress and is close to the north western part of the table land. At the time of the fieldwork the hilltop, like the surrounding areas, had a thick cover of shrubs and grass. The continuing rains have contributed to the growth of the vegetation. This

⁴¹ Personal communication with Dr. Rajan Gurukkal, Director of the Anakkara Excavations 2008-2009 and

untended growth consisted of plants like *Choriyanam* (*Tragia involucrate*), *Communist Pacha* (*Chromolaena odorata*) and *Totttavadi* (*Mimosa Pudica*). These have grown into clumps especially around the sites and other mound like formations except ANK09VI, the soil around which had been removed during the excavations in 2009, blocking them from view.



Fig4.3: Recent site disturbances: a) View of the engineering college building on Nasrāṇikunn from an adjacent hill . b) Debris accumulated on the north western part of Nasrāṇikunn due to recent construction activity (photos: Author 2010)

The **vegetation had to be partially cleared before the studies on these sites could start. The college building is located to the immediate east of the sites at Nasrāṇikunn.** A further eastward extension of the building was made during the year 2009- 2010. Construction material and metal and stone debris have accumulated in many parts often covering parts of the sites from view. Huge piles of laterite soil from the foundation of the building on the northern western and southern parts of the sites block the view. The area to the south of the sites is at present drastically altered because of recent quarrying activity to extract laterite blocks. (See fig 4.3).

The Cluster of Sites at Nasrāṇikunn

Archaeological remains were found only on the north western part of the table land. In this part the table land has a slight north tending slope. The sites from the area include three megalithic monuments (ANK09VI, ANK10VII, ANK10VIII), of which one had been excavated in 2009, as well as a quarry/ ritual (?) area (ANK09V). At present the sites are in a severe state of disturbance due to vegetation and construction activity. Fig 4.4 is a file photograph of the sites of Nasrāṇikunn, prior to the 2009 excavations.



Fig 4.4: Photograph facing west showing the three megaliths of Nasrāṇikunn. The arrows point to the general area of ANK09V

ANK09VI: ANK09VI (See fig 4.5) is a rock-cut cave inside a stone circle. The stone circle has an inner and outer circle of dressed laterite blocks. The circles enclose the entrance to a cave dug on to the laterite surface with steps leading to it. Inside the cave on its side walls three chambers have been dug. Each chamber has a platform. Burial goods are placed on the platform and on the floor of the chamber. The architectural grammar of ANK09VI will be discussed in detail in a separate section.



Fig 4.5: ANK09VI after excavation

ANK10VII: ANK10VII (See Fig. 4.6) is a slab circle of dressed laterite. During the fieldwork of 2010, it was found to be substantially damaged and covered by a clump of grass and shrubs. The vegetation was cleared in a minor way to have a clearer picture of the site.

Five dressed laterite slabs from the stone circle are visible. . Two among them are found uprooted. One is in a standing position with a portion visible over-ground. The last two stones have only the root visible indicating they are grounded in the original position (see Fig 4.7). These came to view only after the vegetation was cleared. There is no distinguishable mound. The central portion of the circle seems depressed due to recent disturbance.



Fig 4.6: ANK10VII as observed in 2010. Photo: Author

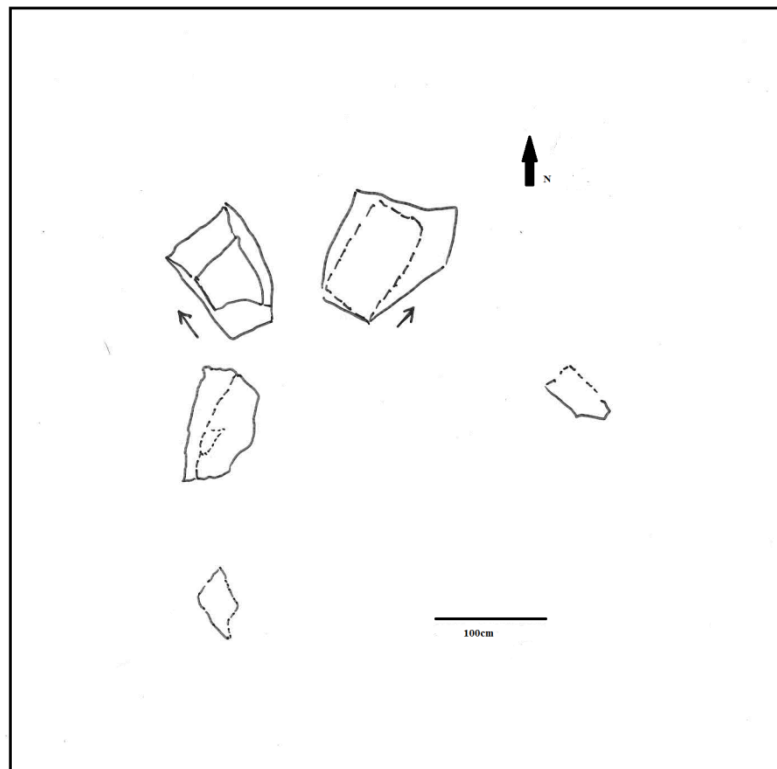


Fig 4.7: Graphical Representation of ANK10VII

ANK10VIII: The site is a very low mound with a menhir raised above (See Fig 4.8). The mound is disturbed heavily making it impossible to determine its actual layout. The menhir is broken and the broken portion is lying next to the portion that is still standing (See fig 4.10)



Fig 4.8: ANK10VIII as observed in 2010. Photo: Author

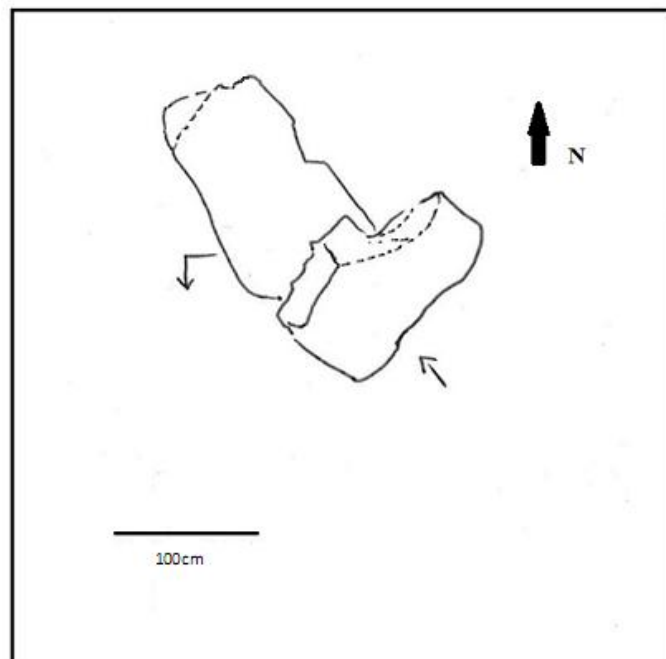


Fig 4.9: Graphical representation of ANK10VIII

ANK09V: ANK09V is the area on the laterite surface of Nasrāṇikunn upon which post holes and quarry marks are found (See fig 4.10 a). This is the first time a site of this nature has been found in association with an Iron Age burial site in Kerala. The concentration of postholes is on the western side of the hilltop, south of the megalithic monuments. Narrow channels are also cut into the rock surface. The engineering college building is to the immediate east of the area. Over the two years - 2009- 2010 - large amounts of debris have accumulated here. At present the view of a major part of ANK09V is obstructed. Within the area there is concentration of quarry marks to the east- south- east.



Fig 4.10: ANK09V in 2009: a. The area with concentration of post holes b. The area with quarry marks

Post holes of a similar nature were found in other parts of Anakkara also. On Nasrāṇikunn itself to the west of the monuments and towards their north on the laterite surface, separated from the sites at present by a road, more postholes can be seen. During the fieldwork in 2010, post holes were noted atop Hill 3 on the north eastern part. Given the nature of vegetation cover, it is not possible to determine whether there are other areas in the region similar to ANK09V. But the site definitely is an area of concentration of quarry marks and post holes.

In 2009 poles were raised on an experimental basis on 22 of the holes that seemed to form a circular pattern. No additional support was given to the poles. In 2010 the poles were observed to be standing despite the rough weather conditions confirming the viability of the holes to support structures of considerable proportions. But taken as a

whole the holes do not seem to follow any specific pattern. The post holes are found over the quarry marks also (See fig 4.10b).

The experts who visited Anakkara and the archaeologists who worked there came up with a number of conjectures on the nature of ANK09V. The site seems to have functioned as a quarry *cum* ritual area. Given the proximity to the burial sites and the quarry marks, it is not likely that the postholes were intended for habitation structures. On the other hand, they could have supported temporary or semi-permanent structures. Such structures are necessary if quarrying and construction work are carried out on site. It is likely that the site has a ritual/ symbolic significance also. Its nearness to the burials points to this. The channels cut into the surface allow water to run through them. The water does not reach up to the other sites of Nasrāṇikunn. These channels could be functional and/or symbolic. The director of the excavation at Anakkara suggested that the site could have had a major role in primary burial rituals. If so, the post holes would have supported platforms on which bodies were laid to decay, before the bones could be collected to be deposited along with other burial goods inside the monuments.⁴² We saw that from the nearby site of Chuliparamb secondary deposit of bone fragments with cut marks were found.⁴³ The platforms could have served as the site of ritual prior to this kind of secondary deposition practices. Another possibility suggested was that the holes could be related to astronomical observations, given the broad view of the sky that the site offers. But, as similar holes are present in other areas as well, it would be premature to make such an assumption.

A Spatial Analysis of the Sites of Nasrāṇikunn

This study looks at the sites of Nasrāṇikunn at three levels. First is at the level of the relation of the entire complex with the other burials/ complexes in the region through their location within the landscape. Secondly, the intra- complex organization of the sites is examined. The third part of the analysis focuses on the architectural grammar of a single site, ANK09VI.

⁴² Dr. Rajan Gurukkal, director of excavation suggested this possibility in a television interview by the local television channel at the time of excavations in April 2009.

⁴³ See the section on 2008 excavations above

Macro Regional Analysis

This part of analysis is based on certain specific questions. Can the sites of Nasrāṇikunn be considered as isolated? What relations can we establish between Nasrāṇikunn and other burial locales of the region? Is it possible to isolate factors that are unique to the Nasrāṇikunn complex?

Apart from the river Ponnani the prominent landscape features in relation to the Nasrāṇikunn complex are three hills. Hill 2 lies immediately to the north-west of Nasrāṇikunn, and Hill 3 to the north-east. The peak of Hill 4 which is slightly more distant than Hill 2 and Hill 4 are visible to the north east- east. (See fig 4.11).

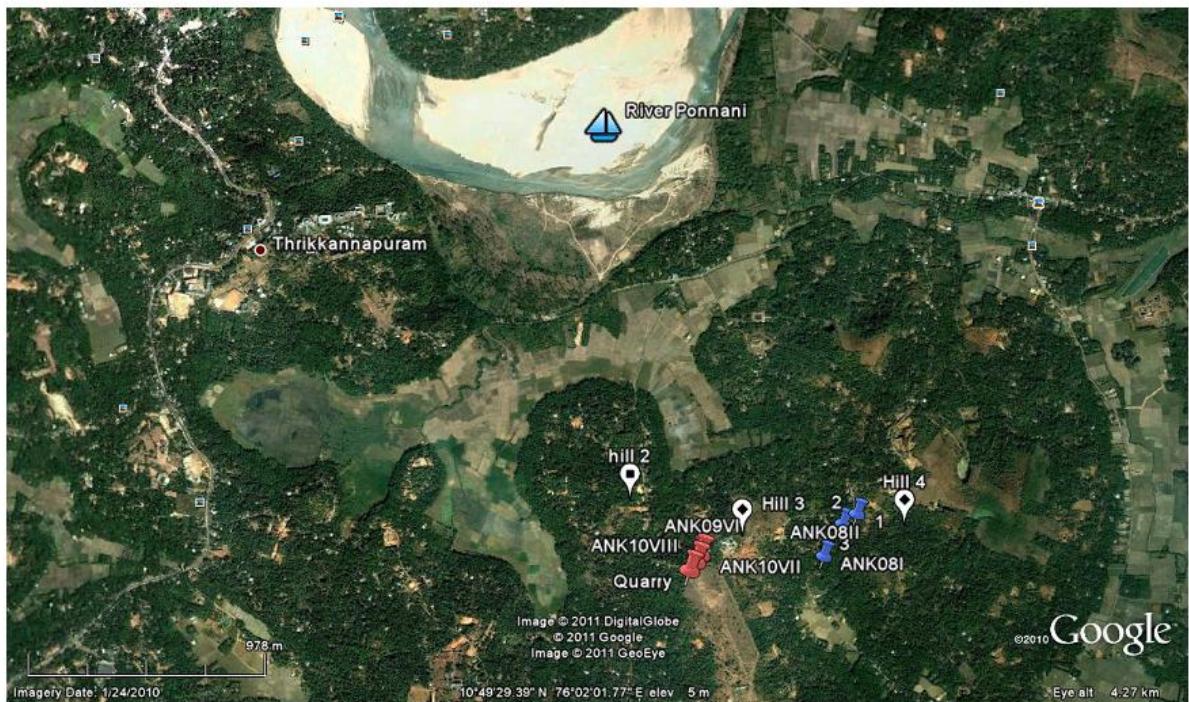


Fig 4.11: Map showing the location of the prominent landscape features in relation to the Iron Age sites of Anakkara

While the rest of Nasrāṇikunn is also surrounded by hillocks interspersed with flatlands, they are not as visible as the above three. The highest parts of Nasrāṇikunn are to the SSE. Hence from the complex there is no visibility beyond these points.

The Chuliparamb complex that was excavated in 2008 lies on the lower slope of Hill 3 to the SSE. This means that the slope is away from the view of the river. Hill 3 slopes

down to a narrow strip of lowland stretching south. From here the sites are easily accessible. The rest of the area is surrounded by similar hillocks. The cluster has a very low visibility. This is due to the gentle slope where even moderate vegetation could hinder the view of the site. Nasrāṇikunn which lies on the opposite side of Hill 3 is not visible from the sites.

Other sites were also found in the area. In the course of the fieldwork in 2010, an urn burial and a laterite cap stone had been noted on the surface of a road (N10 49.142 E76 02.620). These were found very close to each other and possibly the cap stone covered the urn. Close to the above, dressed laterite slabs that are part of a monument (N10 49.120 E76 02.588) were found. This had been located in 2009. Close to the monument is a house that has been built recently. The owner of the land informed us that on this plot a number of urns had been found at the time of construction. All these monuments are located on Hill 3 towards its east – south eastern slope closer to the peak than the Chuliparamb cluster. They are separated by a distance of less than 200 meters. Given the reports of destruction of monuments in the area, it is safe to assume that all the monuments in Hill 3 had been part of the same complex. The sites of Nasrāṇikunn are not visible from any of these as its view is blocked by the peak of Hill 3. In addition to the above there are reports of a Kudakkal and remains of clinostats in the close vicinity. The exact location of these could not be identified. The director of the excavation informed the author that the interest in Anakkara had also to do with the existence of a plot of land called *Valayangad* in the area. *Valayangad* literally means a forest of circles⁴⁴. While monuments have not yet been reported from this plot of land, the name suggests their existence.⁴⁵ Sewell reports four rock cut caves (SEWELL 1882) from Anakkara, which could not be located. But in 2009, before the rock cut cave inside the stone circle of ANK09VI was exposed, the local inhabitants suggested that the circle

⁴⁴ Personal Communication with Dr. Rajan Gurukkal, director of the excavations at Anakkara. It was also suggested that the earlier name of Nasrāṇikunn ,Ponnittannir is also relevant. Ponnittan nira literally means the ranges where gold was put. The name of river Ponnani comes from the early gold washing practices there. Hence these two names can be considered together to point to an important functional role of Anakkara. But apart from the place names we do not have any indications to further explore this postulate.

⁴⁵ Place names are an important indicator of existence of archaeological remains from a region. Place names like Kodakkal and Nannangadi directly points to the existence of megalithic/Iron Age remains (See Appendix 1). The term ‘Mangad’ appears in association with a number of burial sites. Place names that have an older etymology that indirectly refers to possible existence of prehistoric remnants. For instance Mudur, which roughly translates as settlement of the elders, is an instance.

enclosed a cave. Rock cut cave inside a stone circle is not a common pattern (See Appendix 1). This is an assumption handed down over the generations. This suggests that there were rock cut caves exposed before in the area.

Thus we can safely say that the Nasrāṇikunn complex cannot be considered isolated. The maximum distance between the sites located so far is less than 900 meters. While they are not all located in a possible pathway, it was observed during the fieldwork that a person walking at a pace of 4km/hour would be able to trace a route within 15 minutes covering almost all the sites. Thus while the inter-visibility between sites/complexes is low, the prehistoric communities would definitely have had an awareness of the landscape as organized by the spatial distribution of the sites. The quarry is another important factor. It is possible that raw material from the quarry were used in these other locales. There are no indications or experimental archaeology based models so far from the region to understand the process of construction. But the transportation of blocks of laterite from Nasrāṇikunn to any of the other locales is not a task of considerable difficulty, given the gently sloping nature of the terrain and the relatively high altitude at which ANK09V is placed.

If we take the known sites from Anakkara as a whole, they show considerable variety in terms of architecture and location. Some of the architectural choices have to do with the terrain. For instance on the slopes and lower reaches of hillocks, where the soil cover is considerably high, it is possible to have urn burials placed within pits dug into the soil. On the other hand top soil on the area where Nasrāṇikunn complex is located is very shallow. Hence the laterite surface needs to be carved in to place burial goods. The rock cut cave ANK09VI has architectural form that matches this assumption. While it is also possible to have urn burials in such locales, it requires carving out of a pit first into the rock surface. There is no clear preference *vis-a-vis* location of the monuments also. They can be placed in different altitudes with varying degrees of visibility.

But if we take the Nasrāṇikunn complex separately, we see that the location of the complex is a factor that distinguishes it from the other sites/ complexes in Anakkara. The table land of Nasrāṇikunn is one of the highest points in the region and has relatively high visibility. The relative flatness of the hilltop allows a person to have an

unhindered view of the sky and surrounding terrain to a greater degree than the other hills of the region. The most important factor is the location of the complex on the table land. Together the three monuments cover less than 0.65% of the surface area of the hillock and are placed on the north-western part of the table land. Their location has been selected in such a way that it is the nearest area on the hillock from river Ponanni. This also offers maximum visibility of the river through the gap formed by the slopes of Hill2 and Hill3. Further North the tableland slopes down and Hill 2 and Hill3 partially block the view of the river.⁴⁶

Considering the commanding location of the Nasrāṇikunn complex (by virtue of its higher altitude) in relation to the other monuments, and its position in the landscape (that provides a high degree of visibility), a tentative argument is made here that the Nasrāṇikunn complex had symbolic domination of the archaeological landscape of Anakkara.

Nasrāṇikunn: the Sites within the complex

The three megalithic monuments and the quarry were observed to display a conscious pattern in their arrangement. To explore these further, aspects of orientation, inter-visibility and viewshed of each of the sites were examined.

As we have seen above, three monuments of Nasrāṇikunn are architecturally different. We do not know about the subterranean features of ANK10VII and ANK10VIII. We cannot determine their chronological sequence as well. It is possible that other sites had been located in the region. But we find no confirmation for this.

At a chronological point where all the three sites are in place, the complex would have looked similar to fig 4.4. The three monuments follow a definite part of orientation. They all are placed roughly along a straight line. (See fig 4.12). To an observer facing the Northern part of ANK09VI, they are oriented along a line of 25° south- south west. Along this line lies the area of ANK09V that has the largest circular formation of

⁴⁶ At present, a road runs immediately north of the site cutting through the slope. Hence it is possible that in the prehistoric times the nature of the slope was slightly different. But as post holes are found on the surface of the laterite platform on the other side of the road it was not difficult to make assumptions regarding the nature of the slope

postholes. Thus while we do not know their chronological sequencing, the earlier monument must have been a definite determining factor for the location of the latter.

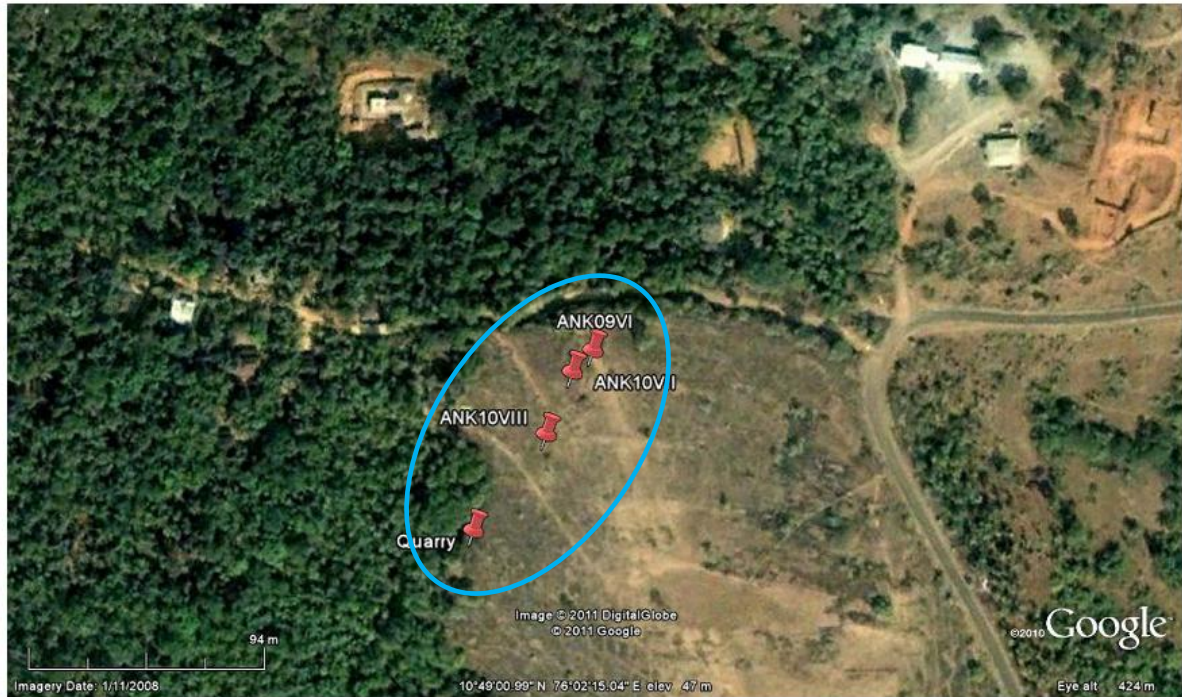


Fig: 4.12The Nasrānikunn complex⁴⁷

Inter-visibility

From ANK09VI if one observes the sites along their line of orientation one sees that all the sites enjoy unblocked view. This is due to the gentle slope of the hilltop to the south- south east. ANK10VIII is also a taller monument than the other two. This offers it a clearer visibility. It is also not blocked by ANK10VII as the latter does not rise very high above the ground level and is very close to ANK09VI. The surface of ANK09V is also visible indicating that any superstructure raised on the postholes would similarly be visible.

From ANK10VII also all the sites are visible, ANK09VI to its north north east and ANK10VIII to its south south east. ANK10VIII has the quarry to its south and west. From the monument ANK10VII and ANK09VI are visible, but the latter is partially blocked by the former if viewed along the line of orientation. This is due to the proximity of the two sites.

⁴⁷ The locations are approximate. The quarry marks spread around all sides of the GPS point shown in the figure

From all parts of the quarry area the sites are visible and vice versa. If viewed along the line of orientation each monument would progressively block the other partially from view. The assumption is that the menhir ANK10VIII was unbroken and rooted in a straight line axis perpendicular to the ground. Thus for a pre historic observer the sites would constitute a group visually separated from the other sites/ clusters of Anakara.

There are internal differentiations in the cluster in terms of organization of space. The quarry *cum* ritual area, while spread out over the laterite surface, does not encroach upon the area occupied by the monuments. Thus there is a clear division of space within the complex based on the function of the sites. The monuments are also differentially grouped within the cluster. ANK09VI and ANK10VIII are both stone circles and they are grouped together. The nearest points of ANK09VI and ANK10VII are only 5 m apart. ANK10VIII is separated from these two by at least 20 meters (if we consider that the original mound extends a few meters north of the menhir). Among the monuments the over-ground features of ANK09VI are visually the most elaborate. Its association with a visually less elaborate monument ANK10VII, suggests hierarchical arrangement. Rather than a conclusive statement, the observation about hierarchy must remain informed speculation. This is because the over-ground features of ANK10VII and ANK10VIII are partially destroyed. Also the prehistoric communities might have had an awareness of the subterranean features of each monument that the modern observer lacks.

Viewshed Analysis

Standing at the center of each of the monument the 360⁰ view was plotted. The landscape of Anakara has suffered drastic alterations in recent years. Nasrāṇikunn itself has suffered major alterations. Considerable parts of the southern and eastern portions of the hillock have been quarried for laterite. The engineering college that lies to the immediate east of the complex, blocks the view from the monuments considerably. Immediately to the north of the monument complex is a road, the construction of which must have altered the nature of the northward slope to some extent.

The prominent landscape features surrounding the complex are:

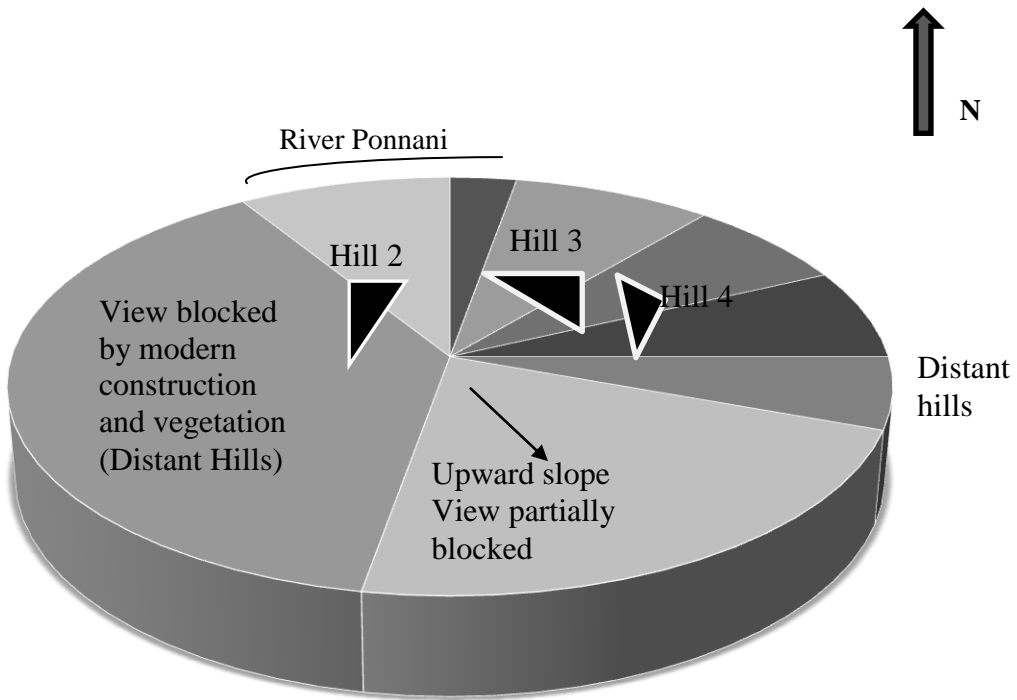
- The River Ponnani: The River Ponnani is at a distance of 1.5 km to the north of the complex. To the immediate east the river takes an ox-bow like bend towards south. The part of the river visible from H1 is between the two ends of the bow and the direction of flow is from west to east following the main course of Bharatapuzha. The distance between the sites and the river has not changed considerably since the period under consideration;⁴⁸
- Hill 2: Hill 2 lies North North West of H1. The slope of H1 merges with that of H2. The peak of H2 is at about 50 meters from the sites;
- Hill 3: Hill 3 lies to the North- North East of the sites. The peak of the hill is visible from the sites and lies at distance of about 30 meters; and
- Hill 4: Hill 4 lies to the East- North East of the sites. It is at a greater distance and the peak is visible behind the Eastern slope of H2. The distance is about 90 meters from the sites.

The peaks of all the hillocks fall within an altitude range of 40-65 m and hence block the view beyond them. The peaks are not prominent in appearance due to their gently rolling nature. A considerable portion towards the east and south east of the hillock is blocked by the college building. However there are no prominent landscape features around this area. The upward gradient of the hill is towards south- south east. The view is partially blocked by the college building. Due to the upward slope, no prominent landscape feature that lies beyond would be visible from the sites towards this direction. To the south west and west of the sites small hillocks are visible at a distance. The view of the region between them is blocked by vegetation.

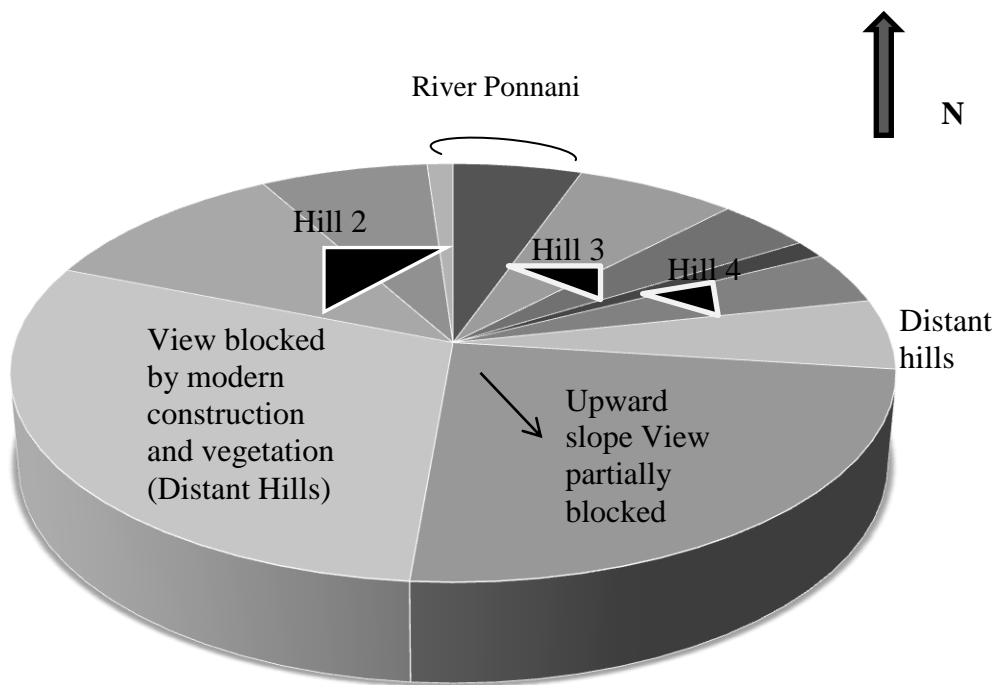
The pie diagrams given below graphically represent the 360⁰ view from each of the three monuments. The central point of the circle corresponds to the monument from where the landscape is viewed. The graph does not indicate the distance. But it follows the rough position of the landscape features in relation to each other and the monument.

⁴⁸ Personal communication with Dr. Shajan K. Paul, Geologist and co- director of excavations at Anakkara.

Viewshed ANK09VI



Viewshed ANK10VII



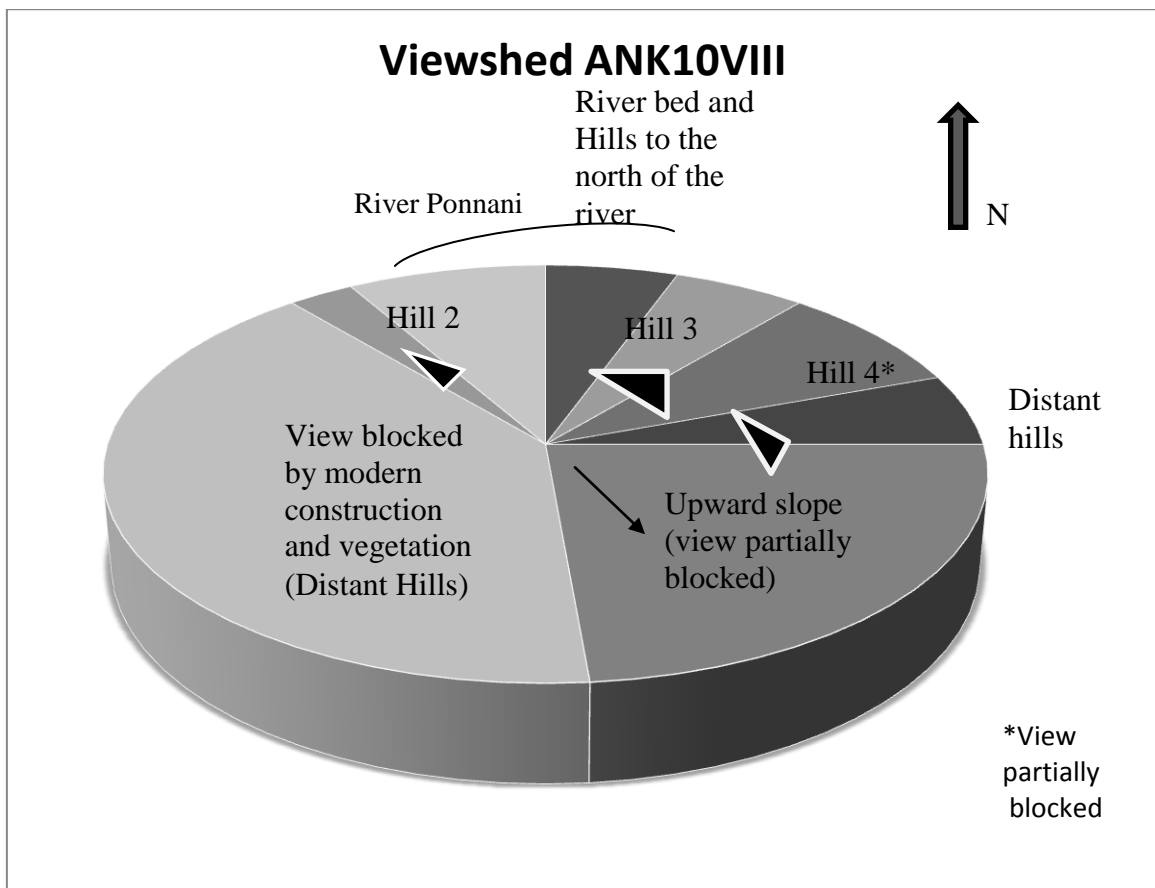


Fig 4.13: Viewshed: a) ANK09VI; b) ANK10VIII; c) ANK10VIII

As the monuments lie in close proximity to each other, there are no notable variations among them in terms of visibility. As noted in the previous section, the monuments are positioned in a way that they occupy the part of the hillock with maximum visibility to the River Ponnani. ANK10VII has a substantially greater view of the river, the riverbed and the area beyond, owing to its position at a relatively higher altitude. The hillocks we have seen are not distinctive in their appearance. They do not seem to have any major influence in the orientation of the monuments. The only exception is ANK10VIII. A person standing at the monument has the peak of Hill4 is to its direct east. At present the peak is visible through a window of the engineering college to the direct east of the monument.

The orientation of the over-ground features of the monuments does not follow a particular pattern *vis-a-vis* the landscape feature. ANK10 VIII has a south- south eastern orientation if we imagine it in its original position. The over-ground features of ANK10VII and ANK09VI are circular.

But the picture changes when we consider the subterranean features of the excavated monument ANK09VI. The entrance to the cave is directly oriented to the east. Similarly two of the three chambers also are oriented to the east. During the excavation the author noticed that this allows direct sunlight into the otherwise dark chambers until about mid-day. Orientation towards the east, that has an evident reference to sunlight, is a pattern shared by monuments from different parts of the subcontinent (GEORGE 1975 RAJAN 1994). This could have symbolic significance with reference to the immediate landscape concerns.

Reverse Viewshed

The position of a monument in the landscape is not solely determined by what it does or does not overlook. One also has to take into consideration the extent of visibility of the monument. Visibility is often a result of deliberate effort. We will examine these aspects with relation to the elements within a single site in the next section. We saw that the sites of the cluster of Chuliparamb are on locations with less visibility. They are intended to be viewed only by those who have previous awareness of their location. Thus this cluster can be considered as private in nature

Now let us look at the sites of the Nasrāṇikunn complex. The reverse viewshed of the sites were recorded in two steps - first by walking away from the site in cardinal directions to see where they cease to be visible and second by looking at the site from each of the four prominent landscape features discussed above.

It was observed that the visibility of the monuments depends on the slope of the hill in all directions. The relatively flat nature of the hilltop allows a greater visibility range than would be the case were the monuments located on any of the neighbouring hilltops. If we take the cluster as a whole, we see that the hillock slopes down immediately towards the northern and western sides of the cluster. Recent alterations must have affected the slope to a great extent, especially towards the west of the sites, Towards the north, while a modern road has been constructed, the presence of post holes to the north of the road allows us to have an estimate of the actual slope. Taking ANK09VI as a reference we see that after about 26 m to its north the monuments start to drop from the eye level. From the quarry region all the monuments are visible. But further south of it the landscape alterations are so drastic that no logical assumption can be made. This holds true to the vision from south towards south east also, as it is blocked by the

college building. But if we follow the general tendency of the slope we see that the monuments would be visible from about 0.5km south of the monument where it starts to slope down again. Towards east - south east we have a clearer vision up to about 250 m albeit blocked and partially disturbed.

Let us examine what an observer, viewing the site from the prominent landscape features around, sees. The peak of Hill 4 is beyond access. From the lower reaches of its slope Nasrāṇikunn and the college building are clearly visible. But the monuments cannot be seen as they are blocked by vegetation. Hill 3 that lies in close proximity to Nasrāṇikunn is heavily vegetated, except where the modern quarry is. It is not possible to get a view of even the hillock from here. But in a situation where the vegetation has been cleared, we can assume that Nasrāṇikunn would be visible. The monuments could be viewed only if both the hillocks are cleared of vegetation, which is not a likely scenario. From Hill 4 the North western part of Nasrāṇikunn, where the monuments are, is visible. The monuments, however, are not visible due to the heavy vegetation cover.

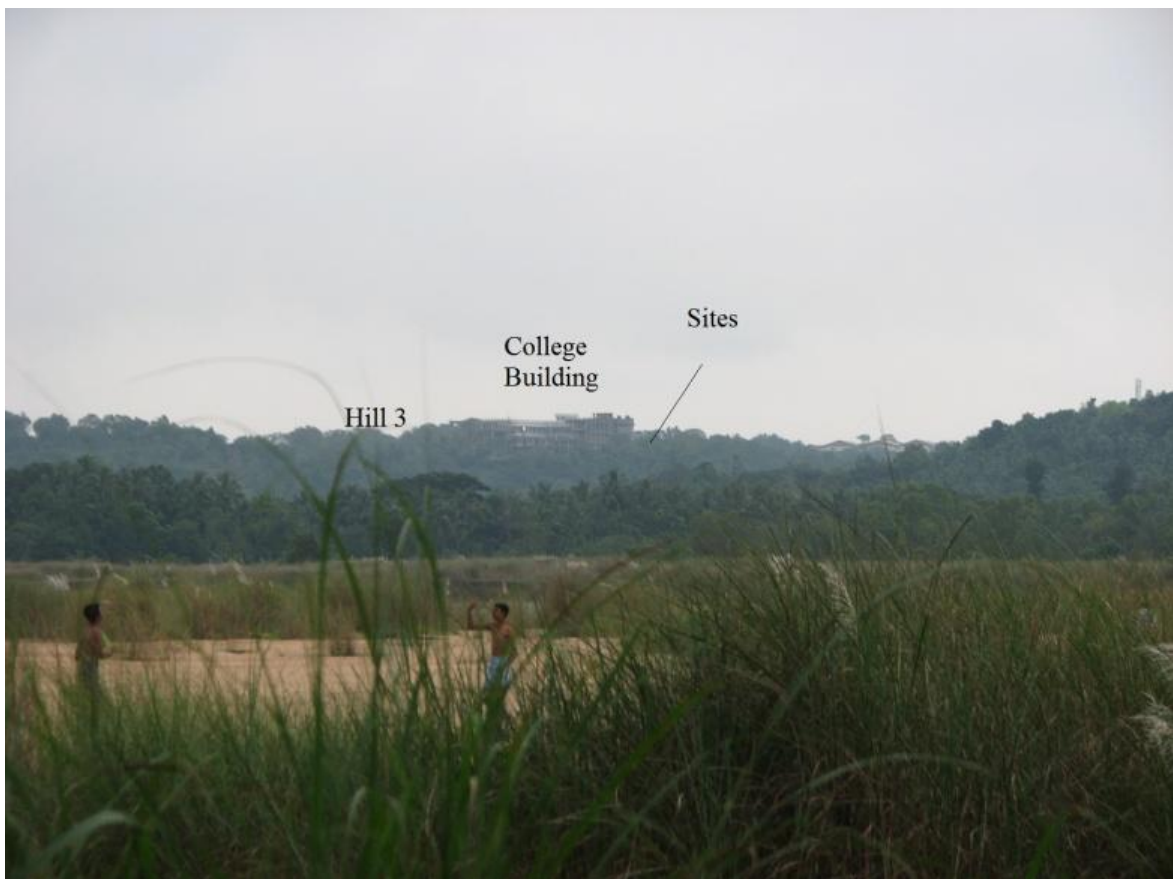


Fig 4.14: Nasrāṇikunn viewed from the northern bank of River Ponnani (Photo: Author)

Nasrāṇikunn enjoys clear visibility from different points along the banks of the river. The hillock was observed both from the northern and southern bank of the river. Nasrāṇikunn enjoys excellent visibility along a stretch of roughly 2km of the river covering the entire length of the oxbow like formation. The visibility of the western part where the sites are located is higher than the eastern part which is partially blocked by the western slope of Hill3 (see fig 4.14)

We saw in the previous section that the sites of Nasrāṇikunn occupies a dominant position in landscape *vis- a- vis* the other monuments. Even then, the nature of vegetation and terrain come in the way of clear visibility. The communities who occupied the territory would have been aware of its existence especially as the quarry would have been in continuous use for considerable amount of time.

The River Ponnani lies along a major route of transportation and trade. The part of the hillock where the monuments are located enjoys clear visibility over a considerable stretch of the river. The sites of Chuliparamb, on the other hand, are located on a slope that faces away from the river. But it is unlikely that a traveler along the route would have had any awareness of the existence of the monuments. Thus the sites cannot be considered public in nature. Evidently, the positioning of the sites has been carefully done. , This allows it to overlook the maximum stretch of plain land and the river; more than any of the surrounding hillocks. The role of the river as a major channel of communication would have had an indirect significance in this choice.

Spatial Organization within a Single Site: Case of ANK09VI

ANK09VI is the only excavated monument in Nasrāṇikunn. We have seen that the monument is a complex one with multiple elements. It has a double circle of laterite blocks enclosing a cairn packing and beneath it a rock cut cave. The rock cut cave has an entrance leading into three chambers through a flight of steps. The access to each of these is closed by means of laterite blocks. The caves are divided by means of a platform and various types of grave- goods are placed in each of these chambers. The schematic representation of the monument made by the 2009 excavation team is given below (See Fig 4).

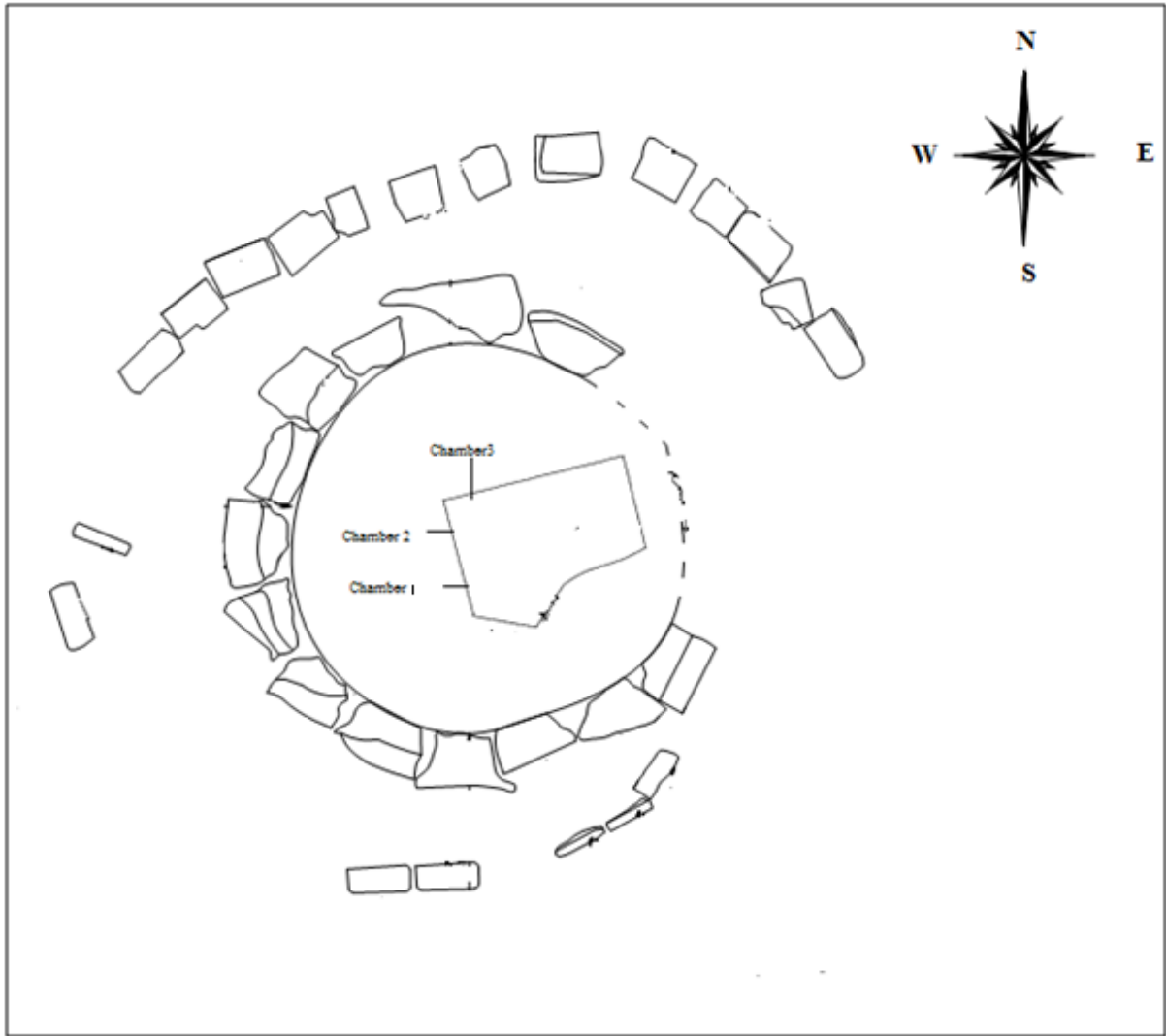


Fig 4.15 Graphical representation ANK09VI (Courtesy MGU: 2009; Modifications by the author)

The gap in the outer circle towards the eastern side seen in the figure is due to recent damage caused to the monument when construction workers at the engineering college building ran the site over with a small bulldozer and removed some of the stones with a crane in the hope of retrieving a treasure. As a result, one of the stones of the outer alignment fell into the entrance of the rock cut cave and the cairn packing, and the steps to the entrance as well as the entrance of chamber 3 were heavily damaged.

Prior to the damage caused to the monument the outer circle had been visible over-ground in the form shown in fig 4.4. The locals of Anakkara informed the team that they had assumed it to be a well. Possibly in the prehistoric/ early historic times the outer alignment of stones also had been visible over ground.

Let us assume that a person is approaching the monument from a distance. He/ she would be able to see the outer and inner alignment of stones. The monument is almost a perfect circle and hence does not show any particular orientation.

The Outer circle: The outer stone circle is not a compact one. It is formed of 22 stones. The stones are not dressed in a uniform manner. They are roughly rectangular in shape, with a maximum height of 20 cm or less. The blocks are 60-70 cm long and 30- 50 cm wide. The outer circle is thus intended for the purpose of demarcation. It does not cause



any visual obstruction to the observer. The stones create the visual effect of an inward slant produced differentially by the way they are positioned, or by intentional arrangement. This brings out the overall compactness and separation of the monument from the surroundings.

The Inner Circle: The inner stone circle on the other hand is very compact and more elaborately dressed. The visible portion of the stones is 80-90 cm high. When all the stones are in position they create a visual obstruction to the observer. The stones are also dressed in a way that maximizes compactness. The base of each block is shaped to

Fig 4.16: Circle Stone from the inner alignment, Longitudinal view

form an extension that locks it to the next. They are also placed with an inward tilt (see fig 4.16)



Fig 4.17: View of the monument from outside inner circle
(Photo Author)

It was observed that the inner circle must have been intended to create a visual obstruction. A person of average height who approaches the monument would not have a view of the cave or chamber entrances from outside the outer alignment, even if these remain exposed (See fig 4.17)

He/ she could get a view only by leaning forward from outside the outer circle to see inside. Otherwise only, the alignment of the stones on the side opposite as well as the surface of the laterite platform close to the alignment would be seen.

Towards the eastern part of the trench before the laterite surface was reached a concentration of potsherds was found (MGU 2009). As this area was heavily disturbed the context had been lost and the soil was mixed with glass pieces and other modern material. Hence it is not possible to make a comment on these finds.

It appears that there was a cairn packing of five or six courses of boulders on top of the laterite surface. At the time of excavation the area was found to be in a heavily damaged condition with only some parts of the packing in position. This makes it difficult to ascertain the nature and extent of the packing.

The Entrance: The entrance to the cave was also found to be extensively damaged. The entrance faces east and there are three steps leading down into a chamber (See fig 4.18)



Fig 4.18 ANK09VI: Entrance (Photo: Mohamed 2009; Modifications: Author)

The entrance leads to a roughly L shaped space. The chambers of the cave have their entrances on the side walls of this space. The area is large enough to allow three adults to stand together. The maximum number of people who can work within the space is two. Thus any time during a ritual sequence only a few privileged individuals would have access into the entrance through the steps.

The Chambers: The steps directly lead to the entrance to Chamber 2. The entrance to Chamber 3 faces South and those of Chamber 1 and Chamber 2 face east. The three chambers are identical in external appearance. They are, as the damaged remains indicate, covered by almost square and identical laterite blocks. A uniformly thick area is carved out from the sides of the chamber entrances. This gives them the appearance of door jambs.

The chambers are all of similar dimensions and shape. Each of the chambers is divided longitudinally by a platform of about 10 cm height that covers the entire length of the chamber. The chambers have domed ceilings that curve down away from the entrance. Each of the chambers has two laterite hook-like projections from the wall, one near the entrance and the other, further away.

The dimensions of the chambers allow one adult individual to be inside to work inside them in a crouching/sitting position. Grave goods that include ceramics, iron objects and beads are arranged inside the chambers. The person(s) who placed these objects inside would have worked backwards from the backside of the chambers, so as to avoid damage to the objects.



Fig 4.19: View of Chamber 2 with the burial goods

Chamber 1 yielded 24 ceramic vessels and 6 pieces of iron. From Chamber 2, 41 ceramic vessels, 25 pieces of Iron and beads of the etched carnelian variety were obtained (See fig 4.19). All beads except one had a double triangle - meeting at the bases pattern. One of the beads had a circular pattern of dots. Chamber 3 yielded remains of 41 ceramic vessels, 10 pieces of Iron and a number of beads. The raw material of the beads is still not confirmed. It is possibly of a synthetic material. They are of two shapes, small rounded micro beads and square ones with multiple perforations. They might have been parts of a multi layered necklace. The analysis of the artefacts is not yet complete because the excavators had to remove them from the site following the onset of the south- west monsoons. From the observations made in 2009 and in 2010, we find that the ceramics are mainly of three kinds - BRW, red ware

and RCPW. The Iron implements include a sword, a dagger, pieces of long rods, elongated spatula- like object with a rounded head that might have been used to work on leather, and other broken pieces of indeterminable morphology

Let us look at the pattern of organization within and the distribution of the objects among the chambers. We see that the burial assemblage is rich and more diverse than the monuments from Chuliparamb excavated in 2008. This can be read along with the dominant spatial positioning of the site *vis-a- vis* those of Chuliparamb. ANK09VI is also architecturally more complex and involves more effort in construction than those of the Chuliparamb complex.

Unlike the sites of Chuliparamb there is no spatial differentiation among the different types of artefacts. Chamber 1 and Chamber 2 have a similar pattern of organization of objects. The platforms are left empty in both cases, except for an iron sword in chamber 1. The artefacts are cluttered on the floor of the chambers, seemingly without organization. In the case of Chamber 3 some objects are also placed on the platform.

This appears primarily to be a function of lack of space.



Fig 4.20: Etched Carnelian beads from Chamber 2

We see that there are certain differences among the chambers in terms of the burial assemblage. Chamber 2, is the richest in terms of the number of artefacts. It also yielded etched carnelian beads (See fig 4.20). Carnelian, as we have seen, has a non-local origin and must have reached the site *via* the Palakkad Gap following the route along the course of the river Bharatapuzha from manufacturing sites like Kodumanal. The beads indicate that the Iron Age communities of the region had contacts with the long distance networks of trade operating in the period.

We do not know about the provenance of the synthetic (?) beads from Chamber 3.

Antechamber (?): In terms of the number of artefacts Chamber 1 appears to be the poorest. But towards the end of the excavation the team noticed that to the south western corner of this chamber there is an arch-shaped carving. (see fig) A gap was also noticed on the laterite surface near two stones on the south western part of the inner circle named C and D. This gap seems to be going further down into the laterite surface. Based on observed details, the team suggested strongly that the arch could be the outer face of a capstone that conceals an antechamber and that the gap could be a porthole leading to it (See fig 4.21).



Fig 4.21: Entrance to the possible antechamber ANK09VI

If we assume the contention to be true, the arch-shaped face of the cap stone could be seen as carved to merge with the wall of chamber 3 offering camouflage. There is no indication over ground that suggests its position. An Iron sword, which is the only artefact placed on the platform of chamber 3, is positioned in a way that it signifies the protection of the antechamber. The northern most circle stone of ANK10VII is very close to the possible port hole of the ante chamber. This raises the possibility of the

monuments being linked in some manner. However meaningful speculation must await further excavation.

If we examine the architecture of ANK09VI, we see that it has different levels of organization that are more complex than the other excavated monuments in the area. The monument is structured to allow differential access to a person approaching it. (see fig. 4.22). As megalithic burials are spread over the west coast, even an observer who does not belong to the community is bound to have pre-conceived notions as to what the circle encloses. But only the individuals directly involved in the construction or ritual or those of the community who have a shared knowledge about the burial would have a clear idea about the nature of the interment. Within the community, the parts of the monument namely, the outer circle, the inner circle, the entrance to the chambers and the chambers and the possible antechamber progressively cut down the number of individuals who are allowed into the center of the monument and to the ritual.



Fig 4.22: ANK09VI: levels of approaching the monument

We also see that the monument directly incorporates landscape features into the architecture. The outer surface of the monument has a semi-circular dome shape which is followed inside for the chamber roofs. The shape of the outer surface is achieved by positioning the monument in a way that it incorporates the north -north eastern slope of the hillock in that region and its general southwards slope. Similarly there is a groove

that runs through the middle of the monument in the north – south direction (See Fig 4.5). This groove divides the area within the inner circle into two hemispheres and forms a demarcating line between the chambers and the rest of the entrance area. This visual effect is achieved by incorporating a natural groove on the laterite surface into the monument.

ANK09VI is intended as a memorial for at least three persons. Richness of the artefacts associated with an individual at death is an important factor to identify the social positioning of the deceased. In the case of ANK09VI we see that the spatial organization of the structure also needs to be taken into account. The presence of an antechamber for instance, that is separated from the other chambers and deliberately concealed and protected, indicates the greater symbolic value attached to the interment within.

While the above analysis focuses on a single burial complex and its immediate vicinity, we should note that the perception of the Iron Age communities of Anakkara of their landscape extend beyond what is visually accessible. The presence of RCPW in association with the sites indicates that they belong to the later phase of the Iron Age, *i.e.* towards the early historic period.⁴⁹ By this time the trade and exchange networks operating within the peninsula must have been well established. These would have operated both at the micro regional and macro regional levels. The hinterland and the coasts were connected through trade routes. And these routes were also incorporated into the Indian Ocean trade networks which had an established and regular pattern controlled by the monsoons. By virtue of their proximity to the River Ponnani (Bharatapuzha), the Iron Age communities of Anakkara would have been in constant contact with the networks of exchange, at least in an indirect way. Hence their conception of their immediate surroundings would have been mediated by an awareness of landscape beyond their physical reach.

We see a number of indications for this from the sites themselves. In the sites of Chuliparamb we see non- local raw materials being architecturally incorporated into the monument. But, Nasrāṇikunn sites use only the locally available laterite. This could be seen in relation with the strong association of the sites with the quarry *cum* ritual area.

⁴⁹ Personal communication with Dr. V. Selvakumar, Archaeologist, Tamil University, Tanjavur.

But, let us turn our attention to the burial goods from ANK09VI. The presence of the etched carnelian beads shows the direct participation of the community in the long-distant exchange relations.

Interesting similarity was noticed between the pottery types and iron objects of ANK09VI and those from the *topikkal* from Chataparamba excavated by Babington (BABINGTON 1823). The similarity extended to the way the ceramics were placed in relation to each other. For instance a conical RCPW pot covered by an RCPW cup has an exact parallel placed in the same manner from Chataparamb. The two sites are separated by a distance of about 70 km.

Another instance is the presence of graffiti on the on some of the vessels from ANK09VI. As the study of the vessels is still in progress, we cannot say if this is restricted to one particular chamber. From what we know so far the graffiti marks are of a single type. It represents a cart with four wheels as viewed from above. The body of the cart is represented as two almost parallel vertical lines with a number of small horizontal lines between them as in a ladder. These marks are made after the firing of the pot with easy casual strokes⁵⁰. Not much care is attached to the aesthetics of representation. Different interpretations prevail on the significance of graffiti marks. The pattern of a single type of mark being associated with a single burial also occurs in sites like Kodumanal; this rules out the possibility of these being potter's marks. The repetition of the same symbol in different burials has led to the suggestion that they could be clan marks (RAJAN 1994). In any case the symbol must have had direct significance to the individual interred. We also see the similar representation of the cart in other sites along important routes of trade like Kodumanal⁵¹ and rock art sites like Edakkal and Tovari (GURUKKAL and VARRIER 1991)

I have analysed the sites of Nasrāṇikunn at interregional, inter site and intra site levels. The discussion suggests that the architectural grammar and the location choices of the sites have important signification in the symbology of the monuments. Aspects of visibility and concealment operate at all the three levels that help constitute the symbolic landscape that Nasrāṇikunn represents.

⁵⁰ Personal communication with Dr.V. Selvakumar, Archeologist, Tamil University, Tanjavur

⁵¹ Personal communication with Dr. V. Selavakumar, archaeologist, tamil university, Tanjavur,

CONCLUSIONS

The studies on the Iron Age and the megalithic tradition of Kerala remain fragmentary. A good number of sites have been identified and reported from Kerala, including from our study area. . But the information we have on most of these sites is inadequate to build a meaningful discussion, and attempt informed generalizations. Theoretical formulations of space and spatial organisation rarely figure in these studies, though these are critical factors in the study of monumental architecture.

The specific effort in this thesis has been to address these limitations. A careful examination of the available data confirmed the need to generate a supplementary body of knowledge. It was also recognized that the available information needed to be re-examined. It was thought appropriate to choose a single group of sites for a focused analysis. This would serve as a pilot case for the modelling of future studies.

The study led to certain observations, which could be significant. The landscape choices exercised by the prehistoric communities are materialistic in many respects. For instance, the location of a monument is more often guided by factors like local availability of raw material. But the monuments themselves are highly symbolic in nature. The observations from Anakkara point to ways in which the landscape is incorporated into the symbolism of the monuments. For instance, the symbolic impulse is obvious in the choice of an elevated spot for the location of a monument designed to be durable.

The choices, however, are not always as straightforward as above. The location of the sites in relation to the landscape and in relation to the other sites, reflect careful planning and critical assumptions.. Such choices make the sites of Anakkara exclusive to the community. But among the sites, the differential positioning within the landscape and its proximity to the ritual / quarry area assigns the cluster of Nasrāṇikunn symbolic dominion over those of Chuliparamb. The sites within a complex are differentiated by architecture as well as by their relative positioning. The elements within a single site are carefully configured to provide for differential levels of accessibility, both visual and physical. If these elements and their configuration are retrieved, the monument would come alive as a site reproducing the relations, hierarchies, and the dynamics of social dominance within the community.

Such a wholesome analysis may hardly be claimed by the present study. Certain real limitations came in the way of such an analysis. The first of these was that the study area has not yet been mapped to a suitable scale. Nor has any thematic mapping been done. Much of the observations, therefore, had to rely on visual record. The landscape of the region has suffered drastic alterations in recent years. This coupled with the densely populated, small land holding pattern of central Kerala further limited the reliability of the visual records.

This study explores the possibility of formulating a methodology to generate significant speculations, in spite of such limitations. These, limitations of course, had been overwhelming and impossible to ignore. The validity of the conclusions, therefore, will have to be firmed up by further exploration. The data on the sites of Nasrāṇikunn would be further enriched when more information on the burial assemblage is made available, and when the complex is studied in relation to other sites from different parts of the study area.

This thesis was conceived as a pilot study. It initiates an effort to bring the concepts of spatial organisation and landscape relations to the centre of the discussion on the Iron Age of Kerala and offers certain practical guidelines to generate data that facilitates such a discussion

BIBLIOGRAPHY

ABRAHAM, Shinu A. (2002) Social Complexity in Early Tamilakam: Sites and Ceramics from the Palghat Gap, Kerala, India. Unpublished PhD Dissertation submitted to the University of Pennsylvania

ABRAHAM, Shinu A. (2003) "Chera, Chola, Pandya: Using Archaeological Evidence to Identify the Tamil Kingdoms of Early Historic South India." *Asian Perspectives* 42,: 207-223.

ABRAHAM, Shinu A. (2004) "Applying Anthropological models of Social complexity to Early Tamilakam: The Palghat Gap Survey." *The Journal of the Centre for Heritage Studies* 1: 1-19.

ACHAN, Anujan P. *Annual Report of the Archaeological Department: Cochin State for the Year 1122 M.E. (1946-1947 A.D.)*. Ernakulam: Cochin Government Press, 1948.

AMRUTH M (2006). Two Dolmenoid cists at Sholayar, Thrissur Dt., Kerala. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. pp83

ARCHAEOLOGICAL DEPARTMENT, SOUTHERN CIRCLE (1912). Annual report of the Archaeological Department, Southern Circle Madras for the year 1911-1912. Madras: Government Press

BABINGTON, J (1823). Descriptions of Pandoo Coolies in Malabar (Transactions of the Literary Society of Bombay 3: 324-30). As reprinted in *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. pp6-16

BINFORD, Lewis R. (1962) 'Archaeology as Anthropology'. *American Antiquity*. vol.28. No.2.(Oct 1962).pp217-225

BINFORD, Lewis R. (1971) 'Mortuary Practice: Their Study and their Potential'. *American Antiquity*. Vol.36. No.4, 1971. pp.6-29

BLAKE, Emma (2002). Spaciality Past and Present: An Interview with Edward Soja. *Journal of social Archaeology* 2002;2; 139-158. <http://jsa.sagepub.com>.

CAMMIADE, L.A.(1930).. Urn-Burials in the Wynaad, Southern India. *Man*, Vol. 30 (Oct., 1930), pp. 183-186. Royal Anthropological Institute of Great Britain and Ireland. Stable URL: <http://www.jstor.org/stable/2790464>

- CHILDE, Gordon V. (1947) "Megaliths." *Ancient India* 4 (July 1947- January 1948): 5-13.
- CHERIAN, P.J., SHAJAN,K.P., and SELVAKUMAR,V. (2007). "In Pursuit of the Missing Links- Pattanam and the Maritime History of Malabar Coast: A Report on the 2007 Excavations." (Unpublished)
- CHS (2004). Notes and news: Archaeological discoveries. *The Journal of the Centre for Heritage Studies* 1.pp 106-107
- CODRINGTON,K De B (1930). Indian Cairn and Urn Burials. *Man*, Vol. 30 (Oct., 1930), pp.190-196. Royal Anthropological Institute of Great Britain and Ireland.Stable URL: <http://www.jstor.org/stable/2790468>
- CRUMLEY, Carole L. (1995) "Heterarchy and the Analysis of Complex Societies.' in *Heterarchy and the Analysis of Complex Societies* (Archaeological Papers of the American Anthropological Association 6) ,edited by Robert M. Ehrenreich, Carole L. Crumley, and Janet E. Levy, 1-6. Virginia: American Anthropological Association, 1995.
- CUMMINGS, Vicki and WHITTLE, Alasdir (2002). Tombs with a View: landscape, Monuments and Trees. *Antiquity*. Volume: 77 NO: 296 Page: 255–266
- DARSANA S(2006) . Antiquarian Research on the megaliths of Kerala. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. Pp 37-44
- DARSANA, S. and V. SELVAKUMAR (2006). New Megalithic Sites in Malappuram Dt. Kerala. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. Pp 85
- DEPARTMENT OF SURVEY, Government of Kerala. http://old.kerala.gov.in/dept_survey/maps.htm (Accessed on 18th March 2011)
- DEVADEVAN, Manu V. "Lying on the Edge of the burning Ground: Rethinking *Tinai*." *Journal of the Economic and Social History of the Orient* 49, 2 (2006):199-218.
- DIKSHIT, M.G. *Etched Beads in India (Deccan College Monograph Series 4)*. Poona: Deccan College Post Graduate and Research Institute, 1949

FAWCETT, F. (1896). Rock-Cut Sepulchral Chambers in Malabar. *The Journal of the Anthropological Institute of Great Britain and Ireland*, Vol. 25 (1896), pp. 371-373. Royal Anthropological Institute of Great Britain and Ireland. Stable URL: <http://www.jstor.org/stable/2842033>

FAWCETT, F. (1896). South Indian Stone Circles. *The Journal of the Anthropological Institute of Great Britain and Ireland*, Vol. 25 (1896), pp. 373-374. Royal Anthropological Institute of Great Britain and Ireland. Stable URL: <http://www.jstor.org/stable/2842033>

GANESH, K.N.(1997). *Keralathinte Innalekal*. Thiruvananthapuram: Department of Cultural Publications, Government of Kerala.

GANESH K.N. (1999)“Historiographical Trends.” in *Perspectives on Kerala History: The Second Millennium (Kerala State Gazetteer, Vol II, Part II)*, edited by P.J. Cherian, 1- 23. Thiruvananthapuram: Kerala Gazetteers, Govt. of Kerala.

GANESH K.N. (2009). Lived Spaces in History: A Study of Human Geography in the Context of Sangam Texts. *Studies in History*. 25, 2 (2009): 151- 195. Sage publications

GEOLOGICAL SURVEY OF INDIA (GSI) (2010). *Geological Survey of India, Southern Region:: Briefing Book*. GSI. www. <http://www.portal.gsi.gov.in>. Accessed on 1st February 2011

GEOLOGICAL SURVEY OF INDIA (GSI). http://www.portal.gsi.gov.in/portal/page?_pageid=108,717695&_dad=portal&_schema=PORTAL. Accessed on 3/03.2011

GEORGE, K.M. and R.N. MEHTA.(1974) *Megaliths at Machad and Pazhayannur, Talappally Taluka, Trichur District, Kerala State*. Vadodara: Department of Archaeology and Ancient History, Faculty of Arts, M. S. University, Baroda. 1974.

GEORGE, K.M. “Archaeology of Kerala (Upto 1500 AD).” PhD Dissertation, M.S. University, Baroda. March, 1975.

GEORGE V. (2006). Megalithic Burial Site at Kattapana, Idukki District. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. Pp 85

GURUKKAL Rajan. (1989) “Forms of Production and Forces of Change in Early Tamil Society.” *Studies in History* 5, 2 159-175.

GURUKKAL, Rajan. (1999) “Historical Antecedants.” in *Perspectives on Kerala History: The Second Millennium (Kerala State Gazetteer, Vol II, Part II)*, edited by P.J. Cherian, 24-37. Thiruvananthapuram: Kerala Gazetteers, Govt. of Kerala, 1999.

GURUKKAL, Rajan and RAMESH B.R..(2007). *Forest Landscapes of the Southern Western Ghats, India: Biodiversity, Human Ecology and Management Strategies*. Pondicherry: Institut Français de Pondichéry

GURUKKAL, Rajan and VARRIAR, Raghava (1991). *Keralacharitam*. Sukapuram: Valathol Vidyapeetham.

GURUKKAL, Rajan and VARRIAR, Raghava (1999). *Cultural History of Kerala Vol 1*. Thiruvananthapuram: Department of Cultural Publications, Government of Kerala

GUPTA, Parameswari Lal (1965). *The Early Coins from Kerala (Government of Kerala, Department of Archaeology, Series No.1)*. Thiruvananthapuram: Department of Archaeology, Government of Kerala.

HART, George L. and HANK, Heifetz. trans. and ed. (1999), *The Puranānuṛu*. The USA: Columbia University Press.

HARVEY, David (2001), *Spaces of Capital: Towards a Critical Geography*, pp.222 –23. New York: Routledge

Indian Archaeology: A Review (1957-58). New Delhi: Archaeological Survey of India

Indian Archaeology: A Review (1960-61). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1961-62). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1962-63). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1963-64). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1965-66). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1966-67). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1967-68). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1968-69). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1969-70). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1970-71). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1971-72). New Delhi: Archaeological Survey of India.

Indian Archaeology: A Review (1974-75). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1977-78). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1978-79). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1979-80). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1980-81). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1982-83). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1985-86). New Delhi: Archaeological Survey of India
Indian Archaeology: A Review (1989-90). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1990-91). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1991-92). New Delhi: Archaeological Survey of India..
Indian Archaeology: A Review (1992-93). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1993-94). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (1995-96). New Delhi: Archaeological Survey of India
Indian Archaeology: A Review (1996-97). New Delhi: Archaeological Survey of India.
Indian Archaeology: A Review (2000-01). New Delhi: Archaeological Survey of India.

INDUCHUDAN, V.T.(1970) “Archaeological Excavations in Kodungallur: A General Impression.” *Journal of Indian History* XLVII,1 (April 1970): 169-188.

IYER, Krishna L.A.(1948). *Kerala- Past and Present. Vol 1: The Prehistoric Archaeology of Kerala*. Thiruvananthapuram: L.K.B Ratnam, Thycad

IYER, KRISHNA L.A.(1967). *Kerala Megaliths and their Builders*. Madras: University of Madras

JOUSSAUME, Roger(1985). *Dolmens for the Dead: egalith Building throughout the world*. London: Batsford

KRISHNASWAMY, V.D. “Megalithic Types of South India.” *Ancient India* 5 (1949): 35-45. New Delhi:ASI,1984.

LOGAN, William(1887). *Malabar: Voll*. Madras: Government Press, 1951 (First published in1887)

MENON, Sudhakara T. (1973). “Our Iron Age.” *Bulletin of the Ramavarma Research Institute* IX,I (Reprint 1973) 11-14. Trissur: Kerala Sahitya Academy

MORELAND, John. (2001). *Archaeology and Text*. P. 83. London: Gerald Duckworth and Co. Ltd.

- MORRISON, Kathleen D. (2002) "Pepper in the hills: upland- lowland exchange and the intensification of spice trade." in *Forager-Traders in South and South- East Asia: Long – Term Histories*, edited by Kathleen D. Morrison, and Laura L. Junker: 105-128. Cambridge: Cambridge Univesity Press.
- M.G.UNIVERSITY (2008). Unpublished report of the excavations at Anakkara, Palakkad District for the year 2008
- M.G.UNIVERSITY (2009). Unpublished report of the excavations at ANakkara, Palakkad District for the year 2008
- MOORTI Udayaravi S. (1994) *Megalithic Culture of South India: Socio- Economic Perspective*. Varanasi: Kaveri Publishing House.
- NARASIMHAIH B (1980). *Neolithic and Megalithic Cultures in Tamil Nadu*. Delhi: Sundeep Prakashan
- NASH George(2008). Encoding a Neolithic Landscape: The Linearity of Burial Monuments along Strumble Head South West Wales. *Time and Mind*. Volume I: Issue III, November 2008. pp 345-362
- PARPOLA, Asko (1973). *Arguments for an Aryan Origin of South Indian Megaliths*. Tamil Nadu: State Department of Archaeology.
- PETER Jenee (2002). *Dimensions of Megalithic Culture of Kerala in Relation to Peninsular India: An Interdisciplinary Approach*. PhD Dissertation, M.S. University, Baroda, May,2002.
- PILLAI, Elamkulam Kunjan P.N. (1959) *Annathe Keralam*. Kottayam: the Author.
- PILLAI Elamkulam P.N.(1961) *Keralam Anchum Aarum Noottandukalil* .Kottayam:Sahitya Pravartaka Sahakarana Sangam, 1961
- Pillai, V.R. Parameswaran trans. (1969), *Purananuru*.Thrissur: Kerala Sahitya Academy.
- PLENDERLEITH, H.J. (1930). Black Polished Pottery from Urn Burials in the Wynad. *Man*, Vol. 30 (Oct., 1930), pp.190-196. Royal Anthropological Institute of Great Britain and Ireland.Stable URL: <http://www.jstor.org/stable/2790468>
- PRASSANAKUMAR, V. (2007) *Geomorphology of Kerala*. Kariavattom: International centre for Kerala Studies, University of Kerala

RAJAN, K.(1994) *Archaeology of Tamilnadu (Kongu Country)*. Delhi: Book India Publishing Company.

RAJAN, K.(1997) *Archaeological Gazetteer of Tamil Nadu*. Thanjavur: Manoo Pathippakam

RAMACHANDRAN, K.S. (1969-70). 'Chronology of Indian Megaliths: Some Considerations'. *Purātattva: Bulletin of the Indian Archaeological Society*. No.3. 1969-70. pp.107-109. Varanasi: Indian Archaeological Society, Banaras Hindu University.

RAMANNA, H.S.(1983). *Megaliths of South India and South East Asia*. . Madras: New Era Publications.

RAMESH, B.R. and GURUKKAL, Rajan (2007). *Forest Landscapes of the Southern Western Ghats, India: Biodiversity, Human Ecology and Management Strategies* (Collection Ecologie – 40). Pondicherry: French Institute of Pondicherry

RAO, K.P. (1988). *Deccan Megaliths*. New Delhi: Sundeep Prakashan

RBI MONETARY MUSEUM. Ancient India Coinage. <http://www.rbi.org.in/currency/museum/c-ancient.html>. Accessed on 19th March 2011

REA, Alexander. (1911)Annual report of the Archaeological Department, Southern Circle Madras for the year 1910-1911. Madras: Superintendent, Government Press

SANALKUMAR, V.(2006). Palakkad Jillyile Puravastu Kandethalukal 2005-2006. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti.pp.86-94

SASISEKARAN. B.(2004). *Iron Industry and Metallurgy: A Study of Ancient Technology*. Chennai: New Era Publications

SATHYAMURTHY T. *The Iron Age in India: A Report on Mangaduu Excavation*. Thiruvananthapuram: Department of Archaeology, Government of Kerala, 1992.

SATHYAMURTY, T. *Catalogue of Roman Gold Coins (in the Collections of Department of Archaeology, Kerala)*. Thiruvananthapuram: Department of Archaeology, Government of Kerala, 1992

SATYAMURTHY, T.(2000) "The Megaliths of Kerala: Retrospect and Prospect." in *Narasimhapriyā: Essays on Indian Archaeology, Epigraphy, Numismatics, Art, Architecture, Iconography, Cultural History*, edited by I.K.Sharma, Deoraj D.V., and R. Gopal, 30-37. New Delhi: Sundeep Prakashan.

SELVAKUMAR, V., SHAJAN K.P., and Roberta TOMBER “Was Pattanam Ancient Muziris?” *Man and Environment* XXX, 2 (2005): 66-73.

SEWELL, Robert (1882). *The antiquarian remains of the presidency of Madras*. Madras: Government Press

SHAJAN, K.P.(2004) “Geoarchaeology of the Coastal Areas in Central Kerala.” *The Journal of the Centre for Heritage Studies* 1: 83-88.

SHAJAN, K.P. (2006). Discovery of Antiquarian Remains in Central Kerala. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. pp 96

SHAJAN, K.P. and V.SELVAKUMAR (2006). New Archaeological Sites in Thrissur and Alappuzha Dts., Kerala. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. pp 96-97

SHAJAN, K.P. and V.SELVAKUMAR (2006). Recent Discovery of Archaeological Sites in Ernakulam Dt., Kerala. *AdhAram: A journal of Kerala Archaeology and History: Vol 1*. Kottayam: Kerala Puratattva Samiti. pp 95-96

SHARMA, Y.D. “Rock Cut Caves in Cochin.” *Ancient India* 12 (1956): 93-115. New Delhi: Archaeological Survey of India.

SOMAN, K. *Geology of Kerala*. Bangalore: Geological Society of India, 2002.

SRINIVASAN, K.R.(1946) “The Megalithic Burials and Urn Fields of South India In the Light of Tamil Literary Tradition.” *Ancient India* 2 : 9-16.

SRINIVASAN, K.R. and BANERJEE (1953). Survey of South Indian Megaliths. *Ancient India* No. 9. New Delhi: ASI. Pp.

SUNDARA, A. (1975). *The Early Chamber Tombs of South India*. Delhi: University Publishers

SURVEY OF INDIA (SoI). <http://www.surveyofindia.gov.in/>. Accessed on 10/03/ 2011

THAPAR, B.K. “Porkalam 1948: Excavation of a Megalithic Urn Burial.” *Ancient India* 8(1952): 3-16. New Delhi: Archaeological Survey of India.

The Director (1921) Annual report of the Archaeological Department, Southern Circle Madras for the year 1920-1921. Madras: Superintendent, Government Press

- _____. (1914). Annual report of the Archaeological Department, Southern Circle Madras for the year 1913-1914. Madras: Superintendent, Government Press
- _____. (1912) Annual report of the Archaeological Department, Southern Circle Madras for the year 1911-1912. Madras: Superintendent, Government Press
- TILLEY, Chris (1994). Patterns of Intervisibility. *A Phenomenology of Landscape: Place, Paths and Monuments*. UK: Berg Publishers. pp 156-165
- VARGHESE, Rachel A. (2008). *From Archaeological Sources to Aspects of Early Social Formation in Kerala: Trade and Communication Indices*. Unpublished dissertation submitted to the Jawaharlal Nehru University in partial fulfilment of the award of MPhil degree. Centre for Historical Studies, JNU.
- VAVOURANAKIS, Georgios (2006). Burials and the Landscapes of Gournia, Crete, in the Bronze Age. Robertson, Elizabeth C., Seibert Jeffrey D. et.al., (eds) . *Space and Spatial Analysis in Archeology*. Canada: University of Calgary press. Pp. 233- 242.
- VARRIER, Raghava M.R. "Pracheena Keralathile Pattanangal." in *Keraleeyatha: Charitramanangal*, 9-21 Sukapuram: Valathol Vidyapeedhom, 1990.
- VELUTHAT, Kesavan (2002). "Logan's Malabar: Text and Context" in *William Logan's Malabar Manual, Vol.1* (New Volume with Commentaries), edited by State Editor, Kerala Gazetteers, xxxvii- xlvi. Thiruvannthapuram: Kerala Gazetteers.

APPENDICES

APPENDIX I: Talukwise Distribution of Megaliths in the Study Area

District: Malappuram

Site	Taluk*	Locational Peculiarities	Monument type**	Description	Assemblage	Remarks	Reference
Alancode	Ponnani		Stone circle (1)				SEWELL 1882
Alancode	Ponnani		<i>Kudakkal</i>				IAR 1970-71
Alancode	Ponnani		Urn				IAR 1970-71
Alancode	Ponnani		<i>Topikkal</i>				IAR 1978- 79
Alathur***	Perinthalmanna		<i>Kudakkal</i>				GURUKKAL and VARRIER 1999
Anampara	Ernad	Laterite Hillock	Cist Circles (13) Multiple hood stones (<i>topikkal</i> s) (2)	Maximum outer diameter of circle: 6.7m. The hood stones are made of dressed laterite blocks and are located close to each other		Evidence of destruction of other hood stones in the area	GEORGE 1975
Ananthavur	Perinthalmanna		Cist Circles (3)	1/2 meter below surface, near to each other			IAR 1970-71, SEWELL 1882

* In cases where the taluk cannot be identified it is indicated by '—'

** If the number of monuments of a particular category found from a site is known, the figure is indicated within brackets near the monument type.

Atavanad	Tirur		Menhirs (4)				SEWELL 1882
Atavanad	Tirur		Rock cut caves(12)				SEWELL 1882
Chekkoḍu	Ponnani		Rock cut cave (1)				SEWELL 1882
Cheriyavarapūr	Tirur		Rock cut caves (some)				SEWELL 1882
Kacherikunnu	Ernad				Red earthen jars with slightly pointed base possibly of meg culture	site highly disturbed	GEORGE 1975
Kaladi	Ponnani		Rock cut caves				IAR 1969-70
Kammanam	-		Menhirs (2)				SEWELL,1882
Kammanam	-		Stone circles (5)				SEWELL 1882
Karukka	Tirur		Stone circles (2)				SEWELL 1882
Karukka	Tirur		Dolmens (2)				SEWELL 1882
Karukka	Tirur		Menhir (1)				SEWELL 1882
Karulayil Range	-		Menhir	Granite			IAR 1980-81
Kāttaparutti	-		<i>Topikals</i> (36)				SEWELL 1882
Kāttaparutti	-		Menhirs (2)				SEWELL 1882
Kāttaparutti	-		Stone circles (2)				SEWELL 1882
Kilikollur***	-		<i>Kudakkal</i>				GURUKKAL and VARRIER 1999
Klāri desam	Tirur		Stone circles (2)				SEWELL 1882

Kodakkal parambu (N 11°11'32" E75°50'41".8)	Tirurangadi		<i>Topikkal</i>	intact		Local reports of many such <i>topikkals</i> which were destroyed	DARSANA and SELVAKUMAR 2006
Kodungathu Desom	-		Rock cut cave				IAR 1971-72
Koduvayur	-		Kudakkal				IAR 1970-71
Kotakkal***	Ernad		Kudakkal				GURUKKAL and VARRIER 1999
Kottilangadi	Perinthalmanna		Rock cut cave				IAR 1974-75
Kumāranallūr	-		Menhir(1)				SEWELL 1882
Kumāranallūr	-		Stone circle(1)			„	SEWELL 1882
Kuttiapala	-		Rock cut caves		-Red slipped bowl painted with russet-coated yellow wavy lines. -BRW bowls, dishes, plates		IAR 1970-71
Manjeri	Ponnani		Flat circular cap stone				
Melmuri	Perinthalmanna		Kudakkal				IAR 1970-71
Melmuri	Perinthalmanna		Stone circles (10)				IAR 1970-71
Melmuri	Perinthalmanna		Rock cut cave				IAR 1970-71
Nallandanni	Ernad		Urns (3)	1/2 meter below surface near to each other			GEORGE 1975
Niramauttūr	Tirur		Topikal (2)				SEWELL 1882
Ōlūr	Tirur		Dolmen (1)				SEWELL 1882
Ōlūr	Tirur		Rock cut cave				SEWELL 1882

			(1)				
Ōlūr	Tirur		Stone circle (1)				SEWELL 1882
Ozhur	-		Kudakkal				IAR 1970-71
Parnundam	Ernad		Kudakkal				IAR 1970-71
Parutūr	-		Stone Circle (1)				
Pathippara	Ernad		Urn burial (1)	Round granite cover stone			GEORGE 1975
Pathappirium	Ernad	Area of about 500sq. meter, Lateritic plain	Urn burials (>15) Stone circles Port holed cists	circular or rectangular cover stones Laterite stones, cairnpacking insidewith laterite soil and granite chips to a height of 1m overground 1/2 meter below rock surface Port holes on eastern orthostats	Pottery Iron objects reported, dagger identified		GEORGE 1975
Ponmala	Ernad		Rock cut cave	Double chambered			IAR 1970-71
Ponmundam	Tirur		Topikal				IAR 1978-79
Ponnani	Ponnani		Rock cut caves		BRW, Iron implements		IAR 1960-61
<i>Ponnani</i>	<i>Ponnani</i>				<i>RCPW (wavy line) that</i>		IAR 1970- 71: 19

					<i>overlaps with BRW in early centuries of Christian era.</i>		
Pudukkode, Vazhayoor Village (N 11 ⁰ 11'45"8, E 75 ⁰ 52' 56" 8)	Ernad		<i>Kudakkal</i>	Intact Laterite Height: 1.38m Diameter: 2.6m		Local populace reported existence of another <i>kudakkal</i> and rock cut cave that are destroyed	DARSANA and SELVAKUMAR 2006
Pulukunnu, Chelambra Village (N11 ⁰ 10'26".0 E75 ⁰ 50'41".8)	Ernad	Laterite deposit	Rock Cut Cave	Single oval shaped chamber port hole on top, flight of steps, entrance on side	Iron axes, BRW bowls, pottery ring stands		DARSANA and SELVAKUMAR 2006
Punchakolli	Ernad		Urns(3)	in a row			GEORGE 1975
Tānālūr	Tirur		Rock cut cave (1)				SEWELL 1882
Tharanur	Ponnani		Rock cut caves				IAR 1969-70
Tāvanūr	Tirur		<i>Topikal</i>				IAR 1969-70
Tāvanūr	Tirur		Stone Circles (4)				SEWELL 1882
Tāvanūr	Tirur		Menhirs				IAR 1978-79
Thannairkode	-		Topikal				IAR 1978-79

Thirunavaya	Tirur		Menhirs				IAR 1970-71, 1978-79
Thirunavaya	Tirur		Rock cut cave (1)				SEWELL 1882
Tripurangōd	Tirur		<i>Topikals</i> <i>/kudakkals</i> (3)				SEWELL 1882
Vadakkupuram	-		Dolmens (18)				SEWELL 1882
Valavānūr	Tirur		Stone Circles (2)				SEWELL 1882
Valavānūr	Tirur		Rock cut caves (2)				SEWELL 1882
Vengara***	Perinthalmanna		<i>Kudakkal</i>				GURUKKAL and VARRIER 1999

District: **Palakkad**

Site	Taluk*	Locational Peculiarities	Monument type**	Description	Assemblage	Remarks	Reference
Akathethara***	Palakkad		Cists(35)				ABRAHAM 2002
Akathethara***	Palakkad		Stone circles(14)				ABRAHAM 2002
Alanallur	Mannarkkad		Multiple hoodstones (50)				IAR 1968- 69
Alathur	Alathur		Urns (50)				IAR 1969- 70
Alathur	Alathur		Dolmenoid cists				IAR 1969- 70
Anakkatti	-		Menhirs (3)	Granite			IAR 1979-80
Anayadiampar	Alathur		Cists (8)				ABRAHAM

utha in Kizhakkencher ry Village ***							2002
Anakkara	Ottappalam		RockCut Caves (4)				SEWELL 1882
Anakkara**** - Chattiparamb- Chuliparamb	Ottapalam		Kudakkal: ANK08I -N 10 ⁰ 49'047" E 076 ⁰ 02'545 Multiple hood stone circle enclosing three urns:ANK08II- N 10 ⁰ 49'047" E 076 ⁰ 02'544 Urn :ANK08VI			Discussed in detail in the study	MGU 2008 Fieldwork 2010
Anakkara- Chulliparamb	Ottapalam	Further uphill from the above	Cap stone N10 ⁰ 49'120" E76 ⁰ 02'588"			Locals reported that a number of urns were found during the construction of a house nearby	MGU 2008 Fieldwork 2010
Anakkara- Nasranikunn	Ottaplam		Rock cut cave enclosed within slab circle: ANK09VI- N10 ⁰ 49'014" E76 ⁰ 02'249 Stone circle:			Discussed in detail in the study	MGU 2009 Filed work 2010

			ANK10VII- N10 ⁰ 49'009" E76 ⁰ 02'245"				
			Menhir: ANK10VIII N10 ⁰ 48'997" E76 ⁰ 02'239"				
Anakkara Near Pallial house	Ottapalam	Found on the road on the slope of a hillock.	Urn Cap stone N10 ⁰ 49' 142" E76 ⁰ 02' 620"			Discussed in detail in the study	Fieldwork 2010
Annakkara	Ottapalam?	40.2km south- south east of Ponnani	Menhirs (4)				SEWELL 1882
Annakkara	Ottapalam?	40.2km south- south east of Ponnani	Rock Cut Caves (12)				SEWELL 1882
Angadi	-		Kudakkal				IAR 1970-71
Arayakulam	Chittoor	1km west of Thekkinchira puraand near Kushavankode in Kollamkode panchayath	Cists (5)			Many monuments are reported destroyed	SANALKUM AR 2006
Attappady	Mannarkkad		Menhirs (50)	Cluster			IAR 1968- 69
Chattanpara	Chittoor	Near Govindatheerth am lake at the base of Perumalmala, 3km north of	Cists (6)		<i>Reports of carnelian beads and bangles found when some other cists were</i>		SANALKUM AR 2006

		Kachamkurissi temple			<i>disturbed due to agricultural activity</i>		
Chattanpara-Govindanmala	Chittoor	On the climb from Chattanpara to Govindanmala	Cists (5)				SANALKUM AR 2006
Chinganchira	Chittoor	West of river Palakapandi a tributary of Gayatriputha, 1 km South of Tekkinchirappu rai	Cists(10) Urns			<i>Kallara</i> (possibly rock cut caves) (10) found 50m away Located near Karukaswami kovil, an ancient place of worship	SANALKUM AR 2006
Chitalancheri ^{***}	Alathur		Stone Circles(30)				ABRAHAM 2002
Chitalancheri ^{***}	Alathur		Cists (14)				ABRAHAM 2002
Chitalancheri ^{***} * N 10° 36' 0.1", E 76° 33' 13.1"	Alathur		Cist (1) Stone circle(1)	Both built of laterite blocks. Cist: a capstone and side slabs	<i>Villagers report that the cist used to contain an urn about a meter deep.</i>	Burials belong to the same complex Laterite is not available in the vicinity	ABRAHAM 2002
Chulanur ^{***}	Alathur		Cists (42)				ABRAHAM 2002
Chulanur ^{****} N 10° 42' 1.6", E 76° 28' 9.8"	Alathur	On top of an outcrop.	Cists (1)		<i>Some sherds collected from the site</i>	Villagers report an urn, iron, beads (10-15), small pots, and	ABRAHAM 2002

						terracotta pendants from the site	
Edappa	Mannarkkad		Cist				IAR 1968- 69
Edathara ***	Palakkad		Cists(2)				ABRAHAM 2002
Elambilaikalam **** N 10° 35' 10.0" E 76° 38' 28.4"	Chittoor	25x45 m ² Base of a large granite outcrop Stone circles along the south west border of the outcrop	Cists(2) Stone circles(3)	All stone circles made of granite slabs		The burials are of a single complex Locals report the existence of a stone circle atop an adjacent outcrop	ABRAHAM 2002
Elampulasserry	Ottappalam		Rock cut cave	Circular Top opening			IAR 1967-68
Elavancheri	Chittoor		Dolmens				IAR 1969- 70, 1978-79
Elavancheri ***	Chittoor		Cists(30)				ABRAHAM 2002
Elavancheri .**** N 10° 35' 38.8", E 76° 38' 45.8"	Chittoor	Along the southwest edge of a grassy scrubland slope of a granite outcrop unsuitable for agriculture.	Stone circle (7) Cists (4) Stone circle with cist (3)			Burials in a complex	ABRAHAM 2002
Erimayur ***	Alathur		Stone Circles (250)				ABRAHAM 2002
Erimayur ***	Alathur		Cists (120)				ABRAHAM 2002
Eravattaparathy	Chittoor		Cist				IAR 1969- 70

Ilampilav, Koduvalpara	Chittoor	Base of Kongor hill, 2km east of Govindanmala (hill), south west of river Ikshumati in Elavancheri panchayat	Dolmenoid cist Cist (>15) Menhir (10)	Small		Many of the cists were found opened	SANALKUAR 2006
Kalladikode-Minakasseri ^{****} N 10° 51' 36.5", E 76° 31' 25.0"	Palakkad?	The soil here is compact, with little visible granite.	Urn(1)		Some charcoal fragments were reported found at the bottom of one vessel,	local residents reported 20 "rather small" urn burials (usually covered with a capstone) and slab cists that were destroyed..	ABRAHAM 2002
Kallekad ^{****} N 10° 47' 13.6", E 76° 35' 30.8"	Chittoor	Undulating pastureland adjoining a granite quarry.	Stone circle(1)			Landscape highly disturbed	ABRAHAM 2002
Kachamkurissi	Chittoor	Distributed on the bank of river ikshumathi and <i>Vakol</i> rock 1km south of Mukkarashank unn	Cists(10)			Near Payallur Kachamkurissi temple Destruction of <i>kallara</i> and urns during road construction and agriculture reported	
Kaladi	-		Rock cut cave	Central pillar	Two BRW		IAR 1965-66.

				Side opening	vessels with Globular profile and round base		
Kalladikode***	Palakkad		Cists(32)				ABRAHAM 2002
Kannachiparutha	Alathur	On a small hillock About 100 sq.m area.	Dolmens (6)	Highly ruined			GEORGE 1975
Kapur	Ottappalam		Kudakkal				IAR 1970-71
Kapur	Ottappalam		Cist Burials				IAR 1970-71
Kapur	Ottappalam		Stone Circle				SEWELL 1882
Kannadi	Palakkad		Dolmens (3)				SEWELL 1882
Kannadi	Palakkad		Menhirs (12)				SEWELL 1882
Kannanūrpāttola	Alathur		Dolmens (46)				SEWELL 1882
Kannanūrpāttola	Alathur		Menhirs (184)				SEWELL 1882
Karimbal	Mannarkkad		Rock cut caves				IAR 1969-70
Kāvaśēri	Alathur		Cairn Circles				IAR 1969- 70
Kāvaśēri	Alathur		Dolmens (150) Menhirs (600)			The dolmens and menhirs occur in a group	SEWELL 1882
Kāvelpād	Palakkad		Dolmens(132) Menhirs (585)			Dolmens and menhirs occur in “large” group	SEWELL 1882
Kiīṛakkambaram	Palakkad		Dolmens and Stone circles (24)			Occur in a group	SEWELL 1882

			Menhirs (96)				
Kollamchalla	Chittoor	Hill top, 1km west of Thekkinchira, north of sitharukund falls	Cist Dolmenoid Cist			Cist is almost entirely destroyed	SANALKUM AR (2006)
Konnampara ^{***} * N 10° 48' 19.6" E 76° 48' 57.9"	Alathur?	20000m ² The complex is located in an area with a mild slope and small rocky outcrop to the east.	Cists (33) Cists? (6) Capstone (10)			Burials of a single complex	ABRAHAM 2002
Kōdandarapalli	Palakkad		Dolmens (36)				SEWELL 1882
Kongad	Palakkad		Dolmens surrounded by stone circles (8)				SEWELL 1882 IAR 1978-79
Kongad	Palakkad		Menhirs (32)				SEWELL 1882
Kornapara	Alathur	Hill top Forested with big trees and bushes	Dolmens (>25)	Multiple dolmens present Majority has E-W orientation Granite chips heaped in the base with circle of stones around it			GEORGE 1975
Kornapara (Palakuzhy) ^{***}	Alathur		Cists (5)				ABRAHAM 2002

Kottahara	Mannarkkad		Menhirs (40)	Granite			IAR 1979- 80
Kūdalūr	Chittoor		Dolmens (28)				SEWELL 1882
Kumaramputhur	Mannarkkad		Urn		BRW, Iron implements	Site disturbed by quarrying	IAR 1962-63
Kuniśśēri	Alathur		Dolmens (120) Menhirs (25) Stone circles (250)			All three types occur in a group	SEWELL 1882
Kuniśśēri**** N 10° 39' 45.4", E 76° 34' 56.3"	Alathur	In a coconut field near the village. The village is located along the crest of rocky outcrop surrounded by forest.	Cists(2) Urn(1)			The burials belong to a single complex	ABRAHAM 2002
Kuṛalmannam	Palakkad		Menhirs (5)				SEWELL 1882
Kutallūr	Alathur		Dolmens (28)				SEWELL 1882
Kutallūr	Alathur		Menirs(75)				SEWELL 1882
Kuthanur	Palakkad		Cist				IAR 1969- 70
Kuthanur	Palakkad		Dolmens (37)				SEWELL 1882
Kuthanur	Palakkad		Menhirs(12)				SEWELL 1882
Kuthanur	Palakkad		Stone circles(3)				SEWELL 1882
Kutharamuli**** N 10° 36' 23.6", E 76° 43' 13.5"	-	Near the base of the Ghat Mountains in the southeast portion of the Gap. The soil here is very hard and	Urns(2)	One urn whole (diameter=76cm), second partial (diameter =58cm)		Locals report destruction of several more urns	ABRAHAM 2002

		infertile					
Māttamattipora i, Koomanpara	Chittoor	North of river Ikshumathi, 3lm south west of Mukkarashinku nn	Cists (35) Menhir Baby cist?	Both small and large cists		Many are found in a highly disturbed condition	SANALKUM AR 2006
Makkanamkursi	Chittoor	One km west of Arayakulam	Urns			Were found near a <i>Siva</i> temple in destructed condition	SANALKUM AR 2006
Mangalam	Alathur		Dolmens (8)				SEWELL 1882
Mangalam	Alathur		Menhirs (some)				SEWELL 1882
Manjalloor	Alathur		Dolmens			Sewell reports single dolmen	IAR 1978-79, SEWELL1882
Manjalloor***	Alathur		Cists (35)				ABRAHAM 2002
Manjalloor**** 10° 39' 40.2", E 76° 35' 57.3"	Alathur	Area of 300m ² The land slopes away from the temple, and around the south-western and western slope, the slab cists are arranged along the slope almost in line	Cists(7)		<i>A fragment of iron slag was found from the area.</i>	Burials of a complex Located in the grounds of Ayyapan kav temple Locals report presence of more cists in the area earlier	ABRAHAM 2002
Mannalūr	Palakkad		Dolmens (4)				SEWELL 1882
Mannalūr	Palakkad		Menhirs(15)				SEWELL 1882
Mannarkkad	Mannarkkad		Cist				IAR 1968- 69

Mattūr	Palakkad		Dolmens (14)				SEWELL 1882
Mattūr	Palakkad		Menhirs (44)				SEWELL 1882
Mudupullur**** N 10° 36' 40.1", E 76° 31' 39.2"	Alathur		Cist(1)	Made of six stone slabs		Two stone circles in the near vicinity were were tentatively identified. Heavily damaged	ABRAHAM 2002
Mukkarashank unn (Agasthyagiri)	Chittoor	½ km west of Pulimandam	<i>Kallara</i> (Rock cut Cave?) (5) <i>Kalasham s</i> (urns/ burial assemblage?)			Reports of destruction of monuments during construction activity in the region	SANALKUM AR 2006
Mukhaparutha in Kizhakkencher ry Village***	Alathur		Cists(8)				ABRAHAM 2002
Mundur	Palakkad		Dolmens (6)				SEWELL 1882
Mundur	Palakkad		Menhirs(34)				SEWELL 1882
Mundur	Palakkad		Stone circles (9) Stone Circles (15)				SEWELL 1882 ABRAHAM 2002***
Mundur	Palakkad		Cist				IAR 1969-70
Munippara	Alathur	Densely forested hill	Dolmens(5)	Near each other Comparatively smaller than those of Kornapara lying 3km east			GEORGE 1975

Naduvattom	Ottappalam		Burial jars and circular pits				IAR 1968-69
Nagalasserry	Ottappalam		Urns				IAR 1970- 71
Nalancheri**** N 10° 35' 23.8", E 76° 39' 36.2"	-	Atop a granite outcrop, its base heavily overgrown, a portion of which is being cleared for a new road.	Cist(1)	Flat extant cap stone	<i>Iron slag from adjacent field paths</i>		ABRAHAM 2002
Nannangadi	Alathur	On a small hillock Densely forested before.	Dolmens (11)	East- West orientation Of granite stones available from the site			GEORGE1975
Padupariyaram	Palakkad		Cist				IAR 1969-70
Palakuzhy***	Alathur		Cists (8)				ABRAHAM 2002
Palavur**** N 10° 38' 02.1", E 76° 37' 18.8"	Chittoor	Along the eastern slope of a large shallow hillside, with scraggy granitic terrain	Cists(4) Cist? (1) Stone circles(2)			From a single burial complex	ABRAHAM 2002
Pallasana	Chittoor		Dolmens (100)				SEWELL, 1882, IAR 1969-70, 1978-79
Pallasana	Chittoor		Menhirs (400)				SEWELL 1882
Pallasana**** N 10° 37'	Chittoor	Over an area 30000m ² Solitary unit	Urns(8) Cap stone (6) Cists(28)			Burials of a complex	ABRAHAM 2002

10.0'', E 76° 39' 12.8''		atop an outcrop with rest scattered below	Cists? (6) Stone circle with cist(3) Stone circle(2)				
Pallatheri**** N 10° 45' 5.6'', E 76° 43' 17.5''	Palakkad	Over an area of 60000 m ² The separate smaller assemblage of 17 'miniature' megaliths consisting of both slab cists and urns	Urns(17) Urn?(1) Urn burial with stone slab(2) Jar burials(1?) Stone circle? (1) Cists(21) Cists?(4)			Burials of a complex Adjoining the Sri Parukkan- chery temple. Report of quartz microliths from the area (GEORGE 1975)	ABRAHAM 2002
Pallatheri	Palakkad	Area of 100 sq.m.	Cists (10) Cist Circle	Some of them are multi- chambered		Bhagavati temple compound	GEORGE 1975
Pallatheri	Palakkad		Dolmen (1)				SEWELL 1882
Pallatheri	Palakkad		Menhir (4)				SEWELL 1882
Pallatheri	Palakkad		Stone circles (1)				SEWELL 1882
Pallavaeer	-		Cists				IAR 1960- 61
Pallavaeer	-		Stone Circles				IAR 1960- 61
Pallavūr	Chittoor		Dolmens (82)				SEWELL 1882
Pallavūr	Chittoor		Menhirs(306)				SEWELL 1882
Panañjatiri	Chittoor		Dolmens (16)				SEWELL 1882
Panañjatiri	Chittoor		Menhirs (60)				SEWELL 1882
Panañjatiri	Chittoor		Stone circles (15)				SEWELL 1882
Panankavu	Chittoor	3km north of Arayakulam	Cists (2)			South of Tirunakkurishi	SANALKUM AR 2006

						Siva temple The place has yielded terracotta figurines also	
Parayan pallam, Muthalamada panchayat	Chittoor	North bank of Palakappandi river, a tributary of Gaytripuzha	Cists (10)			Two were opened by the public out of curiosity	SANALKUM AR 2006
Parli ^{***}	Palakkad		Cists (5)				ABRAHAM 2002
Pazhambalikode ^{****} N 10° 41' 35.6", E 76° 27' 4.8"	Alathur	20x35m area Bordered to the south by fields and to the north by a granite outcrop.	Stone circles(7)	Made of laterite		Laterite is not found in the immediate vicinity. All but one in severe state of damage Burials of the same complex Reports of more monuments that were destructed.	ABRAHAM 2002
Pezhanpotta purai, Muthalamada panchayat	Chittoor	1km south west of Parayanpallam , North bank of Palakappandi river, a tributary of	cists (27) Baby cists? (2) Urns			stones resembling slab stones for cists and capstones also found.; locals report destruction of	SANALKUM AR 2006

		Gaytripuzha				more monuments	
Pudussery***	Palakkad		Cists (26)				ABRAHAM 2002
Pulimandam	Chittoor	In Payyalur, 2km east of Makkanamkuri ssi	Menhir				SANALKUM AR 2006
Tadukuśseri	Palakkad		Dolmens surrounded by stone circles(82) Menhirs (328)	Occur in a "large group"			SEWELL 1882
Tadukuśseri***	Palakkad		Cists(32)				ABRAHAM 2002
Tadukuśseri**** N10° 49' 23.3", E 76° 28' 20.0"	Palakkad		Urns(2)		Some sherds of thick coarse pottery as well as "an unusual fragment" of a fine ware with red slip and yellow painted lines (RCPW?) found in survey	The burials belong to the same complex. Possible remnants of 2 more urns found.	ABRAHAM 2002
Tarūr	Alathur		Dolmens (17)				SEWELL 1882
Tarūr	Alathur		Menhirs (136)				SEWELL 1882
Tarur	Alathur		Cairn circles				IAR 1969- 70
Tekkinchirappu rai, Kollenkode	Chittoor	Hillock , ½ km north of	Slab cists (10) Urn		Carnelian bead find from the	Stones shaped for cist slabs	SANALKUM AR, 2006

panchayat		Pezhanpotta purai	<i>Kallara?</i> (possibly rock cut cave)		area	both rectangular and circular were found	
Tenmala	-		Topikkal				IAR 1978- 79
Thachanattukara	Mannarkkada		Menhir				IAR 1968- 69
Thenampathy	Chittoor		Cist				IAR 1969- 70
Theneri***	Palakkad		Cists (17)				ABRAHAM 2002
Thonipadam in Tarur village***	Alathur		Cists(23)				ABRAHAM 2002
Thonipadam in Tarur village***	Alathur		Stone circles (11)				ABRAHAM 2002
Thonipadam in Tarur village***	Alathur		Urn (1)	With capstone			ABRAHAM 2002
Ungallur	Ottappalam		Topikkal (1)				IAR1968- 69
Vadakarapatti	Chittoor		Cist	Chambered			IAR 1978- 79
Vadakkamšēri	Alathur		Dolmens (12)			“Groups of cromlechs are said to exist on the hills above this town”	SEWELL 1882
Vadakkamšēri	Alathur		Menhirs (48)				SEWELL 1882
Valivallampathy	Chittoor		Cist				IAR 1969- 70
Vaniyamkulam	Ottappalam		Rock cut cave	Circular domed vault, Rectangular opening on top			IAR 1968- 69
Vaniyamkulam	Ottappalam		Rock cut cave	Square, entrance to the			IAR 1978-79

				West Small opening on top			
Vattakkād	Chittoor		Dolmens (30)				SEWELL 1882
Vattakkād	Chittoor		Menhirs (88)				SEWELL 1882
Vellimazhi	-		Rock cut cave	Circular domed vault, Rectangular opening on top		disturbed	IAR 1968- 69
Vellinezhi	Ottapalam	Extended to a small river	Rock Cut Cave		sword, plough- share, ring stand, megalithic pottery.		IAR 2000-2001
Vengappara	Chittoor	Atop an elongated hillock 300 meters south of Kollamchalla	Cists (5)			Almost entirely destroyed	SANALKUM AR (2006)
Vilayanūr	-		Dolmens (35)				SEWELL 1882
Vilayanūr	-		Menhirs (10)				SEWELL 1882

District: **Trissur**

Site	Taluk*	Locational Peculiarities	Monument type**	Description	Assemblage	Remarks	Reference
Alur	Mukundapuram		Urn				IAR 1967-68
Anappara***	Trissur		Menhir				GURUKKAL and VARRIER 1999.
Angadiyur	-		Urns	Pyrifrom type			IAR 1968- 69
Cherakkunnu	Talapilly	Level ground	Cist circles (6)				GEORGE 1975

		In an area of 50 sq. meters		-avg. 5 m. diameter			
Cheramangad ***	Talappilly		Pits covered by <i>Topikkals</i> (3)	Many circular depressions One of the <i>topikkal</i> had two circular holes drilled into the it			GURUKKAL and VARRIER 1999: 112
			<i>Kudakkal s</i> (3)				
Choondal	Talappilly		Rock cut cave		BRW		IAR 1963-64
Chovannur	Talappilly		Rock cut cave	Hemispherical cave Two benches, one each on the Nortern and Southern Sides Five circular Vessel stands cut out of laterite on Western side	Red ware jars		SHARMA 1956
Churakkattukara ***	Trissur		Menhir				GURUKKAL and VARRIER 1999
Edakulathur	Trissur		Urn				IAR 1967-68
Elanad	Talappilly		Cist circles (3)	avg. diameter 6m		In a group	GEORGE 1975
Elanad	Talappilly	1 km south of the above	Cist circle (1)	avg. diameter 6m			GEORGE 1975
Elanthikkara ***	Talappilly		Dolmenoid cist				GURUKKAL

*** Indicates that the information is from studies based on published reports

							and VARRIER 1999
Eranallur	Talappilly		Urn				IAR 1967-68
Eyyal	Talapilly		<i>Kudakkal (35)</i>	3 are intact Description (possibly of a single selected monument) : 4 clinostats, basediameter:3. 45m, height from ground: 1.20m, circumference: 10.8m, length of clinostat: 2.7m	Vessels of fragile state Few bits of undistinguishab le bones		IYER 1948
Eyyal***	Talapilly		<i>Topikkals</i>				GURUKKAL and VARRIER 1999
Eyyal	Talapilly		Rock cut cave	Double chambered with a common courtyard First chamber: slightly bigger, central pillar, two benches Second chamber: Bench on South Western corner, carved	Bone fragments kept in pots of glazed BRW. Iron knives and swords Etched carnelian beads		SHARMA 1956 PETER 2002

				vessel stands			
Kadar, Anakkayam (N10°18'20"2, E 76°43'36"6)	Mukundapuram	Hill slope	Dolmenoid cists(2)	More than one chamber, capped with stone slabs		Disturbed; the chamber is open with some debris. Evidence of local worship in the form of incense sticks	AMRUTH 2006
Kadavallloor	Talappilly		Rock Cut Cave				IAR 2000-2001
Kakkad	Talappilly		Rock cut cave	Flight of three steps to reach the entrance One bench			SHARMA 1956
Kallumpuram, Kunnamkulam	Talappilly		Rock Cut Caves(2)		Pottery, Iron Implements		IAR 1992-93
Kandanissery	Talappilly		Rock cut cave	Three benches Circular opening at the top of vaulted roof		Similar to the cave at Kakkad	SHARMA 1956
Kanimangalam	Trissur		Urns				IAR 1967-68
Kanjirakode	Talappilly		Urn				IAR 1967-68
Karalam	Mukundapuram		Urn				IAR 1966-67
Karunathara	Talappilly		Dolmenoid Cist	without port holes			IAR 1968-69
Karunathara	Talappilly		Urns				IAR 1968-69
Kattakampal	Talappilly		Rock cut caves	Four chambers : 2 facing West and 1 each facing North and South Open courtyard Rectangular	Bone fragments kept in pots of glazed BRW. Iron knives and swords Etched		SHARMA 1956 PETER 2002

				chambers A bench each	carnelian beads		
Kodaranur	Talappilly		Menhir				IAR 1966-67
Kondazhi	Talappilly	Bare hill Area of 1 sq. kilometre	Dolmens (>100)	-mostly E-W orientation -mostly multiple dolmens with common circles -base and surroundings filled with granite stone chips			GEORGE 1975
Koonamoochi	Talappilly		Rock cut cave		BRW, Iron implements		IAR 1960-61
Koratty	Mukundapuram		Urms (3)			While digging the foundation for a building	CHS 2004
Kottanallur	Mukundapuram		Menhirs				IAR 1966-67
Kunnamkulam	Talappilly					<i>a curious cave containing an earthen tub and a cot of laterite with three legs (possibly megalithic)</i>	Annual report of the Archaeological Department, Southern Circle Madras for the year 1911- 1912.
Kuttur	Talappilly		Menhirs				IAR 1966-67

Machad****	Talappilly		Cist Circles (5) Urn(1)		Pottery, Iron objects, Beads		GEORGE and MEHTA 19 74, GEORGE 1975
Mangad	-		Rock cut caves		BRW vases and bowls		IAR 1967-68
Matoor- kaavu	Talappilly		Urn burial (1)	-in a laterite cut section -height=1.25m, breadth=1m.	Fragmentary pieces of BRW bowl from the site.	Many urn burials reported from and around the site.	GEORGE 1975
Meenakshipet	Talappilly	Northern slope of a small hill Covered with dense forest	Urn burials (>50) Cists (3)	one was 1.10x1.0 m - almost all had cover stones			GEORGE 1975
Mullassery	Chavakkad		Rock cut caves				IAR 1967-68
Muttam***	Talappilly		Menhir				GURUKKAL and VARRIER 1999
Nadattara	Trissur		Urn				IAR 1966-67
Nattika	Chavakkad		Urn				IAR 1967-68
Palappilly***	-	On a rocky table	Dolmens (a cluster of)	Small dolmens Aligned in a circular fashion			GURUKKAL and VARRIER 1999
Pandipara	Talappilly		Cists	Badly despoiled			IAR 1963-64
Parambanthali	Trissur	25km northwest of Trissur	Urns Rock Cut Caves	Covered with stone slabs		Encountered while clearing a plot for construction	CHS 2004

**** Further details discussed in the chapters

Pathazhappara	-		Multiple Dolmens				IAR 1966-67
Pazambalakode	Talappilly	All the monument types in an area of 500 sq. meter	Multiple hoodstones (2) Stone circles (19) Slab cists (2)	- -converge with gap on top -4.0-11.10m -huge dressed laterite stones -granite stones -near to each other			GEORGE 1975
Parappukkara	Mukundapuram		Urn				IAR 1966-67
Pazhayannu-padam	Talappilly	Level ground Side of paddy field	Cist Circles(5)	-6-9 meter - one has an outer circle of granite stones attached to main circle of sectorially dressed clinostatic laterite stones circle on the Western side.			GEORGE 1975
Pazhayannur/ Nadappakkund ****	Talappilly	on hill top planted with teak ½ km area	Cist Circles (27)	-many in groups with common stone circles around.	Pottery, Iron objects, Beads		GEORGE and MEHTA1974; GEORGE 1975
Pazhayannur/ Nadappakkund ****	Talappilly	E side of hill on a hill lying in E-W	Cist Circles (12)	Same as above			GEORGE 1975

		direction					
Perunkulam ⁺	-		Sarchophagus	Terracotta Bovine shaped			GURUKKAL and VARRIER 1999
Porattusseri	Talappilly		Urn				IAR 1966-67
Porkalam	Talappilly	low sloping laterite formation	Dolmenoid Cist				PETER 2002
Porkalam ^{****}	Talappilly		Rock cut cave s (2) Urn with stone circle	One cave has two benches and four carved vessel stands Second cave has a central pillar at the centre Granite capstone covered with laterite circle.	A pyriform jar covered with granite capstone. Bowls dishes, pots and lids, sickle and nails Seven pots, bones that were badly crushed bones, one tanged Iron dagger two Iron implements, 48 beads	Peter notes that dolmens cists rock cut caves and urns are found within an area of 8093.71 sq.m	THAPAR 1952, PETER 2002, SHARMA, 1956 THAPAR 1952 PETER 2002
Porkalam ^{***}	Talappilly	Plains	Dolmens	Huge			GURUKKAL and VARRIER 1999: 114
Pulayakkal	Talappilly		Menhirs				IAR 1966-67
Pullur	Talappilly		Urn				IAR 1961-62
Punkunnam	Trissur		Urns				IAR 1966-67
Ramavarmapur am ^{***}	Trissur		Menhir				GURUKKAL and VARRIER

							1999
Sukapuram ***	Trissur		Rock cut cave				GURUKKAL and VARRIER 1999
Thonnorkara	Talappilly	4km W of Chelakkara town W side of paddy field	Urn (1)	-height=1m.; breadth=.75m - incised oblique line designs			GEORGE 1975
Vadakkthara	Talappilly		Dolmenoid Cists	Without port hole			IAR1968-69
Vegitangu	-		Menhirs				IAR 1967-68
Velathanjur	Talappilly		Kudakkal				IAR 1967-68
Village near Vellarakkal	Talappilly		<i>Kudakkals and Topikkals</i>			Some reported to be in good preservation	IYER 1948
Vellarakkal ***	Talappilly		<i>Kudakkals</i>	Numerous			GURUKKAL and VARRIER 1999
Vetilappara	Mukundapuram		Dolmenoid Cist(1) Dolmens (2)	Double stone circles Monuments are near to each		Damaged	GEORGE 1975
Vilvattam	Trissur		Menhir				IAR 1966-67
Vilvattam	Trissur		Urn				IAR 1966-67

Appendix 2: Bead- finds associated with Iron Age burials from the study region

Site	Monument	Taluk/ District	Bead types
- *	Megalith	Palakkad	Etched beads (carnelian/agate)
Chattanpara	Cists	Chittur/ Palakkad	Local reports of Carnelian beads and bangles from cists
Chulanur	-	Alathur/ Palakkad	Local reports of 10-15 beads and terracotta pendants from megalithic site
Eyyal	Rock cut cave	Talapilly/ Trissur	Etched carnelian
Kattakampal	Rock cut cave	Talapilly/ Trissur	Etched carnelian
Machad	Cist	Talapilly/ Trissur	Cherty Jasper (1) Etched carnelian (98) Faceted crystal(1) Indeterminate metal (2) Orthoclase feldspar (41)
Machad	Urn	Talapilly/ Trissur	Etched carnelian (19) Indeterminate metal (5)
Nasranikunnu	Rock Cut Cave ANK09VI	Ottapalam/ Palakkad	Etched Carnelian Steatite? ⁺
Pazhayannur	Cist	Talapilly/ Trissur	Etched carnelian (9)
Porkalam	Urn	Talapilly/ Trissur	Etched carnelian (41) Indeterminate metal (6) Terracotta(1)

* Details not known (Dikshit1949)

⁺ Details are discussed in Chapter 4

APPENDIX 3: ARCHAEOLOGY WALK-OVER RECORDING SHEET

ARCHAEOLOGIST	DATE	TIME	SITE NO.
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NAME OF SITE

Brief Description of landscape/monument

1. **Landscape type (valley, mountain):**
2. **Soil type:**
3. **Prominent landscape features (orientation) :**

4. **Landscape position (where does it stand - valley slope?):**

5. **Monument Orientation:**

6. **Viewshed (what can be seen?)**

7. **Intervisibility (with landscape features):**

8. **Intervisibility (with other monuments):**
9. **Other monuments (stone circles, monoliths):**

10. **Monument architecture (passage, chamber, mound?)**

Reference (bibliography): Unpublished report of excavation conducted by MG university in 2009	Location	
	Lat	
	Long	

PHOTOGRAPHY		Monument No. (short description):
Digital No.	File No.	
		Image looking (direction)

MONUMENT DESCRIPTION

Broad class	Type	Architectural analogy (other site No.)?	Period
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Condition:	LAND USE
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POLITICAL LOCATION

Ward:	Village Panchayat:	District:
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VISUAL RECORD

Short Description. Main elements, phases and periods of the site (Sketch)

GROUP VALUE (physical monument relationships):

RV 2010.08

FULL DESCRIPTION (with dimensions)

FULL BIBLIOGRAPHY (including Grey literature)