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ROCK ART OF TAMIL NADU

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PREFACE

Rock art is a term used to denote artistic expressions on rock media such as bare surface of caves, rock shelters and boulders. They appear in several forms such as painting, etching, engraving, bruising etc. The early cave man was a nomadic hunter-gatherer, whose life was inextricably linked to his physical and natural environment. What he saw he reduced to painting in the caverns inhabited by him.

Archaeology studies the story of man's past through his material remains. The word archaeology comes from the Greek words 'Archaios' – Ancient and 'logos' – theory or science. It is essentially a method of reconstructing the past from the surviving traces of former societies. Both archaeology and history are concerned with the study of human past; but, archaeology presents another method of approach to history, by a study of human cultures through the material remains. Rock art is a vital piece of evidence linking man with his creations left behind for posterity. Its study throws enormous light – as any archaeological excavation would – on the lifestyle of early man.

Tamil Nadu has a rich heritage and chequered history. Its ancestry dates back to the Paleolithic age. Archaeologically, it is one of the most interesting sites, considering the antiquity of monuments, richness of artifacts and the variety of its museums. In epigraphy, the state can proudly boast of having the largest number of inscriptions in the country. Its temple architecture, sculptures and bronzes are world-renowned. However, it was widely believed that the state had no rock art of any significance. But, this was till a few decades ago. In the late seventies, Prof. K.V. Raman chanced upon rock engravings in Mallapadi in Dharmapuri District, thereby flagging off the race for identifying new sites; and the effort has not been in vain. Till date, more than **thirty** sites along the Western and Eastern Ghats have been identified, many of them by officers of the State Department of Archaeology. This has conclusively proven the existence of cavemen who inhabited the rocky shelters of Tamil Nadu in megalithic period (Iron age). It has also established the State's claim to be considered as one of the important regions for studying and interpreting rock art.

However, the exposure of the State to the rest of the country has been somewhat meagre. This is mainly due to the overwhelming urge of scholars and archaeologists to express themselves in the vernacular, Tamil, in preference to English. Though a number of articles on the subject have appeared in the Department's quarterly journal, 'Kalvettu' and in other journals, and a few books have also been published, yet they

are mostly in the native language. This has deprived scholars of North India from appreciating the full extent of the State's richness in rock art; while at the same time, denying Tamil Nadu a rightful place in the rock art map of the country. The publication of the present volume seeks to correct this lacuna.

Any reference to paintings in Tamil Nadu immediately brings to mind the famous murals of Sithannavasal in Pudukottai. Similarly, the paintings in the Thanjavur Maratha Palace, in the Tirumalai Nayakkar Mahal and in the Sethupathy Palace at Ramnathapuram are masterpieces in their own right. But, these were later developments modeled on similar efforts in other places. However, the inspiration for painting must be drawn from the rock engravings and sketches, made inside rock shelters by cavemen, who lived in earlier times. The rock art of TN displays great virtues of balance, appropriate use of colour, love of nature, and a keen understanding of the life and times of the inhabitants. Scenes of battlefield, travel, hunting, festivities and food habits are depicted with realism and sensitivity. All the images etched on rock surfaces clearly demonstrate their urge to express themselves in forms that are intelligible. They are the first - hesitant, but clear- attempts by early man to communicate in writing with members of his tribe as well as with neighbours. A study of the paintings throws enormous light on their thinking process, their every day concerns and their fight for survival in a difficult era. It also displays the artistic talent inborn in early man. Their study is at once fascinating and illuminating.

The dating of rock art is always a difficult proposition, considering the complexities involved. Experts have concluded that rock art in India can be dated to the Microlithic period, as a wide variety of Microlithic implements have been found near these sites. By this yardstick, an attempt has been made in this book to comparatively date the paintings in the four southern States of India. Based on factors such as style, technique and cultural traits, with associated findings from excavations, most of the rock paintings in TN can be ascribed to the Megalithic period.

Realising the importance of rock art and the need to preserve them from deterioration due to quarrying or vandalism, the Government of Tamil Nadu has notified four sites namely Alambadi, Kilvalai, Settavarai and Vettaikkaranmalai as protected monuments under the "Tamil Nadu Ancient and Historical Monuments and Archaeological Sites and Remains Act 1966". As mentioned earlier, details regarding various sites have appeared separately on different occasion. In order to present the available data in one place, a compendium on Tamil Nadu's rock paintings, covering all the sites so far identified, are presented in this volume. As a result of this publication, some of these sites will become as famous as that of Bimbetka

in Madhya Pradesh and Altimara in Spain. It is hoped that this document will be useful not only to the discerning research scholar, but also to the general reader interested in art and archaeology.

I am thankful to the Government of Tamil Nadu for having provided sufficient funds for this publication. In the preparation of this monograph, I must record with gratitude the tremendous effort put in by Tmt. S.Vasanthi, Archaeologist of the department. She took keen interest and visited almost all the sites with zeal and dedication. The notes on most of the sites are her contribution. I wish also to acknowledge the part played by Thiru S.Sreekumar, Technical Assistant in drafting the Chapters on Physical features and Geology, Muralidharan, Senior Artist cum Designer and Tmt. B. Valarmathi in providing Secretarial assistance.

T. S. Sridhar

Chennai – 113
Date: 23.02.2005

(T.S. SRIDHAR) IAS.,
Special Commissioner

CHAPTER I

INTRODUCTION

Human brain - endowed with perception, vision, reflexes and response -taught man to live in harmony with nature. The curiosity of man inspired him to reproduce his thoughts in some artifacts, and thus dawned the art of rock painting. It was the best-suited media for human genius to express and convey ideas on the rock shelters, located in forest areas, which served food and water at ease, during leisure time. The rock art, reflecting the beliefs and artistic conventions of ancient societies, is an integral part of the collective memory of humanity. This surviving art is one of the greatest treasures left by our ancestors.

The terminology 'Rock Art' generally is used to refer to paintings, carvings and engravings found on the ceilings and walls of caves or rock shelters, located in remote areas and in isolated rock boulders in the plains. In India, rock art is also termed as cave paintings. However, the usage of such term to rock art is not appropriate as no paintings are noticed in the caverns in India. The name cave painting was borrowed from France, where paintings are noticed inside caverns in limestone area.

Rock Painting dates to ancient times while the study of rock art in itself is considerably recent due impetus and interest evinced by archaeologists and historians.

Rock Art in India found to occur in many places right from Himalayas to the tip of the sub-continent and ranks as one of the six major regions in the world. The earliest rock paintings in India have been identified in the rock shelters of Uttarpradesh, Madhyapradesh and Rajasthan.

Tamil Nadu is located in the Eastern side of Peninsular India with discontinuous ranges of Eastern ghats and pockets of other mountains. Though Tamil Nadu is placed in the prehistoric map of the world, after the discovery of many Palaeolithic, Microlithic and Neolithic implements, yet investigations pertaining to rock paintings gained momentum only in early 1980s. The first discovery of rock painting was made in Tamil Nadu in the year 1978 by Dr. K. V. Raman, University of Madras at a place

called Mallapadi in Dharmapuri district. This was followed by a survey of other districts by scholars and Archaeologists of the State Department of Archaeology. Thus, very interesting rock paintings at Kilvalai, Settavarai, and Alambadi in Villupuram District and other places were identified from the year 1982 onwards.

The study of rock art envisages vast scope for critical and thorough investigation. The age of rock art dates back to three thousand years. Although many findings and surveys have been recorded from Tamil Nadu, this art has to be studied systematically in order to get a comprehensive knowledge about the origin, progress and pattern of distribution amongst regions in and around. The availability of modern tools likes computerized techniques, photography, physico-chemical process and also the usage of manual implements are all very useful aids in achieving this objective.

Inspired by these surveys, this monograph aims at correlating the rock paintings of Southern Indian regions in relation to social behaviour of man and his progress from nomadic to community life style. The study also aims at exploring the relationship between the graffiti on potteries of Megalithic period and symbols found on rock paintings. The study has been planned for a preliminary survey of rock shelters as well as to study the paintings in Tamil Nadu.

REVIEW OF LITERATURE:

The exploring zeal of foreigners in the field study of rock art in the Indian subcontinent is remarkable. Archibald Carlleyle explored some rock paintings in the Kaimur range in Bihar in the years 1880-81 CE.

The first article on Rock Painting was published by J.Cockburn, after Carlleyle in 1881. Cockburn had found fossilised bones of the Rhinoceros indicus in the Ken river Valley of Mirzapur, and also a painting of Rhino hunt in a shelter at Roup. In 1899 he published an account of all his discoveries and compared them with those found in Australia, South Africa and South America.

F.Fawcett, discovered the rock paintings at Edakal cave in Kozhikode District, Kerala in the year 1901. Some rock arts were recorded from Baroda District by C.A.Silberrand in the year 1907.

Godon in 1932 commenced his work and continued his exploration as long as 1945. Besides surveying the already known areas, he investigated Panchmarhi and its surrounding areas in a systematic and scientific approach. F.R.Allchin (1955) conducted an independent study on rock art in Hyderabad area.

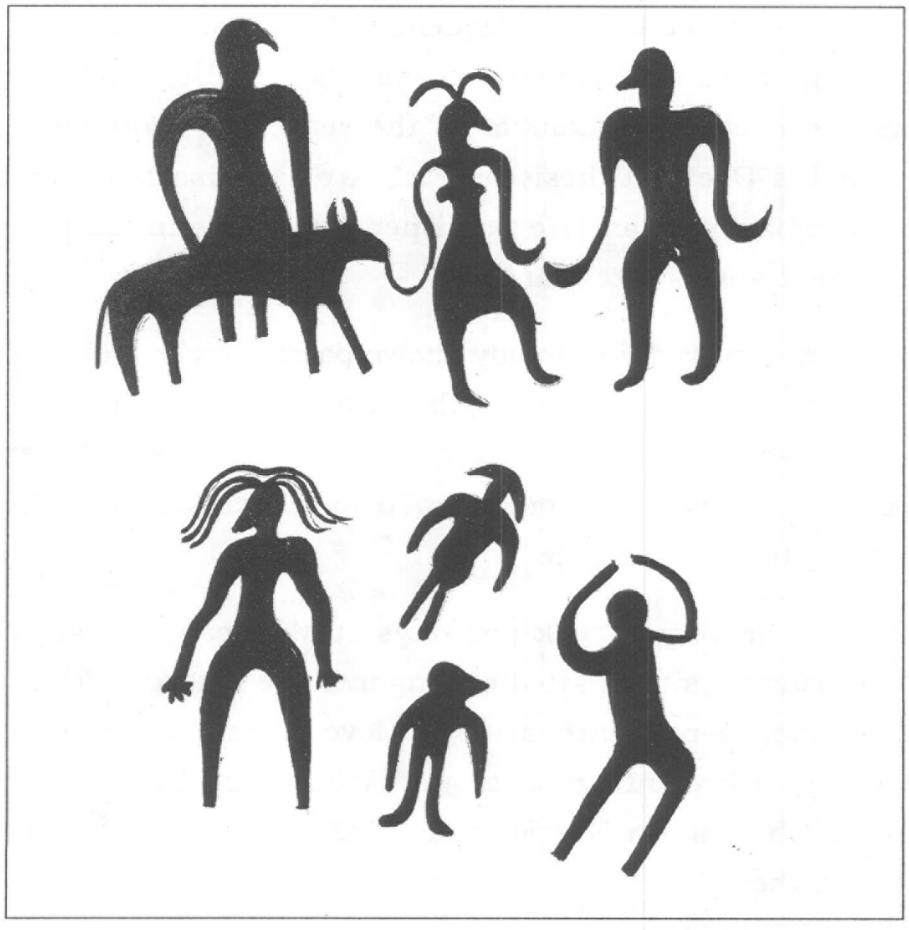
Indian scholars showed interest in this field of rock art only after independence. Their extensive survey and investigations were fruitful in the identification of large number of rock shelters in Madhyapradesh and other parts of the country. Extensive survey was conducted by Wakankar, Pandey and Shankar Tiwari in Central India and by Sundara in Karnataka (1967). A few painted rock shelters were found and excavations were conducted to know the cultural sequence of this area. The Rock Shelters with paintings were discovered at Bhimbetka in the Raisen District of Madhyapradesh by V.S.Wakankar in the year 1957. Wakankar besides working for his Doctoral thesis on rock art had also published several articles on Indian rock art. He published two books in joint authorship with R.R.Brook and Lother Wanke.

Dr. Pandey surveyed the already known painted rocks and also explored new areas in Bhopal, Raigarh, Chchatarpur and other districts of Madhyapradesh from 1960 onwards. In the year 1970 he excavated Bhimbetka which was later on followed by Wakankar, V.N.Mishra and subsequently by K.D.Banerjee.

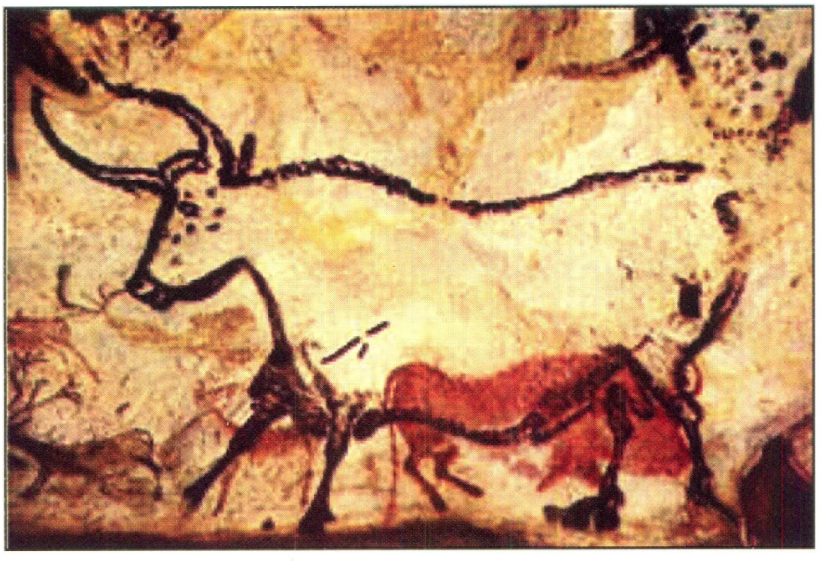
After the discovery of rock paintings at Mallapadi in the year 1978, many rock-painting sites started coming into the limelight. The officers of the State Department of Archaeology, Government of Tamil Nadu, have located many rock paintings in around Villupuram District, Coimbatore District and Dharmapuri District from 1982 onwards. Many articles were published in the "Kalvettu" journal of the Department.

The rock paintings have been discovered further South, near Madurai by the scholars from Madurai University. A book on *'Parai Oviyangal'* in the

Vernacular Language Tamil was published in the year 1986 by Thiru. Poundurai of Tamil University, Thanjavur, yet they are mostly in the native language. The publication of this volume seeks to correct this lacuna. This department also protects many of the rock art sites in the state; hence it is our privilege to bring out a publication on rock art of Tamil Nadu, and place the state firmly on the rock art map of the world.









LASCAUX - FRANCE



WILD BOAR AND BOOMERANG - ALAMBADI



SKIN OF AN ANIMAL - ALAMBADI



COW WITH INTESTINE - ALAMBADI

CHAPTER II

PHYSICAL FEATURES AND GEOLOGY

PHYSICAL FEATURES:

The Geographical features play a vital role in social and cultural activities of the people. Tamil Nadu (Lat.8 ^{0}N to 14 ^{0}N Long. 76^{0} E to 80^{0} E) is geographically divided into two parts, 1) the Tamil Nadu uplands and South Sahyadri region (Western Ghats) and 2) Eastern Coastal Plains.

The Tamil Nadu uplands and south Sahyadri region (Western Ghats) comprise Dharmapuri, Salem, Coimbatore and the North Arcot districts(Tiruvannamalai & Vellore), western parts of Madurai and Tirunelveli districts. The northwestern part of Tamil Nadu may be considered to be the continuation of Mysore plateau and falls into two distinct terraces (i) Palghat and (ii) Baramahal. The Palghat terrace is over 930 m in height above sea level and comprises Hosur taluk, a hilly tract in the district of Dharmapuri. The Baramahal is characterized by hills and hillocks and consists of Krishnagiri, Dharmapuri and Hosur taluks of the composite Dharmapuri district. The region north east of Tamil Nadu hills is studded with the outlines of the Eastern Ghats. Notable among them are Sholinghur, Vellore, Vaniambadi, Odugattur; Tiruvannamalai and Gingee hills. The Nilgiris lies west of the Coimbatore uplands and on the Anaimalai Hill range where the Western Ghats reaches their maximum height of 2740m, in Anaimudi peak.

The Coastal plain includes the districts of Chingleput(Kanchipuram & Tiruvallur), a small part of North Arcot(Tiruvannamalai & Vellore), most of South Arcot(Villupuram & Cuddalore), Madurai, Thirumangalam and Melur Taluks of Madurai, Ramanathapuram, Tirunelveli, Pondichery and Karaikal area.

The chief mountains of Tamilnadu region are Western Ghats and Eastern ghats.

Western Ghats:

It extends along the western coast from the Tapti valley in Maharashtra up to Kanyakumari. The length of this ghat is nearly 1,600 km. The major rock formation constituting the Western Ghats in Tamilnadu are Archaean Gneisses, Schists and Charnockite. A remarkable pass or gap known as Palghat Gap, located south of Niligiri hills, has always provided a major line of communication between the coastal plains of Malabar and Kanara on the one hand and the plains of South Madras on the other. South of the Palghat the Western ghats form the Anaimalai (Highest peak- Anaimudi). At the top of these hills is an undulating plateau.

Eastern Ghats:

These are detached hill ranges of heterogeneous composition stretching intermittently from the northern border of Orissa through coastal regions of the Andhra Pradesh to join with the Western Ghats to form a knot (Highest point- Doddabetta) in the Nilgiris. Charnockite and Granitoid Gneisses are the group of rocks that constitute the Eastern hill ranges of Tamil Nadu region.

Rivers and Lakes:

Tamil Nadu is served by a net work of river systems. Among the rivers, the Palar, the Pennaiyar, the Vaigai and the Tamaraparani are the important ones.

The Palar river rising on the Nandhi hills in the Karnataka enters Tamil Nadu after draining in North Arcot and Chingleput and flows into the Bay of Bengal.

The Pennaiyar river rising on the Channarayanbetta in Karnataka enters Tamilnadu at Dharmapuri and flows through Dharmapuri and South Arcot; finally it reaches the coast at Cuddalore. It receives several tributaries, the most important of them being the Chinnar in Hosur, Markandanadi in Krishnagiri and Variyar in Hosur.

The Kaveri river rises at Tala Kaveri on the Brahmagiri hills in Coorg in Karnataka. It touches the State border at Hoganekal in Dharmapuri District and flows southwards. After draining the disricts of Salem,

Tiruchirapalli and Thanjavur, it joins the Bay of Bengal at Poompuhar.

The Vaigai river is formed by two streams which drain the Kambam and Varushanad Valleys in Madurai and receives much of its water from the Palani hills. It enters Bay of Bengal about 60 km east of Ramnad.

The Tamraparani river rises in the slopes of the Agastyamalai, a coastal peak in Kerala State. The river finally enters the sea in the Gulf of Mannar. The non-perennial rivers are the Vellar, the Noyyil and Valparai. All these rivers are rainfed; they originate from the Western Ghats and flow eastward towards the Bay of Bengal.

Along the coast, there are a few lakes and lagoons noticed. Veeranam Lake in Cuddalore District is one of the biggest lakes in the state. Kanchipuram and Ramanathapuram Districts are often called as 'Lake Districts'

Climate:

The climate of Tamil Nadu in general is very warm and dry except at the hilltops. The average annual rainfall varies from 640 to 910 mm and is received from both northeast monsoon (October-December) and southwest monsoon (June-September). The former is more active than the latter and the great importance of this monsoon sharply distinguishes the state from many other parts of the country.

Temperature is dependent upon the latitude, altitude and distance from the sea. Mostly it ranges from a January average of 22° C to a May average of about 40° C. The interior regions are warmer when compared to the coastal areas. The summer temperature may touch 45° C and the January temperature may be 18-20° C. The hilly regions of Anamalais, Nilgiri, Palani and Tirunelveli enjoy a cooler climate.

Soil:

The Cauvery delta riverine beds in the plains have loamy river alluvial soils. Long stretches of coastal area of Ramanathapuram District are sand dunes. Black cotton soil is found from Tirunelveli to Coimbatore Districts and also in parts of Tiruchirapalli and Dharmapuri Districts. Laterite soil occurs in Nilgiri and Anamalais. Red sandy soil is met with in Tirunelveli, Ramanathapuram and Madurai Districts.

Fauna of the region surveyed:

Of the cat family, the largest are the tigers, leopard or panthers and the stripped hyaena. They are almost extinct but are found occasionally in thick jungles even now. The fishing- cat, civet cat, palm-cat and the jungle-cat are common. Of the mongooses, the best known is the common mangoose.

The dogs include the Indian wild dog, the deer, the wolf, the little Indian fox and the jackal are becoming extinct as they are good sport for hunting.

The Rodents or gnawing animals represented by porcupines, hares, rats, mice and squirrels are very common.

Elephants are predominant mammals in this region. The Denkanikota region in Hosur Taluk in district Dharmapuri and the Anaimalai hills in the District Coimbatore are largely populated by elephants.

The Ruminants include the Sambar deer, spotted deer, rib-faced or barking deer, the little mouse-deer, the blue-bull, gazell or Chinkara, four horned antelope, Indian antelope or black-buck, Nilgiri wild goat, the gaur or bison, wild buffalo are common.

Among the host of birds which inhabit the plains, the hills and the sea-shore, the important ones are, peacock, jungle-fowl, sand-grouse, quails, pigeons and doves, vultures, eagles, hawks, owls, parrot tribe, and perching birds.

The fishes and snakes are represented by scores of varieties.

Geology:

A major part of Tamil Nadu consists of an assemblage of crystalline rocks of Archaean metamorphic complex. The Archaean rocks were formed during the very early period when there was no life on the earth. They are mostly of igneous origin comprising metamorphosed granite and basaltic rocks together with a subordinate amount of sediments. They mostly consist of Archaean gneisses, schists and charnockites.

There are marine Cretaceous deposits near the coast at Ariyalur, Tiruchirrapalli and Uttatur. These lie on a platform of granitic gneisses and charnockite and are fringed along the western margin by thin strip of rocks of Upper Gondwana age. The other notable geological formation found in the state is Cuddalore sandstone series belong to Tertiary beds, which bear plant fossils. One of the important Wood fossil (long trunk) of a coniferous forest of this age is found exposed near Thiruvakkarai. Parts of the Tertiary beds are covered by laterite. Besides this, the occurrences of Upper Gondwana formation are also noticed near Sriperumbudur and Satyavedu. These are composed mainly of white to pink clays, shales and feldspathic sandstones.

The charnockites of Madras, Mysore and Andhra Pradesh are amongst the strongest and most durable stones found anywhere in the world. The temples and the architectural monuments have been hewed out of solid charnockite. The petroglyphs or abraded drawings are confined mainly to the granite hills in peninsular India.

Mineral occurrences of different origin have been recorded in all the rock formation found here. The chief minerals of Tamil Nadu are Lignite found interbedded with Cuddalore Sandstone and clays in Neyveli area, Iron ore deposits of Salem and Dharmapuri district, Limestone, both crystalline and sedimentary from Ramanathapuram, Tiruchirapalli and Tirunelveli District, Bauxite deposits from Shevroy hills and Magnesite at Chalk hills of Salem District and Graphite deposits from Sivaganga.

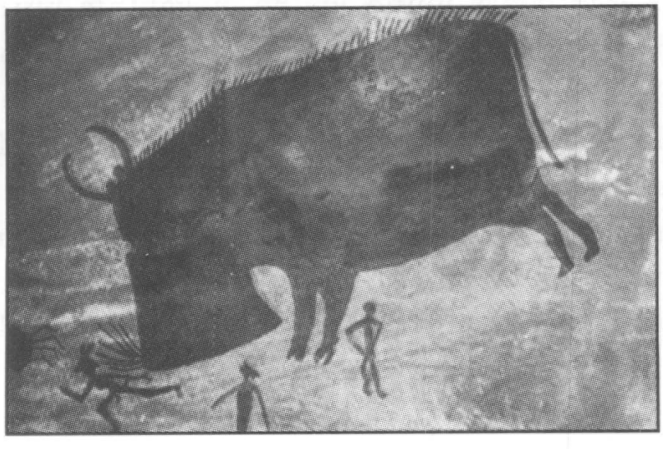


Plate - 37

CHAPTER III

TECHNOLOGY

The study of paintings leads us to know the techniques that were followed by the ancient people. Technologically, the Indian rock art are in the form of Pictographs or Painted drawing and Petroglyphs or Abraded drawings. The former type of art is mainly confined to the Sand stone formation of 'Vindhyan System' while the latter type is concentrated in the granite hills of Peninsular India. The style of art varies with specific cultural changes and tastes through the periods.

The painting are painted on vertical or near vertical rock faces or on the under surface of projecting or over hanging rocks. The painting technique is often the wet colour technique.In South India, the Neolithic groups living on the granite hills have incised drawings of animals and hunting scenes on the rough surface of the boulders. Thus rock art is found on the walls and ceilings of naturally formed caves and on boulders without any preparation of ground for painting such as chiseling, grinding, smoothing and plastering of rock surface. The paintings are found on the ceiling and inner walls of the shelters. In painting shelters too, some particular portions were selected and were found to be super imposed.

After selection and preparation of the painting area, the cave men used the naturally available colours to paint the figures. The natural pigments, such as manganese, haematite, limonite, ochre, red chalk, charcoal and vegetable juices were used for the preparation of colours. Altogether, it is obvious that the primitive men might have used the above-cited natural minerals found in the local geological formation. Red ochre, which is available as natural substance, was specially useful to the primitive people. Red ochre found in the megalithic burials proves the fact that they used the same for painting also. Another colour they used was white, which is obtained from kaolin. This is found in several places in the Deccan Plateau and in Nilgiri hills. There are different colours present in certain mineralized stones and soils. The soils leading to the use of haematite, limonite, molybdenum mica, graphite, and kaolin were used as pigments for ritualistic purposes and cave art. The examination of the white pigment confirms that they are nothing but clay. Due to the long period of the paintings' survival it can be presumed that water was the medium used for the pigment and it is probable that the slow action of water on the siliceous rock resulted in the formation of colloidal silica

and the latter produced an imperceptible layer on the pigments, thereby fixing them firmly to the rock, and rendering them immune to the solvent action of water. The finding of natural mineral pigments from the excavations conducted at the rock shelters of the world attest the fact of ancient men having used them to execute and transform their ideas in the form of rock art. However, we have not found any archaeological records to understand the tools used for painting on the rock. The naturally available roots, parts of the plants and grasses were used as brushes.

The most commonly used material for preparing pigment in all periods was iron- oxide. This material, called *geru* in India, is abundantly found wherever laterite deposits are available. Pulverised *geru* mixed with water was applied to the rock surface for art. Hence, the study of local geological formation is an asset for us to know about the provenance of natural colour pigment like red and yellow ochres. On account of this it is very important to study the origin and content of Laterite rock. (derived from latin word *later* which means a brick).It is porous, pitted, clay-like rock with red, yellow, grey and mottled colours, depending on the composition. The condition favouring the formation of laterite are warm, humid climate with plentiful and well distributed rainfall and good drainage from a variety of rocks which include alkali rocks like nepheline-syenite, intermediate and basic igneous rocks like dolerite and basalts, gneissic rocks rich in feldspar and sedimentary rocks including shales and impure limestones. Weathering of these aluminous rich and iron bearing rocks results in the formation of residual deposits of laterite and bauxite or clay minerals.

The term was first used for materials from Malabar in South India by Francis Buchaman in 1800. The following extracts of his diary clearly gives some clues for the occurrences of red and yellow ochre.

"It is diffused in immense masses without any appearance of stratification and is placed over the granite that forms the basis of Malayala. It is full of cavities and pores and contains a very large quantity of iron in the form of red and yellow ochre."

Laterite is extensively distributed in Peninsular India and common over the Deccan traps in the greater part of Bombay, Madyapradesh and Bihar. And laterisation is also seen in the Eastern Ghats where the prevalent rock is Khondalite (Garnet- Sillimanite- Feldspar gneiss). There are several occurrences on the Khondalite of Eastern Ghats and gneisses of the Western Ghats in Malabar and Travancore. It is interesting to note

that Kondalite rock formations are recorded in many districts of Tamil Nadu and especially in and around Villupuram and adjoining districts.

The existing deposits in most parts of India may have been formed during Upper Tertiary, probably during Pleistocene. It is typically developed in tropical lands, such as India, Malaysia, East Indies and Tropical America.

Generally the rock art are drawn in outline rather than in full forms. Some time the hunters are shown wearing variety of masks; as to show his magical religious rites. This might be to ensure the successful hunt for his community. Animals are shown in action such as galloping, leaping, and running. The food channels and the inner portion of the animals are well depicted and they are generally known as x ray style. There are many stencil impression of hands, which might have some protective powers against the evils.



CHAPTER IV

ROCK ART SITES

As indicated in the review many interesting sites were surveyed and recorded in Tamil Nadu. However, a thorough knowledge pertaining to chronology, socio- cultural interactions and habitual implications amongst the communities are to be investigated. An attempt in this regard is made in the present study and the following is the list of sites surveyed pertaining to rock art paintings. In addition, knowledge of ethnic groups is also to be viewed for better understanding and their link with rock art, if any, may be corroborated.

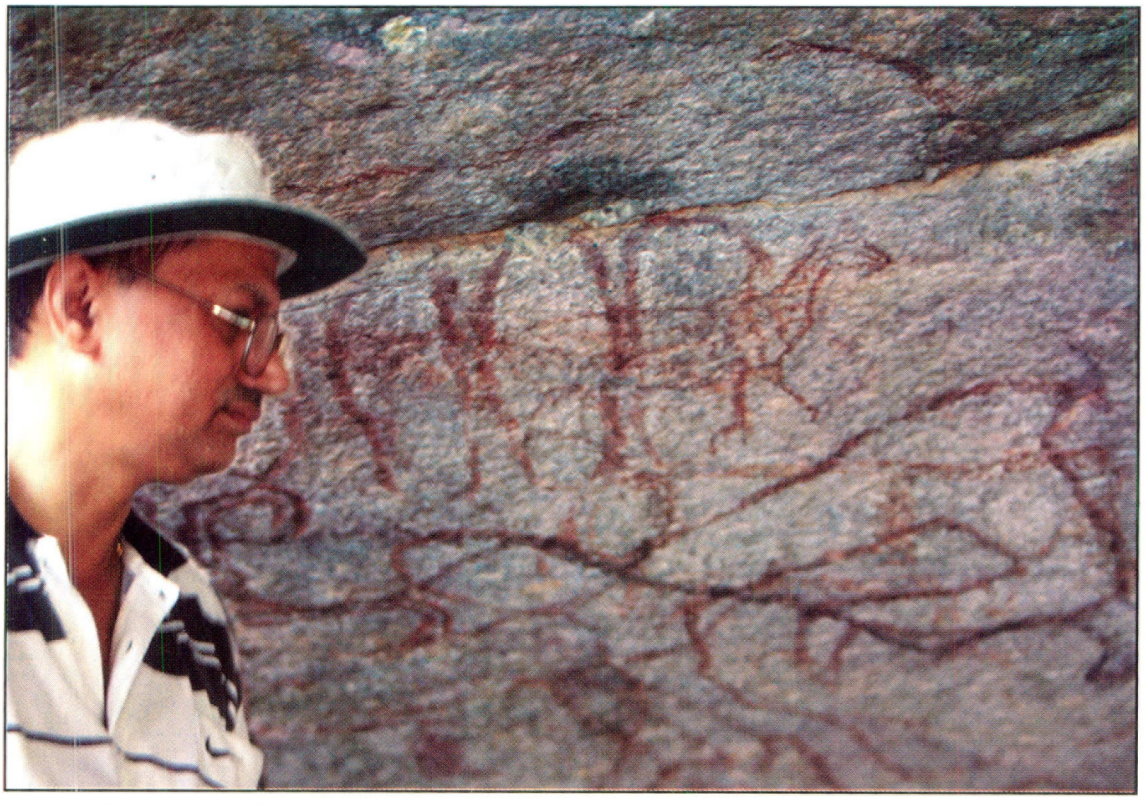
Tamil Nadu has a very ancient ethinic history. There are evidences of early Palaeolithic men having lived here and the first indication of early Palaeolithic man in India came forth in 1863 from Pallavaram- a place near Chennai. It is believed that these early inhabitants belong to the Negrito group whose present representatives can be seen in Parambikulam and Anamalai areas. The traces of descendants of Proto-Australoid groups also found in Tamilnadu. The tribes like Malayar (Malayal), Kurumbar, Eruvar,etc., are regarded to belong to this category. People belonging to the Proto-Mediterranean group can be met with and the discoveries from Adichanallur bear testimony to this. Irular, Kanikkar, Karumpar, Kattunaicker, Kothar, and Thodar, tribes are mainly concentrated in the Western ghats region. Some of them are nomadic and semi-nomadic bands. The tribal population generally lived in harmony with nature.

Since the present study of Rock Art falls in the District of Villupuram, Krishnagiri, Sivaganga, Madurai, Vellore, Dindugal and Coimbatore, a rudimentary knowledge on Geology and Mineral wealth of these districts is more essential. Hence, it is briefly discussed here. In the course of survey by scholars of State Department of Archaeology, other organizations and research scholars of various Universities in the state, nearly thirty rock art sites have been identified in the state. The painted drawings in these sites are discussed and dated with the available of supportive evidences of megalithic appendages and rock implements of Neolithic and Mesolithic period. A brief description of rock arts of each district is summarized below.

The rock shelters - where we find rock arts - are formed due to differential weathering by natural agents like water and wind. On weathering, the rock formations of lesser hardness are easily eroded leaving behind the stronger one to protrude or project prominently to form deep hollows or shelters which provide space for living. The rock shelters in India are found to occur in three geological formations viz Mountain ranges, Riverbanks / River valley and Plateau/ Plains.

In the mountainous region, rock shelters are in chain form or rarely individual. The size of the shelter varies from small to huge one due to degree of weathering process on rock surface exposed to tectonic movement namely folding. The shelters found in the Vindhyan, Satpura, and Aravalli mountain ranges are formed in the sedimentary and metamorphosed sedimentary rock formations. Eg. Bhopal, Raisen, Putalikarar, Satkunda, Kaharwari and Naraingarh. Besides this, rock shelters are also found in the river valley where the running water played a vital role to create shelters by weathering process. The flow of water in the valley carved shelters in the sedimentary formation of Vindhyan system of rock formations. Due to weathering by running water the lesser hard rocks are eroded away and looks like a shelter hanging in between very hard rocks. Ex. Chambal valley, Abchand, Kataw and Shahadol. The rock shelters, located in the plains or plateau, are found to occur in the boulders lying separate or standing against other rock boulders. Even here weathering plays an important role for the formation of shelters. These shelters are mostly encountered in the granite trap rock areas. Ex. Andhra pradesh, Karnataka, Gujarat and Tamilnadu. It is understood that the formation of rock shelters are due to action of running water on the rock formation of lesser hard rock sandwiched between harder rocks. So, the differential weathering results in the formation of hollow like shelters, which are safer to live, defensible during summer, cold winter and monsoon rains. Hence, the nomadic people preferred to occupy these shelters.

In Tamil Nadu, the rock shelters are mainly concentrated in the Eastern Ghats. However, most of the rock paintings are noticed in the isolated boulders in the plains and not in the shelters. In some districts rock arts are encountered in smaller cave like shelters.



INSPECTING THE ALAMBADI PAINTINGS BY THE EDITOR



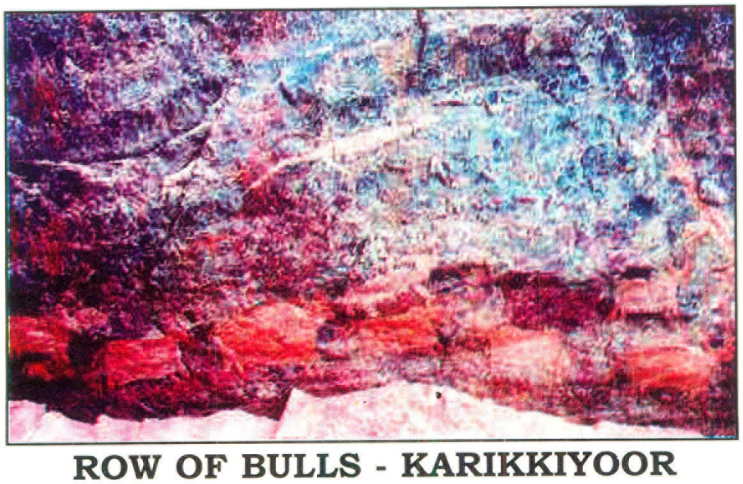
WELCOMING POSTURE - KILVALAI



SYMBOLS - KILVALAI



SYMBOLS - KILVALAI



ROW OF BULLS - KARIKKIYOOR

VILLUPURAM DISTRICT

Villupuram, (Once forming part of district of South Arcot), is bordered by the districts of Tiruvannamalai on the north, Salem and Dharmapuri on the west and Cuddalore District on the south.

The Gingee hills and part of the Kalrayans to the Southwest of Gingee town are the important hills in the district. Kalrayan hills which divide the Salem and Villupuram district are seen to the extreme west of Kallakurichi taluk. Besides this, there are isolated hills namely Tyagadurgam and Perumukkal. The Principle River is Ponnaiyar or Pennar. The other important rivers are Gadilam and Varahanadi or Gingee.

Metamorphic crystalline rocks of Archaeans age belonging to Charnockite-Khondalite Group of rocks and Unclassified Gneisses are the major formation of this district. The occurrence of basic and ultra basic intrusive and extrusive rocks namely metamorphosed equivalents of Gabbro, Anorthosite, Pyroxenite and Dolerite are also encountered at many places. The chief mineral deposits are copper in the form of polymetallic sulphide near Mamandur((Kallakurichi Taluk), Iron ore in the form of Magnetite-Quartzite at several places.

SITES : 1.Kilvalai, 2.Settavarai, 3.Alambadi, 4.Nayanur, 5.Padiyandal, 6. Kollur

KILVALAI - A Protected Monument

Latitude: 12° 01' 48' N

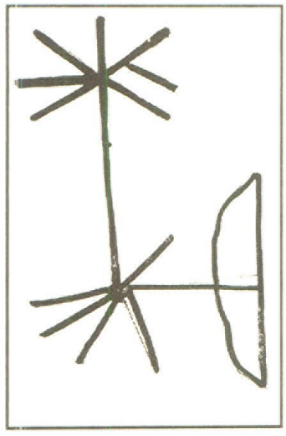
Longitude: 79° 20' 28' E

Location:

Kilvalai is a hamlet twenty-three Km. from Villupuram on the road to Tiruvannamalai.

Description:

The paintings are found in four different rocky areas. The picture depicts three persons postured side by side, one seated on a horse, another



holding its bridle and the third man standing with outstretched hands, in a way of welcoming the horsemen. Below this painting, there are some more drawings one of them delineates a group of four men with interlinked hands. They seem to be standing on a boat and one of them is holding a long pole.

Further down, some paintings of geometrical designs consisting of combined triangles, plus, multiplication markings drawn inside the circles are observed. Yet another geometrical design of a wheel with six spokes was clearly painted. A picture of a sun with 17 rays is also noticed. (Plate - 2).

A second group of painting is found on the outward face of a huge rock resting on another rock at a height of nearly 20 feet. The paintings look blurred due to aging. It depicts six men standing in a row. This painting seems to be the biggest in size among the surveyed ones at Kilvalai.

The third group occurs deep inside the ledge. One has to crawl down and observe to decipher the paintings. There is a painting of four men standing side by side while two others are seen standing aloof (Plate - 5) from the group of four men.

The fourth group of paintings consists of figures that lacked clarity. Some designs inside a circle could be seen. There is a painting of six men standing and a few others with outstretched hands. This painting is indicative of some ritualistic significance. The horned headgear of the men and their faces resembles bird's beaks, (Plate - 3) which bear a very close similarity to some of the Egyptian paintings of the second millennium BCE.

The occurrence of designs and depiction of men rowing a boat (Plate - 1) indicates a link between the Indus valley and the southern region, since similar symbols (Plate - 4) have been discovered on Indus valley seals; but these symbols might be post Indus valley, because of the date indicated by the occurrence of the horse, which was absent in Indus valley. The



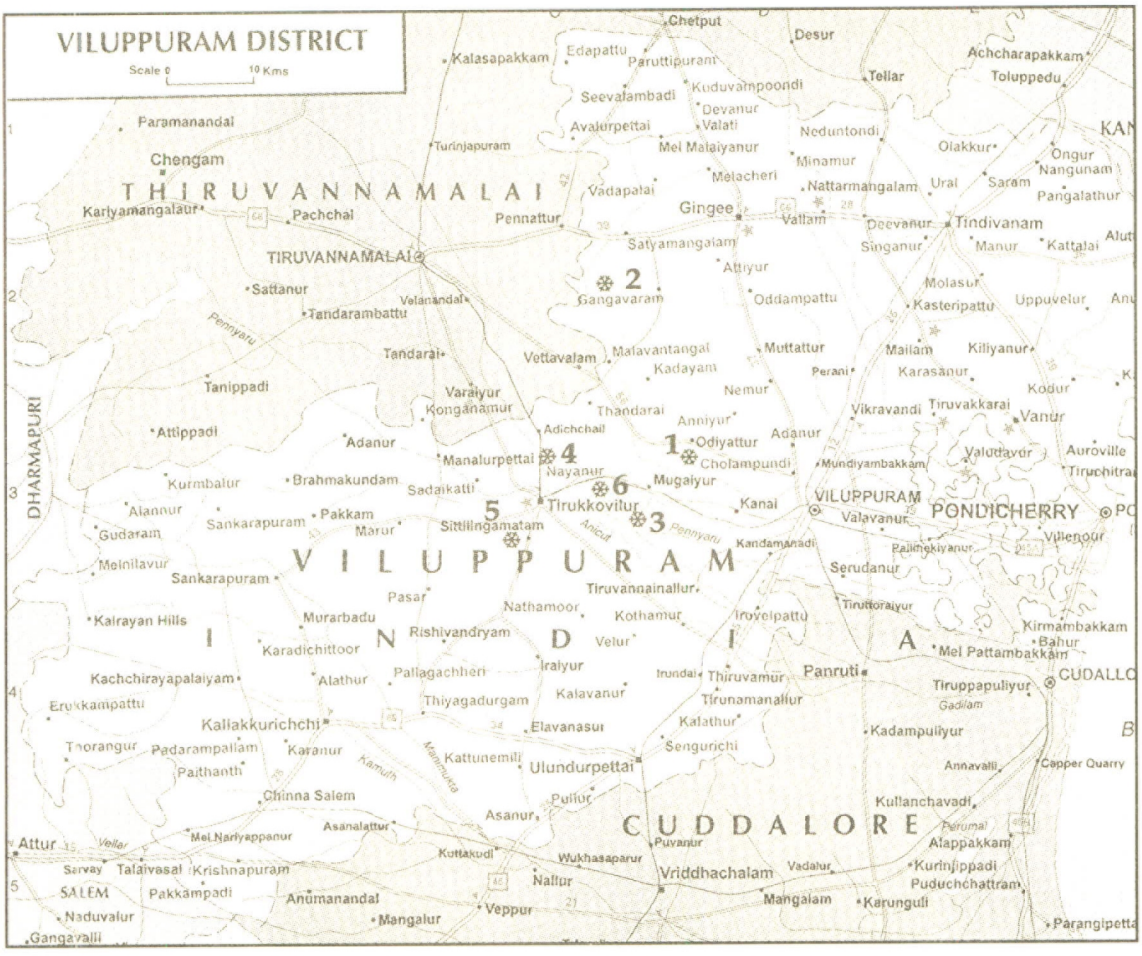

VILUPPURAM DISTRICT
Scale 0 10 Kms
Chetput
Desur
Kalasapakkam
Edapattu
Paruttipuram
Achcharapakkam
Toluppedu
Tellar
Seevalambadi
Kuduvampoondi
Devanur
Paramanandal
Avalurpettai
Valati
Neduntondi
Olakkur
Ongur
Nangunam
Pangalathur
Turinjapuram
Mel Malaiyanur
Minamur
Melacheri
Chengam
THIRUVANNAMALAI
Vadapalai
Nattarmangalam
Ural
Saram
Karlyamangalaur
Pachchal
Pennattur
Gingee
Vallam
Deevanur
Tindivanam
Satyamangalam
Singanur
Manur
Kattalai
TIRUVANNAMALAI
Attiyur
Sattanur
Velanandal
Gangavaram
Oddampattu
Molasur
Kasteripattu
Uppuvelur
Tandarambattu
Pennyaru
Tandarai
Vettavalam
Malavantangal
Muttattur
Mailam
Killyanur
Kadayam
Perani
Karasanur
Kodur
Tanippadi
Varaiyur
Kongamamur
Nemur
Thandarai
Vikravandi
Tiruvakkarai
Vanur
Anniyur
Attippadi
Adanur
Adichchali
Odiyattur
Adanur
Manalurpettai
Nayanur
Cholampundi
Mundiyambakkam
Valudavur
Auroville
Kurmbalur
Brahmakundam
Sadaikatti
Mugaiyur
VILUPPURAM
PONDICHERRY
Alannur
Pakkam
Tirukkovilur
Kanai
Valavanur
Sankarapuram
Marur
Sittilingamatam
Anicut
Pennyaru
Kandamanadi
Villenoor
Gudaram
Palliyekiyanur
Melnilavur
Sankarapuram
Serudanur
Tiruvannainallur
Pasar
Nathamoor
Kothamur
Iruvelpattu
Tiruttoraiyur
Kairayan Hills
Murarbadu
Kirmambakkam
Bahur
Karadichittoor
Rishivandryam
Velur
Mel Pattambakkam
Iraiyur
Kachchirayapalaiyam
Alathur
Pallagachheri
Irundai
Thiruvamur
Panruti
CUDALLO
Tiruppapuliyur
Gadilam
Erukkampattu
Thiyagadurgam
Kalavanur
Tirunamanallur
Kaliakkurichchi
Elavanasur
Kalathur
Kadampuliyur
Thorangur
Padarampallam
Karanur
Kattunemili
Sengurichi
Paithanthi
Ulundurpettai
Annavalli
Copper Quarry
Chinna Salem
Pulivur
Kullanchavadi
Asanur
CUDDALORE
Asanalattur
Peruma
Attur
Mel Nariyappanur
Puvanur
Alappakkam
Kuttakudi
Wukhasaparur
Servay
Talaivasal
Krishnapuram
Nallur
Vriddhachalam
Vadalur
Kurinjippadi
SALEM
Pakkampadi
Puduchchattram
Anumanandal
Mangalam
Karunguli
Naduvalur
Mangalur
Veppur
Gangavalli
Parangipetta
DHARMAPURI
KA



Plate - 1

figure depicting men riding on horse clearly suggests the domestication of animals and the settled way of life by early men.

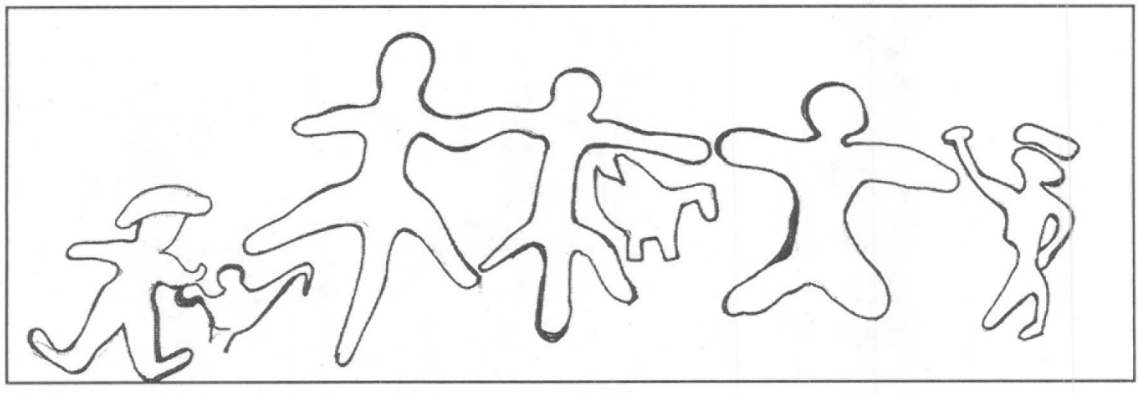
There are also figures of bow and arrow but there is no depiction of the hunting scene. Hence, it is obvious that these paintings did not belong to a hunting society. Another feature to be noted is the horned headgear of men. The rock paintings discovered at Bhimbetka (Madhya Pradesh) also often depict such headgears on men painted frontally. Only the red ochre colour was used throughout. The strokes are broad and flat as it shows that the artist did not use a brush.

Date:

These paintings must have been drawn between 1000 and 500 B.C.E or in the beginning of Megalithic age.

Discovered in the Year 1984: Burgur Kuppusamy, Teacher from Pondicherry

Interpreted by: Dr.R.Nagasamy, the then Director of Archaeology.



SETTAVARAI - A Protected Monument

Latitude : 12° 09' 42' N

Longitude : 79° 15' 32' E

Location:

It is about 15 Km west of Kilvalai near Vettavalam in Villupuram district. The paintings are seen on the rock shelters of Ayyanar Malai.

Description:

The paintings of deer, buffalo, wild boar, tiger (Plate 7 & 8) fish and geometrical designs are found in three rock shelters at the top of the hill in an inaccessible area.

The outlines in some of the paintings have been done with red colour and the inner part filled with white pigments. In portraying buffaloes and animals, only red ochre was used. The front facial part of the buffalo is totally filled with red colour, while rear portion of the body showed strokes.

A well-preserved painting of a deer, standing near a fire and the flesh pierced with a long pole or spear being grilled in the fire is also seen. (Plate - 6)

Another painting is that of a big fish with its inner portion depicting its bones. This painting resembles the paintings found at Bhimbekta of Madhyapradesh.

A human figure, resembling the paintings of Kilvalai with a beak head is also found here. (Plate - 9) The salient features of the paintings are the repeated occurrence of the human palm. The outline of the deer and fish are depicted in big size and painted in red ochre, while the inner part is painted white. A front half of a buffalo is drawn in thick ochre and the back body portion is shown with bones and other inner organs.

Date:

The date of Settavarai paintings might assigned to 1000 B.C.E. to 500 B.C.E.

Discovered & Interpreted in the Year 1982: Tvl:

1. Dr.R.Nagasamy, the then Director of Archaeology
2. V.Vedachalam, Epigraphist, T.N.Mahal, Madurai
3. S. Ramachandran, Epigraphist, Chennai
4. S.Selvaraj, Archaeological Officer, Dharmapuri
5. Pon Arasu, the then Pre-historic Archaeologist
6. K.S.Sampath, Epigraphist, Chennai
7. L. Thayagarajan, Professor, Ariyalur College.
8. C. Chandravanan, Curator, Ramanathapuram

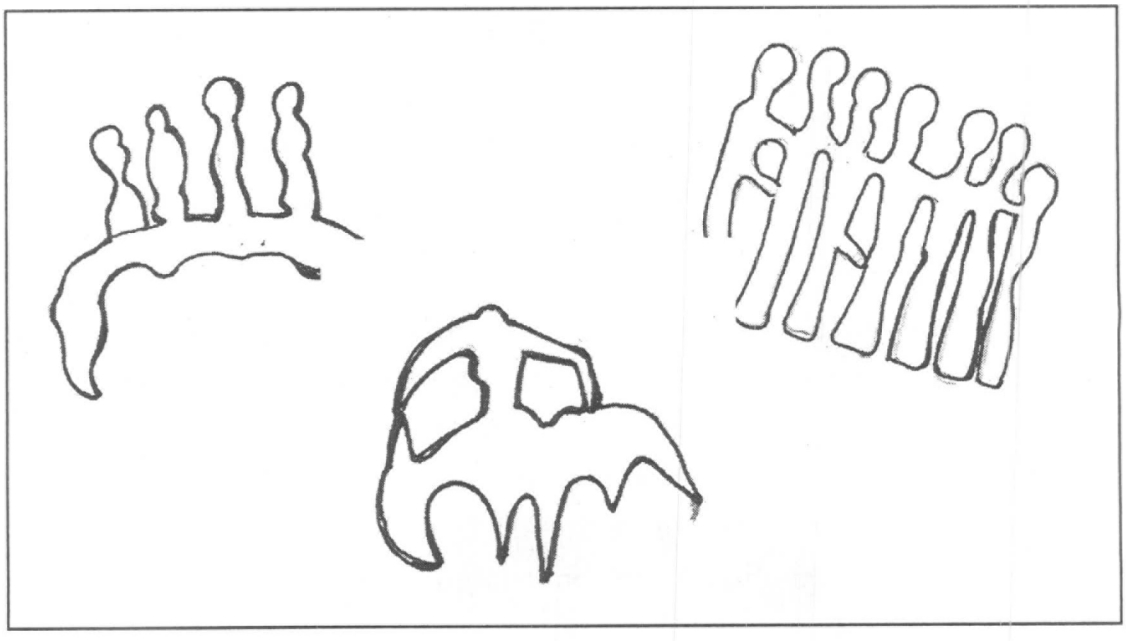




PLATE - 2



PLATE - 3



PLATE - 4

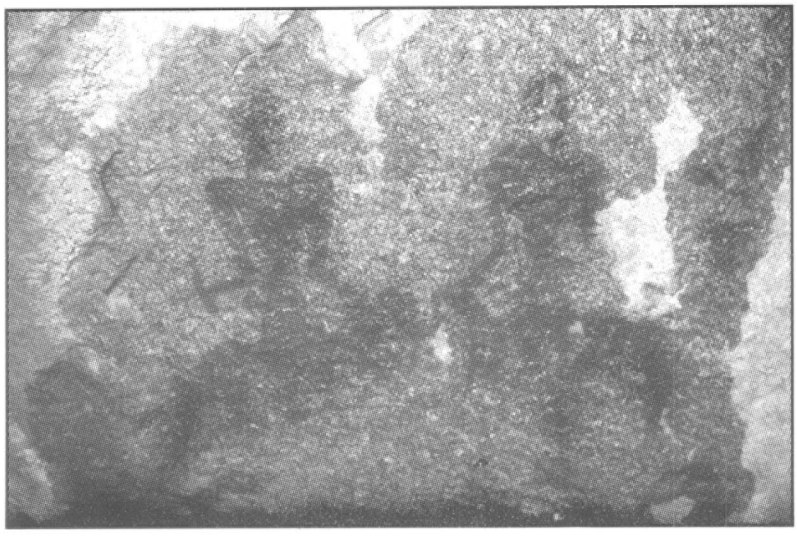


PLATE - 5

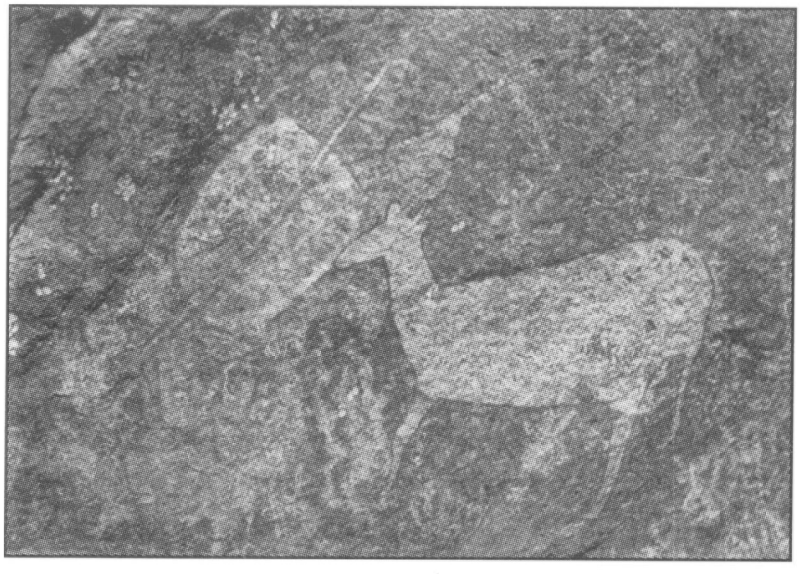


PLATE - 6

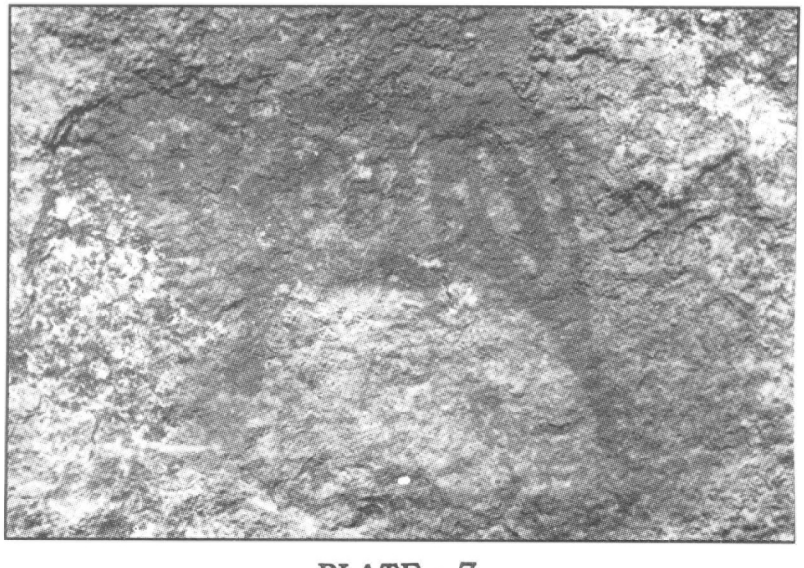


PLATE - 7

ALAMBADI - A Protected Monument

Lattitude : 12° 0' 16' N

Longitude: 79° 17' 54"E

Location:

Located about 18 Km from Thirukkoilur (A taluk headquarters of Villupuram District) towards the Northwestern direction on the way to Villupuram. The paintings are located in a rock called *'Kuzhankal Parai'* or *'Vannathi Parai'* by the people. This rock is situated about 2 kms west of Alambadi village.

Description:

The drawings of animals like Deer, Cow and Calf, Wild Boar, fish, and Rhinoceros are painted on the rock (Plate 10, 11 & 12). A mask of a man (Plate - 13) is an interesting feature of this painting. In one painting the intestines of the cow are shown. In another painting a Deer is standing behind the trees while another Deer is being hunted by a Tiger. Some paintings suggest the hunted portions of the animals. Red ochre is used for colouring.

The painting of a cow with its intestine painted in the inner part of its body seemed similar to those found at Chaturpetnattallah and Chatkunda in Madhyapradesh and Settavarai in TamilNadu. The paintings are superimposed on the same surface. Thus, it shows that early man occupied this shelter from time to time. Recently painting conservation was done utilizing funds from XIth Finance Commission.

Date:

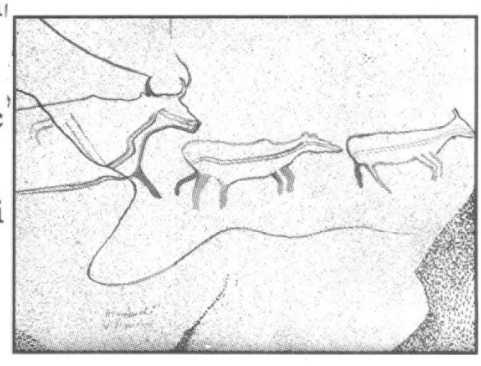
Late Neolithic or beginning of Megalithic period.

Discovered and Interpreted in the Year 1984:

Thiru Natana Kasinathan, the then Director of Archaeology.

Thiru Pon Arasu, the then Pre historic Archaeologist

Tmt.S.Vasanthi, Archaeologist, Chennai



NAYANUR

Latitude: 12° 0' 24" N

Longitude: 79° 12' 26" E

Location:

Nayanur is a small village situated about 7 km from Thirukoilur on the way to Vettavalam. The painting is noticed on a large rock surface.

Description:

A huge goat is positioned sideways. The painting is represented as line drawing with red ochre. This type of goat is locally called as 'Varaiyadu' (Plate - 14). These are usually found in the hilly region and were tamed by the tribes called Kurumbas (Plate - 15). There are many megalithic burial types of Dolmens and Menhirs noticed at Nayanur and another nearby village, Devanur.

Date:

Megalithic period.

Discovered and Interpreted in the Year 1990:

Thiru Natana Kasinathan, the then Director of Archaeology

Thiru M.Chandramurthi, the then Deputy Director

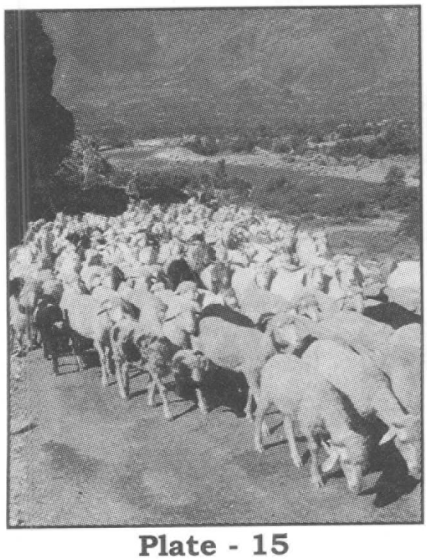


Plate - 15

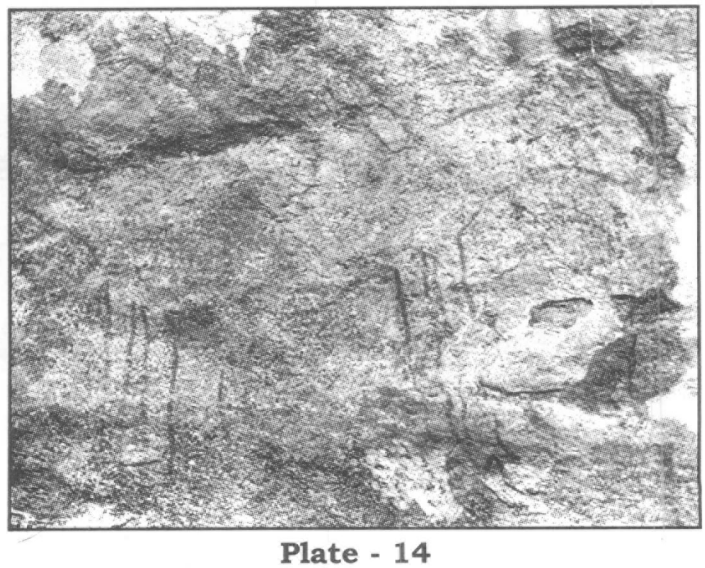


Plate - 14



PLATE - 8

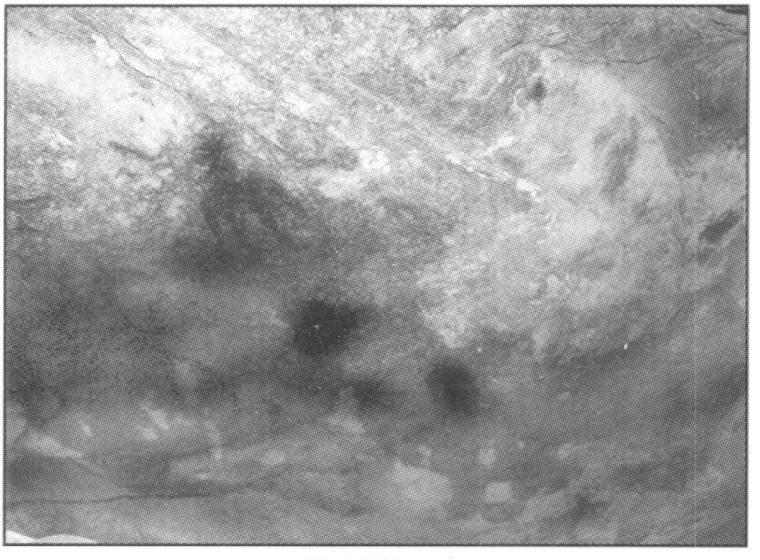


PLATE - 9

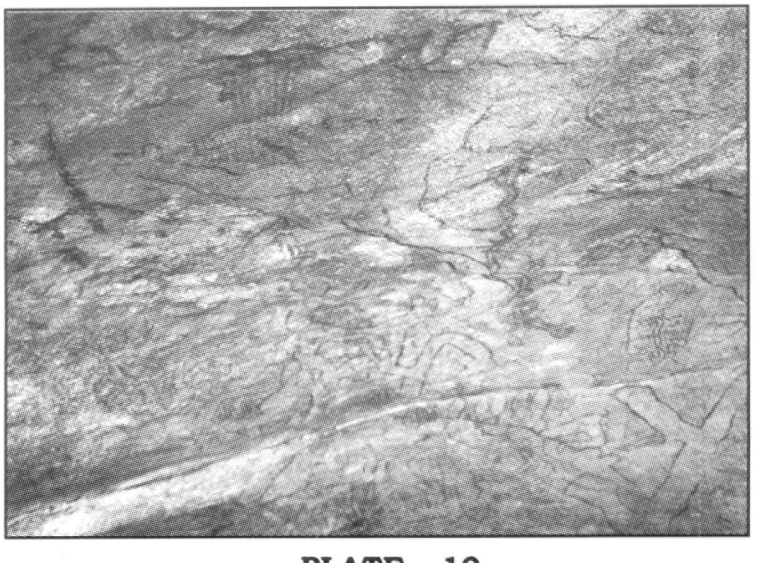


PLATE - 10



PLATE - 11



PLATE - 13

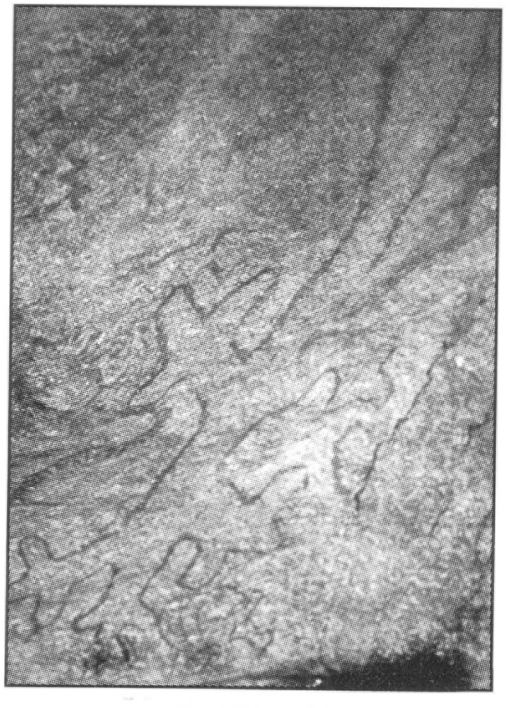


PLATE - 12

PADIYANDAL

Latitude: 11° 53' 39" N

Longitude: 79° 07' 16" E

Location:

This place is situated about 12 Km. From Thirukoilur near a place called Cholappandipuram. The paintings are found in a rock called Irullakal.

Description:

The paintings of Deer, Tiger, Horse and some geometrical designs are found; the paintings are faded and few are visible. Red ochre was used for painting.

Date:

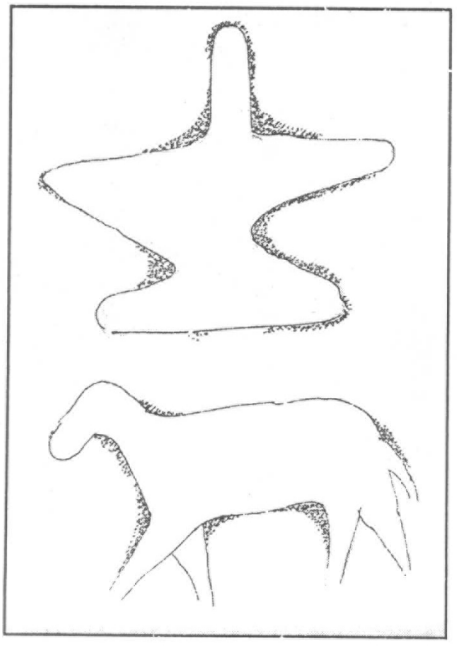
The depiction of horse in these paintings suggest their dates to Megalithic period.

Discovered and Interpreted in the Year 1984:

Thiru Natana Kasinathan, the then Director of Archaeology

Thiru Pon Arasu, the then Pre historic Archaeologist

Tmt.S.Vasanthi, Archaeologist, Chennai



KOLLUR

Latitude : 11° 58' 06"N

Longitude: 79° 14' 48"E

Location:

Kollur is situated near Thirukkovilur towards east. It is about 3 Km from Arakandanallur town. Locally the painted rock is called as Irullakal.

Description:

Some Geometrical designs are drawn. No human or animal figure is seen in this group. Red ochre was used.

Some Neolithic celts have been collected near by; local people worship the celts as their traditional village Gods in the rock shelter.

Date:

Late Neolithic (1300 B.C.E – 1200 B.C.E)

Discovered and Interpreted in the Year 1984:

Thiru Natana Kasinathan, the then Director of Archaeology

Thiru Pon Arasu, the then Pre historic Archaeologist

Tmt. S. Vasanthi, Archaeologist, Chennai

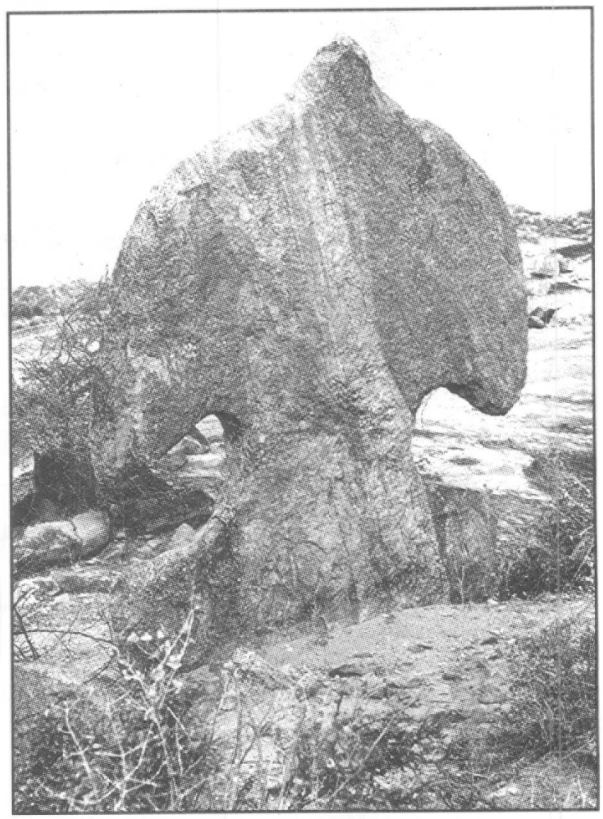


Plate - 16

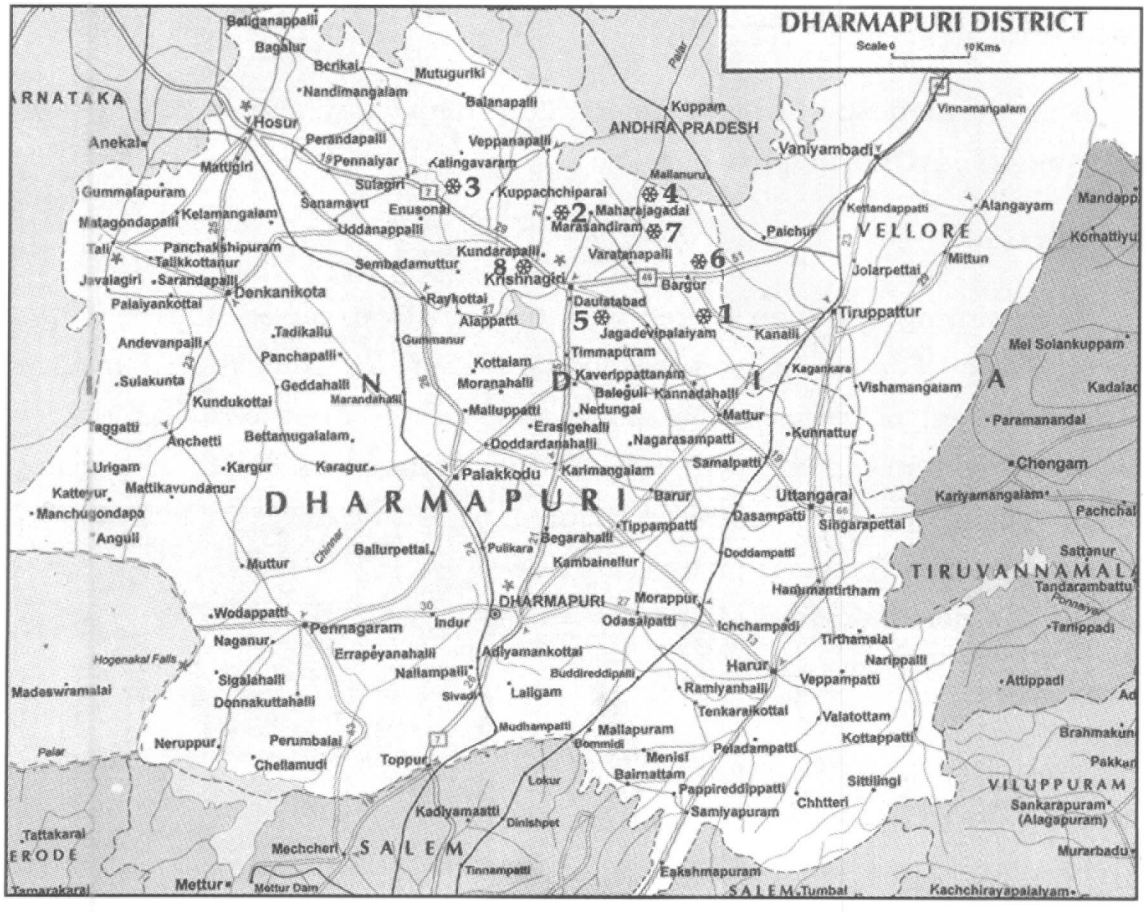
KRISHNAGIRI DISTRICT

Krishnagiri district, lying at the tri-junction of Karnataka, Andhra Pradesh and Tamil Nadu, is situated in the northwestern portion of Tamil Nadu. It is bordered on the south by Dharmapuri district and on the east by Vellore district. This district is surrounded on the northwest by Mysore plateau and on the east by Javadi hills. The main river draining this district is Ponnaiyar.

Crystalline rock formation of Archaean metamorphic complex are exposed in the district with dolerite dykes at several places. The occurrences of Limestone, Corundum and ornamental stone of dolerite dyke rock are some of the chief minerals encountered here. The occurrences of iron-ore namely magnetite-quartzite encountered near Tirthamalai in Dharmapuri district

PLACES : 1.Mallapadi, 2.Maharajakadai, 3.Mallachandram, 4.Kuruvinayanpalli, 5.Mayiladumparai, 6.Oppattavadi, 7.Othikuppam, 8.Thalapalli

Composit Dharmapuri District



The paintings were applied invariably by using both white and red pigments. At Myiladumparai and Oramanagunta the white pigments are superimposed over the red pigments. This place might have been occupied time and again. According to Dr. Rajan, "the non-availability of red pigment in the megalithic burial and its superimposition by white pigment suggested that these were executed on some special occasions."

There are ten rock art sites noted from Krishnagiri district. The rock paintings are mostly found in the dolmens and ceilings of rock shelters or big boulders. The paintings are found at following places in Krishnagiri and Hosur taluks. Thalapalli, Oppathavadi, Oramanakunta, Myiladumparai, Mallapadi, Mudippinayanapalli. The paintings on dolmens are noticed at Mallachandram, Maharajakadai, Malththampatti, Kuruvinayanapalli, and Oramanakunta.

MALLAPADI

Latitude: 12° 31' 34" N

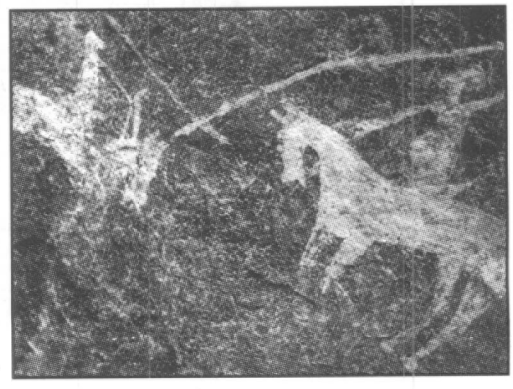
Longitude: 78° 22' 36" E

Location:

It is situated on the Krishnagiri-Bargur highway about 12 km from Krishnagiri in Dharmapuri district.

Description:

The painting of a man seated on a horse with upraised arm holding a spear, (Plate - 17) was in good preservation. There are some more paintings of animals, one of the paintings depict an elephant. Another fighting scene between two horse riders with poles in their hands was on the low ceiling of the rock shelter. The paintings painted in white Kaolin. The clear picture of horse shows the domestication of the horses.



Excavation:

The site was excavated by the Department of Ancient History & Archaeology, University of Madras under

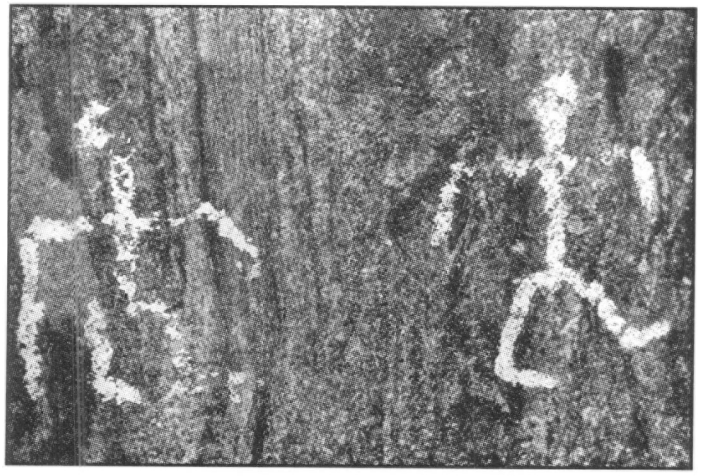


PLATE - 19

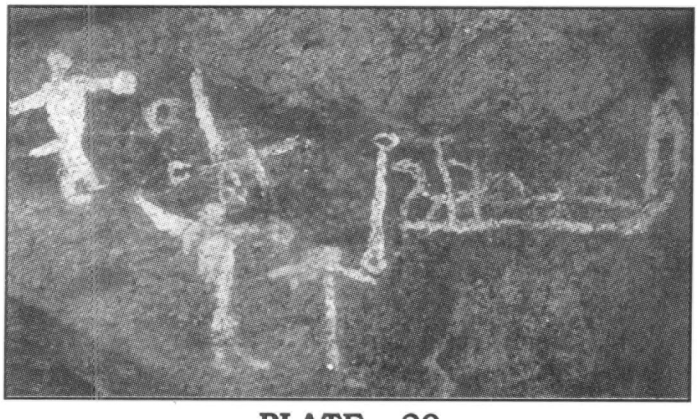


PLATE - 20

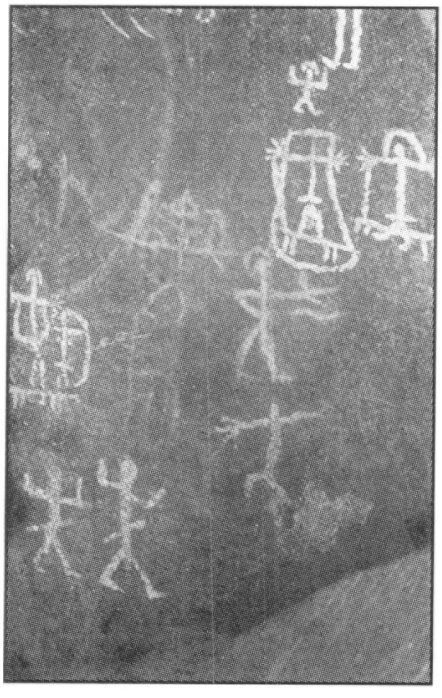


PLATE - 18

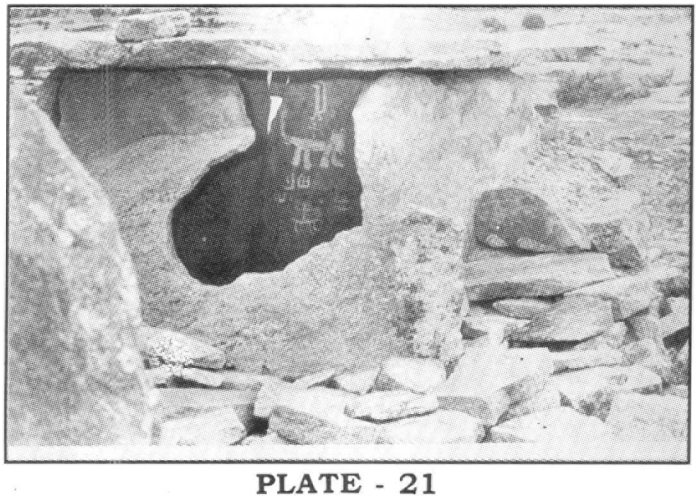


PLATE - 21



PLATE - 23



PLATE - 24



PLATE - 27

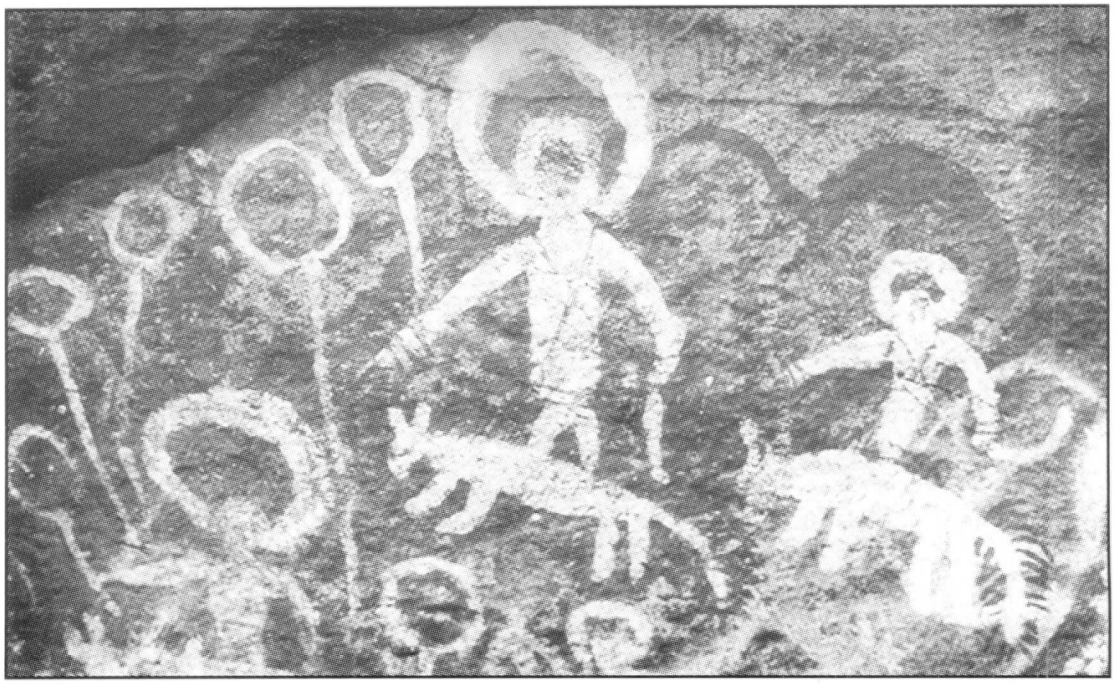


PLATE - 28

the direction of Prof. K.V. Raman in the year 1980. The excavation revealed that the earliest occupation belongs to the megalithic culture but with some lingering traits of the Neolithic culture represented by black and redward, red, redslipped ware and black ware. Occurrence of pottery head rest along with the Neolithic grey ware is particularly interesting.

Date:

Megalithic period (500 B.C.E.to 300 C.E)

Discovered and Interpreted in the Year 1982:

Prof.K.V.Raman, Head of the Department (Retd.), University of Madras

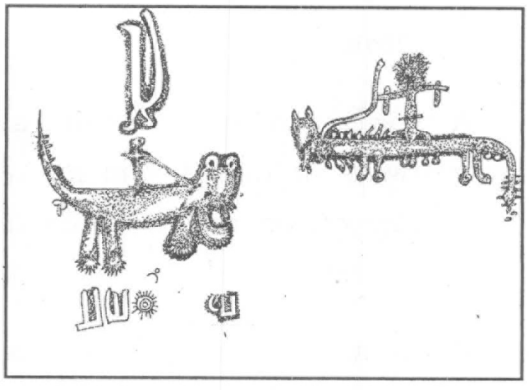
MAHARAJAKADAI

Latitude: 12° 37' 26" N

Longitude: 78° 15' 16" E

Location:

Maharajakadai is situated (Krishnagiri near about 12 kms) in Dharmapuri district. The paintings are found on the slabs of four dolmens (A typological terminology for a Megalithic burial).



Description:

The figures of a Bird, an Archer, a man riding on a horse and a man holding a raised pole (Plate 18 - 20) were found on the dolmens. Another painting was of a person with an halo over his head and body drawn upto the hip. A picture of rays emanating from the head suggests that it might be the representation of a God or a headman of that tribe. White colour was used as a medium of painting.

Date:

As all the paintings were drawn on dolmens, the date assigned to them are 1000 B.C.E. to 500 B.C.E. or Megalithic period.

Discovered and Interpreted in the Year 1984: Tvl.

1. Natana Kasinathan, the then Director of Archaeology
2. S.Krishnamurthi, Archaeological Officer, Chennai

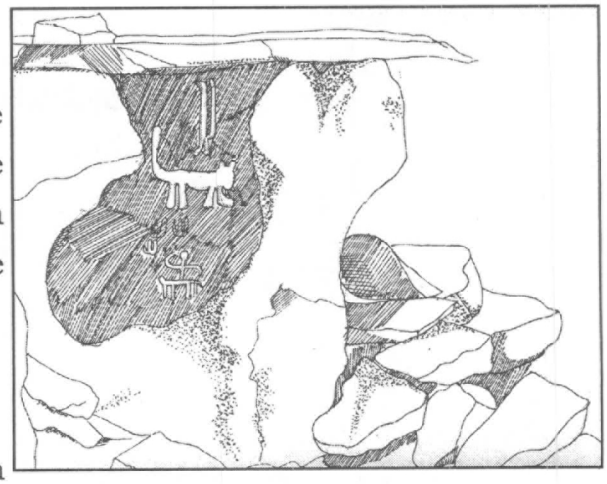
MALLACHANDRAM

Latitude: 12° 38' 54" N

Longitude: 78° 05' 49" E

Location:

Located near Krishnagiri on the way to Sulagiri towards Bangalore highway about 22 km from Krishnagiri. The pictures were drawn on Dolmens (Plate - 21).



Description:

A painting of a horsemen, an animal with fur raised, and human figure decorated with a richly decked crown, are drawn on the Dolmens. The drawings could be seen through the portholes.

Some graffiti marks such as tree in railing, a drum like figure, a Tulasi plant (Ocimum) on a pedestal are also noticed. White pigment is used as colouring agent.

The human figure with headgear could be identified with a headman suggesting that these people had begun to lead a community life. The graffiti marks found in these paintings are also noticed in the potsherds collected from the excavations.

Date:

Megalithic period.

TAMIL NADU STATE DEPARTMENT OF ARCHAEOLOGY 11845 MADRAS

Discovered and Interpreted in the Year 1984:

Thiru Natana Kasinathan, the then Director of Archaeology

Thiru S.Krishnamurthi, Archaeological Officer, Chennai

Thiru K.S.Sampath, Epigraphist, Chennai

KURUVINAYANAPALLI

Latitude : 12° 38' N

Longitude : 78° 20' E

Location: It lies 17 km northeast of Krishnagiri on the Kuppam road.

Description: One of the dolmens had a painting in white pigment on the inner surface of the western orthostat facing the porthole. Four human figurines were noticed: two on the northern side while two on the southern side and an animal. There are square box ca some symbols with vertical and horizontal lines, and round dots on either side of them, are also noticed.

Date : Megalithic Age

Source: Archaeological Gazetteer of Tamil Nadu - Dr. K. Rajan, Thanjavur - 1997

MAYILADUMPARAI

Latitude : 12° 28' N

Longitude : 78° 18' E

Location: Lies at a distance of 8km from Sandur, near Krishnagiri.

Description: The paintings are found in the two big boulders near the locally known pond *negul sunai.* Both red and white pigments are found on the rocks which shows the super imposition of the paintings time and again. Here five group of paintings are found. In the first group in red ochre a man is seated or standing on an animal and is shown as if a structure covers him. The human figures are shown holding weapons like swords and dagger. In the second group six men and animals are painted. Third group has six pairs of men depicted in fighting scene, while a man with long lance kills an animal. Two men are shown holding a bow or

shield standing against each other, and a human being killing a wild pig.

Date : Megalithic Age

Source : Archaeological Gazetteer of Tamil Nadu - Dr. K. Rajan, Thanjavur - 1997

OPPATTAVADI

Latitude : 12° 34' N

Longitude : 78° 24' E

Location: Oppattavadi lies about 10 km from Barugur, on the way to Neralakkotttai.

Description: The paintings are found on the hillock called as *Thottiyana kuttai*

The white pigment paintings were found in the five locations. Few human, animal and bird figurines are found in the rock shelters. The human figures are shown with some weapons.

Date : Megalithic Age

Source: Archaeological Gazetteer of Tamil Nadu - Dr. K. Rajan, Thanjavur - 1997

OTHIKUPPAM

Latitude : 12° 37' N

Longitude : 78° 20' E

Location: It lies about 1 km enroute to Bargur-Basavanakoil. The paintings are notice on thenearby hillock called *Kathirappanamalai*

Description: A rock shelter called 'sanniyasi gavi' where the paintings are found in white pigment. There are eight human figures, out of them four men are shown in a row.

Date : Megalithic Age

Source: Archaeological Gazetteer of Tamil Nadu - K. Rajan, Thanjavur - 1997

THALAPALLI

Latitude : 12° 33' N

Longitude : 78° 12' E

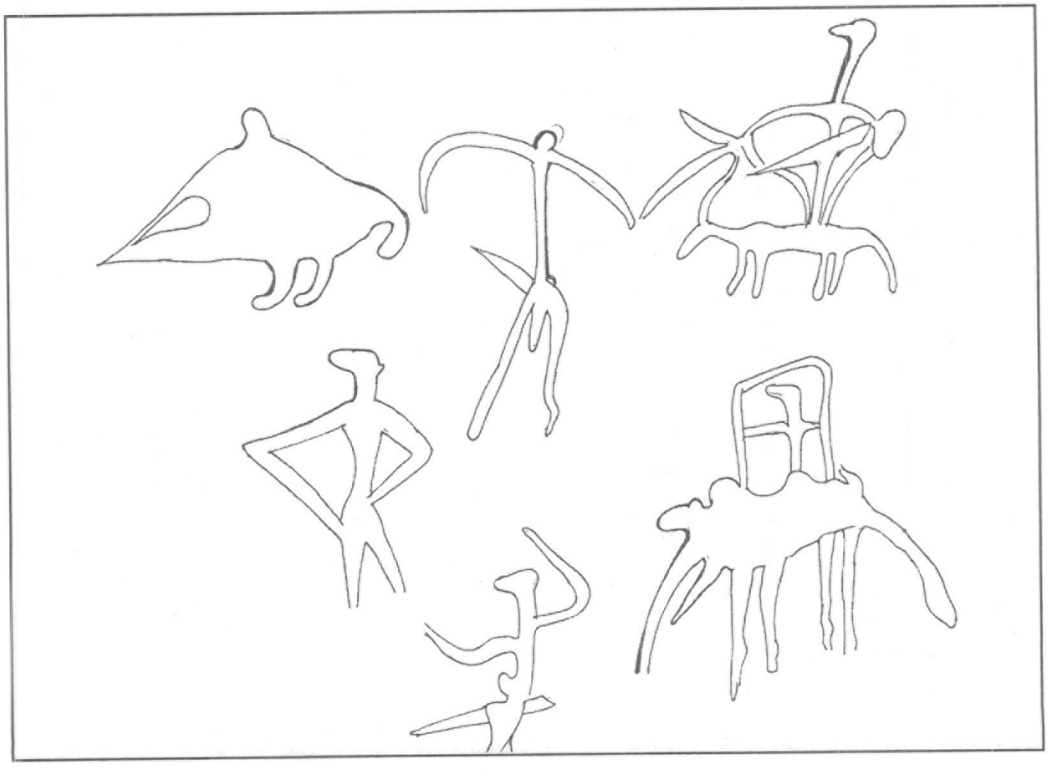
Location: Lies 3 km from Krishnagiri enroute to Rayakottai road.

Description : There are four groups of rock paintings seen in a natural caves near the build site. First three groups of rock paintings are located in KottiKundur (Katti means Monkey, Kundu means big boulder) while the fourth group of paintings are seen int the Ammarasai Kundu. All are drawn in while pigment.

12 symbols are identified in the first group of paintings depided on KottiKundu. They are star., Bow and Arrow, a man beside an animal, a circle with a dot at the centre and three strokes meeting at a single point. In the Amona Vasai Kunu figure of a male with bow and arrow and a female are drawn. In the third group, an animal and a like objects are depicted.

Date : Megalithic Age

Source : Archaeological Gazetteer of Tamil Nadu - Dr. K. Rajan, Thanjavur - 1997

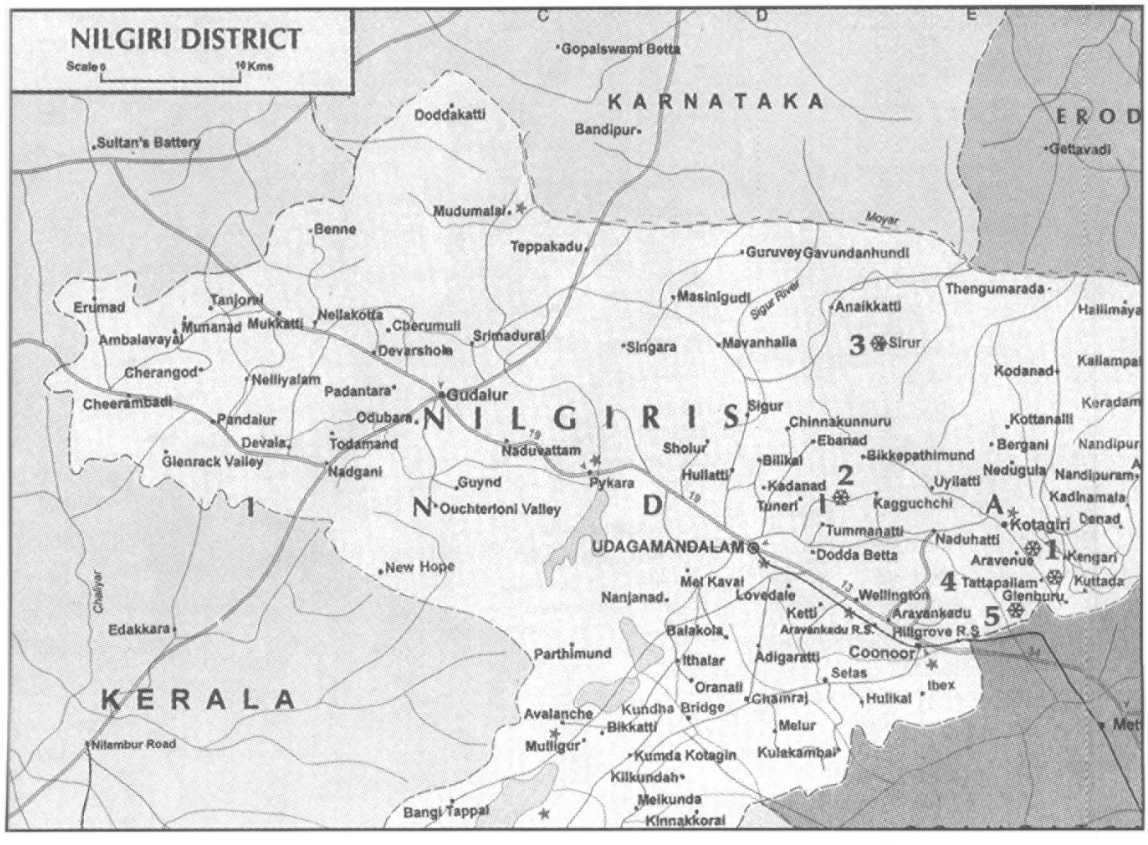


NILGIRIS DISTRICT

Nilgiri is a mountainous district situated in the northwestern part of Tamilnadu and bordered by Kerala and Karnataka states.

The average elevation of Nilgiri hills is 1370 m above MSL and with some prominent peaks like Nilgiri peak (2476 mt), Devabetta (2552 mt), Mukurthi Peak (2559 mt) and Doddabetta (2635 mt) which is the highest peak in Tamilnadu. Bhavani and Moyar are the two main rivers of this district.

Pyrexene gneisses interbedded with pyroxene granulites and garnetiferous quartzofelspathic gneisses is main rock formation of this district. Most of the country rock are intruded by younger granites, vein quartz, gabbros and dolerites. On the Nilgiri plateau there are a number of laterite capping which are aluminous. The mineral wealth of the district is rather poor except for low-grade bauxite deposits, gold, magnesite and minor occurrences of mica and iron ore. Low-grade iron ores (magnetite-quartzite) are reported from near Devala, east of Yedapalli near Coonoor, Masinagudi and Sigur etc.,



The rock art sites are found in Sigur, Iduhatti, Konavakarai, Thengumarahada and Vellerikombai. Due to the occurrence of kaolin the paintings are in white pigment.

PLACES: 1. Konavakarai, 2. Iduhatti, 3. Sigur, 4. Karikkiyoor, 5. Vellerikkombai

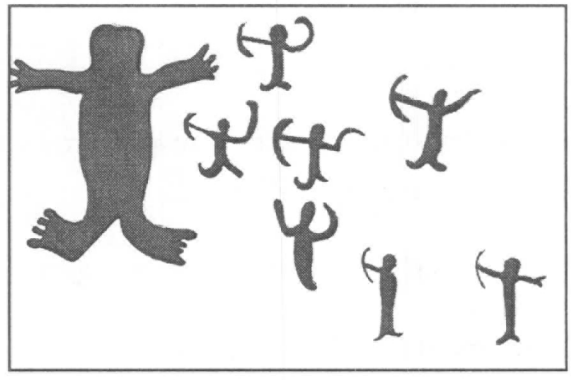
KONAVAKARAI

Latitude: 11 24' 28" N

Longitude: 76 53' 39" E

Location: It lies 10 km south east of Kotagiri in Nilgiri District. The paintings are found on the faces of a huge rock.

Description: The drawings show eight or more human figures performing war dance. Obviously before attacking a couple of wild bears. The human beings are seen holding bow in their hands while the bears are shown with outstretched arms.



Colour: White pigment

Date: Megalithic period

Discovered by: Prof. Basuvalingam, Government College, Ooty

Interpreted in the Year 1984: Thiru R.Poongundran, the then Registering Officer
Thiru K.S.Sampath, Epigraphist, Chennai
Thiru: T. Subramanian, Archaeological Officer, Thanjavur
Thiru: R. Selvaraj, Archaeological Officer, Chidambaram

IDUHATTI



Plate - 22

Latitude : 11° 28 N

Longitude: 76 47' E

Location:

This village lies 25 km northeast of Ooty. The rock is located further north about 5 km from Iduvatti in Nilgiri District.

Description:

The paintings of hands and floral designs (Plate - 22) are found at Iduvatti.

Colour: Deep red ochre

Date:

Megalithic Comments: The paintings at Iduvatti resemble the hands found at Settavarai and Kilvalai.

Discovered by: Prof. Basuvalingam, Government College, Ooty

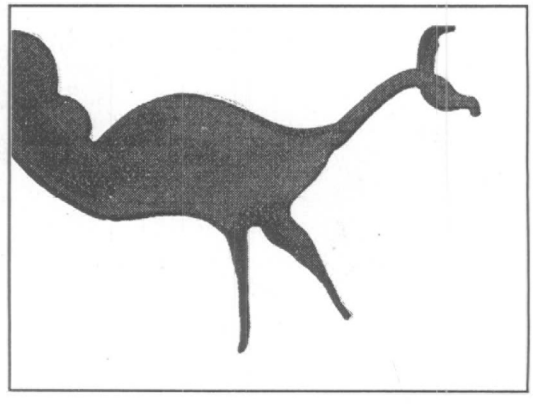
Interpreted in the Year 1984:

Thiru R.Poongundran, the then Registering Officer
Thiru R.Selvaraj, Archaeological Officer, Chidambaram
Thiru K.S.Sampath, Epigraphist, Chennai
Thiru: T. Subramanian, Archaeological Officer, Thanjavur

SIGUR

Latitude: 11° 34' 12" N

Longitude: 76° 38' 31" E



Location: The paintings are located near Masinagudi, in a high up in the Sigur hills.

Description: The figures on the rock are all in a tumble and they are about twenty in number. The stylized human

figures on horseback and the imperfect representation of dogs and asses are noteworthy. It appears to be a hunting expedition.

Colour: White pigments

Discovered by: Prof. Basuvalingam, Government College, Ooty

Interpreted in the Year 1984:

Thiru R.Poongundran, the then Registering Officer
Thiru R.Selvaraj, Archaeological Officer, Chidambaram
Thiru K.S.Sampath, Epigraphist, Chennai
Thiru: T. Subramanian, Archaeological Officer, Thanjavur.

KARIKKIYOOR

Latitude: 11° 23' N

Longitude: 76° 55' E

Location: Karikkiyoor, a village about 40 km from Kotagiri, and about 2 km trek to the shelter in Nilagiri district.

Description: The huge rock, roughly 300 feet high and 500 feet long, with paintings found on its eastern face; locally known as Porivarai is one of the longest pre-historical rock art sites found in Tamil Nadu. The paintings extend to a length of nearly 53 m and to a height of 15 m.

The painting scenes include about 500 figures, of animals and human figures (Plate 23 & 24) There are series of depiction of bulls and bullfights, wild animals like boar, deer, elephants, fowl, monkeys, and a mongoose. A man is shown riding on an animal while another man is carrying some animal. There are also paintings of snake fight and depiction of warriors with weapons.

The procesion of bulls and calf are the master pieces. Another interesting depiction is a group of dancers with their arms thrown over the other person's waist.

The colours used here are ochre (red hematite) and white (lime), both available locally.

At Porivarai, the natural rock wall was not prepared by the pre-historic artists. In rock art, it is characteristic for the artist to chose to execute the work irrespective of the rock curvature or characteristics. At Porivarai, some of the representations are placed so high that they are well beyond the reach of someone standing at floor level. The Porivarai artists may either have clambered on to the wall or used an artificial aid.

At this site, the vast majority of recognisable representations are indeed of various species of animals and human activities. Among the animals most commonly represented are the bison, the bull and the horse. Animals, humans or signs are shown either in isolation or on panels. The representation of human are very crude and there are super position of paintings freguently. It is not at all uncommon to find one animal or sign placed on top of another or sign placed on top of another or sign either overlapping the previous representation in part only or completely covering it. Animals are almost invariably shown in profile and the varieties of stances to be found in this art are numerous. Also some images are painted with solid colours in red and white pigments treatments believed to belong to an earlier period.

The depiction of the skeleton and intestines of living animals is a widely diffused phenomenon in the art of the hunting and gathering societies. Even in the earliest paintings, depictions in the x-ray style are plentiful. But uniformity is lacking even between animal depictions within the same painting group. Such x-ray style bull images are depicted in Porivarai. Similar style paintings are found mostly in central Indian rock art shelters. In Tamil Nadu, such images are found in Alambadi, Vellarikombai and Odiyathoor.

Pre-historic art gives information on pre-historic social activities, the economy, material culture, idealogy and environmental context, which is often not reflected in other types of archaeological evidence.

Date : Historic Period.

Discovered by : Dr. G. Chandrasekaran, Professor,College of Arts and Thiru.K.T. Gandhirajan

Source : http://www.thehindu.com/thehindu/mag/2004/03/07

VELLERIKOMBAI

Latitude : 11° 21' N

Longitude: 76° 54' E

Location:

Vellerikombai, situated 20 km from Kotagiri, is in the Jakanare slopes reserved forest, Nilgiri District. Locally this rock art site is known as eluthupaarai (inscribed rock). It is situated on the outskirt of Coimbatore District.



Plate - 34

Description:

Vellerikombai rock art is regarded as unique as its depiction are full of stylized forms and absence of general depiction of animals and human activities such as hunting and dancing scenes as in the other rock art sites of Nilgiri. The rock art noticed here depicts human figures in stylistic form, a bull a cat like animal (Plate - 34) and a hand. All these are executed with red ochre.

Period: Megalithic age

Observation: The tradition of painting still exists among the Kurumbas and there is only one old man still practising the art. Further it was limited to decoration and painting during the annual festival (thiruvizha) of the Kurumbas.

They prefer to use red ochre as in Ezhuthuparai. However they also used white on the walls of their huts, which they depict in the paintings.

Discovered by: Mr.Allen Zackerel, Professor of Anthropology from USA

Interpreted in the Year 1984:

Thiru R.Poongundran, the then Registering Officer

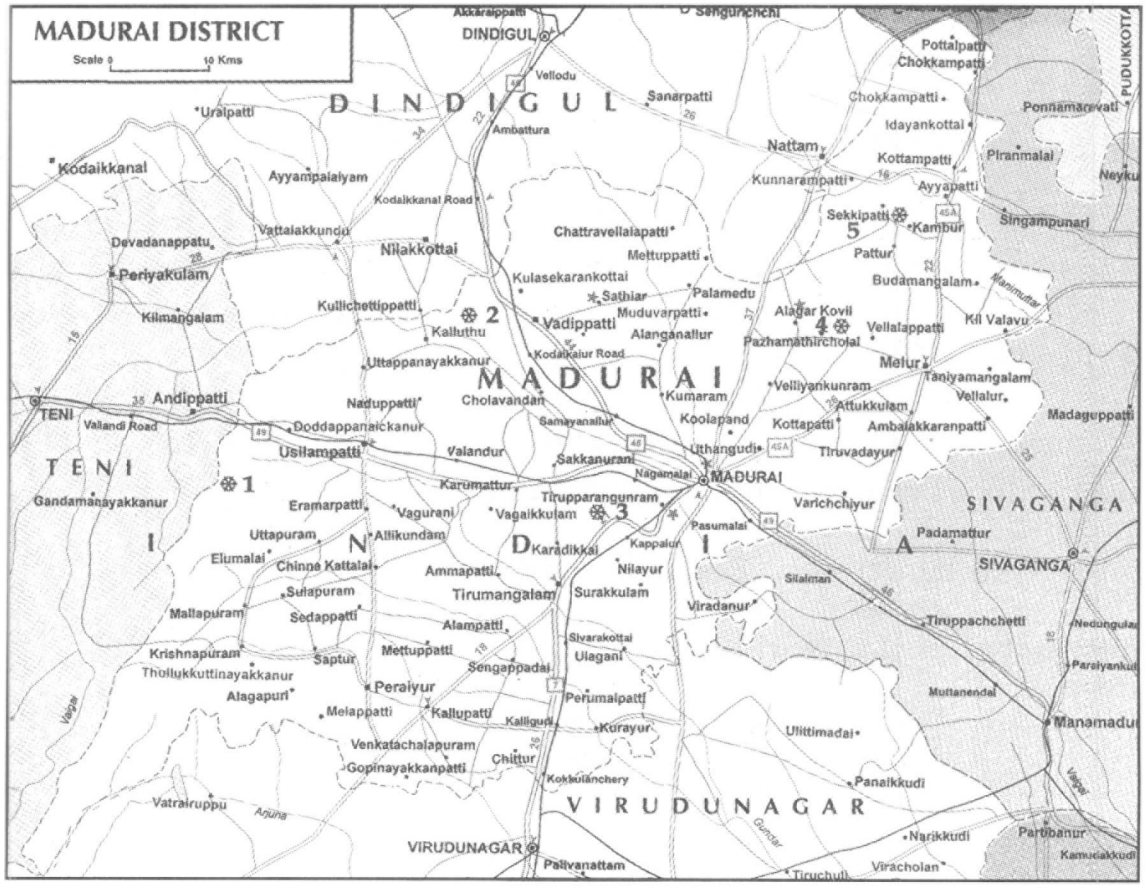
Thiru R.Selvaraj, Archaeological Officer, Chidambaram.

MADURAI DISTRICT

Madurai district is an inland district bordered by Theni District on the west and Sivaganga on the east. On the north it is bordered by Dindugal distict and Virudunagar on the south. The main hill and river of this district are Alagarmalai and River Vaigai. Black soil predominantly occurs in Tirumangalam taluk.

The main types of rocks encountered fall into two groups: Charnockites and Khondalites of Archaean age. The Khondalite group of rocks consists of crystalline limestone, calc-gneiss and calc-granulite, garnet-sillimanite gneiss, hornblende and biotite- gneiss and related migmatites with bands of quartzite are exposed in the plains of Melur taluk. The chief minerals of this district are gem stones comprising rubies, aquamarine, amethyst in the soil derived from pegmatite veins on weathering in Melur taluk and copper (lead-copper-zinc mineralisation within calc-silicate rocks) near Joshiyar-Alangulam in Tirumangalam taluk

SITES: 1.Kamayagoundanpatti, 2.Anaippatti, 3.Muttuppatti, 4.Kidarippatti, 5.Karungalakudi



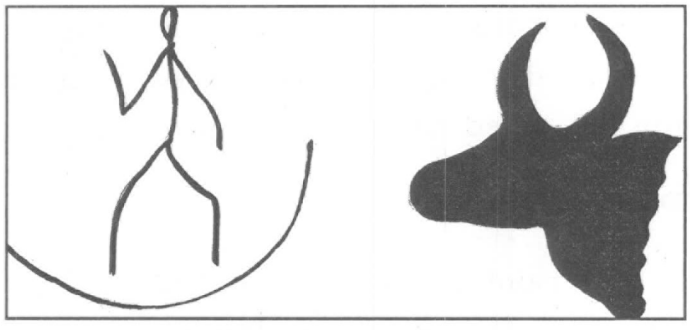
KAMAYAGOUNDANPATTI

Latitude : 9^0 44' N

Longitude: 77^0 19' E

Location:

This place is situated near Suruli hills of Kambam valley in Madurai district. The hill is known as 'Sangilikkaradu" where the paintings are located at a place called 'Padayalpparai'



Description:

Though these paintings are clearly visible, special attention may be drawn to a painting of a head of a bison, and a man rowing on a boat. The head of the bison is thickly painted

Colour; White pigment

Date: Megalithic period

Comment: Neolithic celt and megalithic burials are found in and around Sangilikkadu hill. The paintings are dated to megalithic period.

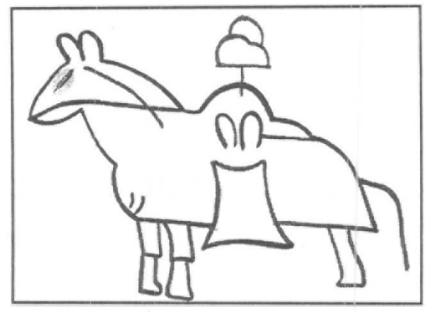
Discovered and Interpreted in the Year 1984: Tvl:

Dr R. Poundurai, Lecturer, Tamil University, Thanjavur.

ANAIPPATTI

Latitude : 10° 06' N

Longitude: 77° 51' E



Location:

Anaippatti is situated near Andippati in Madurai district. The paintings are found in the hill called sittarmalai.

Description:

The paintings of a man on horse back, as well as few paintings of deer, cart are noteworthy. The man on the horse is shown with a cap on his head.

Colour: red ochre

Period: Megalithic period

Comment: The depiction of the cart proves the fact that the people who painted had a settled life.

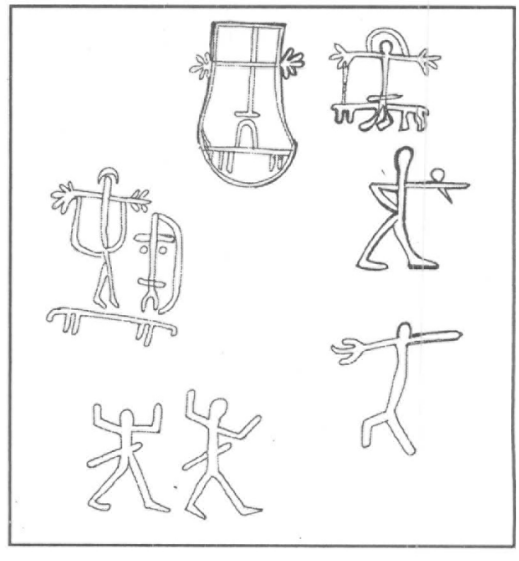
Discovered and Interpreted in the Year 1984:

Dr.Selvakumar, Research scholar, Madras University

MUTTUPPATTI

Latitude : 9° 56' N

Longitude: 78° 01' E



Location:

Muttuppatti is situated in the southern part of Nagamalai near Madurai city. This place is locally called Karadippatti as the paintings are found in the cavern

Description:

The painting of a man with thin arms, a round hip and broad body portion is unique; some lines are drawn near this painting.

Colour; red ochre

Period: Megalithic period

Comment: Only the human beings are painted the nature of the paintings shows that they belong to megalithic period.

Discovered and Interpreted by:

Dr.R. Venkatramam, Professor, Madurai Kamarajar University.

KIDARIPPATTI

Latitude : 10^0 03' N
Longitude: 78^0 17' E

Location:

Kidarippatti is situated about 19 km near Alagarrmalai. Thirteen rock paintings are noticed here.

Description:

Red ochre is used for the painting. The face of the human figures are shown as that of a bird's beak. (Plate - 25) Depiction of antelope with its horn, full figure of elephant, trisulam, small insects and a horse are note worthy.



Plate - 25

Date : Megalithic Age

Discovered and Interpreted in the Year 1984:

Thiru : Sulaiman, Curator, Madurai Museum

Dr. V. Vedachalam, Epigraphist, T.N. Mahal, Madurai

KARUNGALAKUDI

Latitude : 10° 08' N

Longitude: 78° 22' E

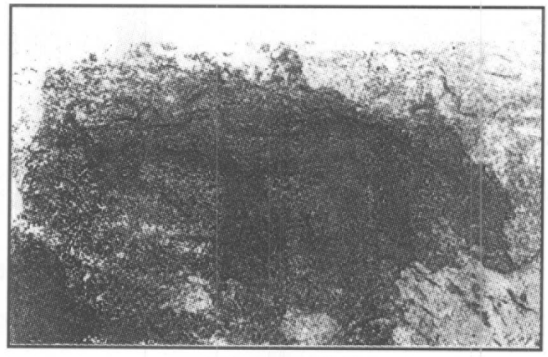


Plate - 26

Location:

Karungalakudi is situated near Melur.

Description:

A horse (Plate - 26) is painted in a running posture while a bull is also shown fully covered with red ochre.

Date : Megalithic Age

Discovered and Interpreted in the Year 1984:

Thiru : Sulaiman, Curator, Madurai Museum

Dr. V. Vedachalam, Epigraphist, T.N. Mahal, Madurai

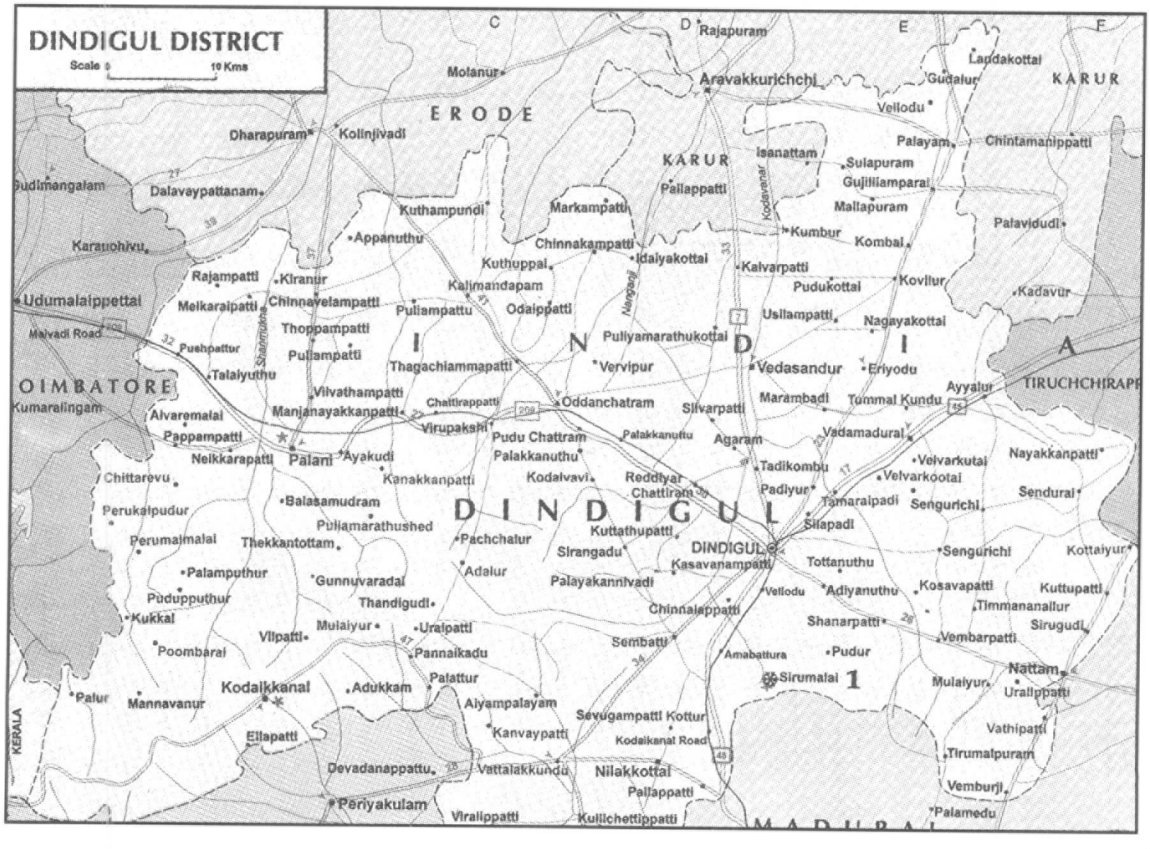


DINDIGUL DISTRICT:

Dindugul district is bordered on the north by erode and karur district, on the west by Coimbatore district, on the east by Tiruchy district and by Madurai and Teni district on the south. The Palani hills on the western side and Nattam hills on the south east of this district are the important hills noticed here. Black soil is found to occur in the part of Palani taluk.

The main rock types encountered fall into two groups: Charnockite and Khondalites of Archaean age. The Charnockite group of rocks consists of the acid charnockite and related migmatites. with bands of basic granulite and magnetite-quartzite. They form the country rocks in Palani and Sirumalai hills. Laterite-bauxite capping of Tertiary period are seen on the Kodaikanal Plateau of Palani hills. Important minerals occurring in the district are bauxite, molybdenite and gemstone. Bauxite occurs as lumps of cream to light pink colour associated with aluminous clays of yellow to brown colour, on the Kodaikanal pleatau of Palani hills. Gemstones namely Rubies, aquamarine, amethyst are found in the soil derived from pegmatite veins in Palani and Dindugul taluks.

SITE 1.Sirumalai



SIRUMALAI

Latitude : 10° 19' 36" N

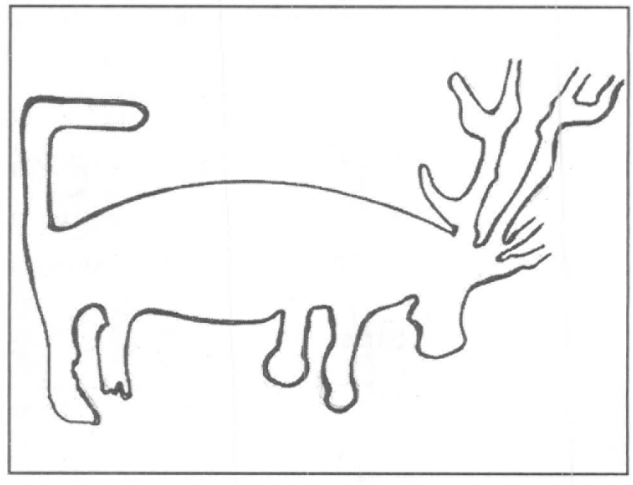
Longitude: 77° 33' 46" E

Location:

The paintings are found in a cave in Cirumalai hills near Dindugul on the Pallapatti-Dindugul road about 31 kms. The cave situated here is locally called as Aruvimalai, where a waterfall flows down.

Description:

The cave measures about 10mt x 13mt and the paintings are found all over the wall. The paintings depict several hunting scenes (Plate - 27) of animal fight and men in combat the most important aspect are the religious ritual. A man with a halo (Plate - 28) around his head is shown seated in an imposing manner. Another man is shown nearby in a similar pose, both of them are holding a sickle like weapon on their left hands, and a 'X' shape cross band runs around their chest.



Next to this panel another symbol of a skeleton resembling an Anthropomorphic or Mother Goddess is found. The animals are drawn with care. The deers like black buck, four horned antelope, (Plate - 29) and animals like Porcupine, wild cats and wild hen are noteworthy.

Another typical scene is the one where a man initiates a fight between a wild cat and a porcupine. (Plate - 30) The paintings of human beings are shown tall with long thin hands and legs. In one picture a man is showing the direction to another, in another a man holding a bow and an arrow in aiming posture. Both white and red ochre were used for drawing the paintings.

While comparing the pictures of human being three types of men could be distinguished, one with a halo around their head, another figure without halo and the third man having conical or triangle faces might suggest the three level hierarchy in the society. The occurrence of megalithic burials nearby suggest that these paintings belong to that period.

Date: Megalithic period.

Discovered by:

Prof.Vijayavenugopal, the then Head of the Department, Madurai Kamaraj University

Interpreted in the Year 1984 by:

Thiru : V.Vedachalam, Epigraphist, T.N.Mahal, Madurai



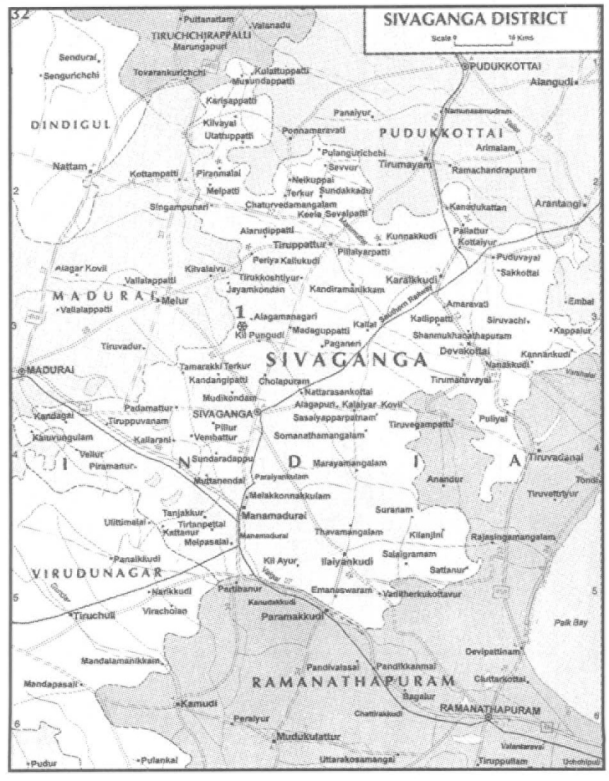
SIVAGANGA DISTRICT

Sivaganga district is bordered on the north by Pudukottai district, on the south by Ramanathapuram district and on the west by Madurai district.

Most of the area in Tirupattur taluk and northern portion of Sivaganga taluk are covered by red soil and drained by river Virisull and Manimuttar nadi

The soft sedimentary rocks of upper Gondwana age consisting of basal boulder bed and conglomerate, micaceous sandstone and alternating shales and grits unconformably overlie the Archaean rocks are noticed in the Sivaganga taluk and certain part of Tirupattur taluk. The Gondwana rocks are seen to be overlain by coarse, soft, gritty, occasionally conglomeritic at few places around Kovilur and Kuttelar in Tirupattur taluk. Laterite and reddish brown lateritic soil of sub recent age occur covering wide area in the parts of Sivaganga taluk. Mineral deposits of Graphite and variegated clay of Gondwana formation are found occurring in this district. Yellow shales and red ironstones underlying laterite occur in the places around Sivaganga. These are found to be suitable for pigment manufacture.

PLACES: 1.Tirumalai



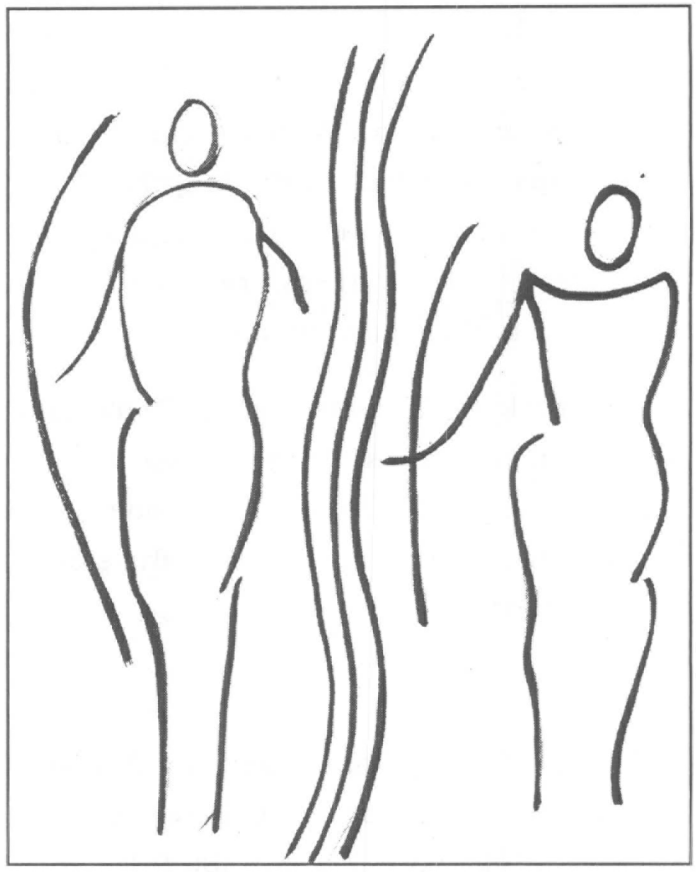
TIRUMALAI

Latitude : 9° 59' N

Longitude: 78° 28' E

Location:

A small hamlet situated about 21 km, West of Sivaganga.



The paintings are noticed on a granite hill in the north of the hamlet in the rock shelters. They are found in four places in this shelter.

In the foot hill a painting of a man sitting on an animal is located on the west wall of the rock shelter between Sarukkum Parai and the rock west of it. The head of the man is depicted in a small, elliptical shape with an elongated dot in the middle. The dot might the representation of the eye. A slender line connects the head with the shoulder. The body of the figure is drawn like an upright drum. The oblique lines drawn on the body of the figure suggest the wearing of dress. The figure has three fingers in its hands, and the hair is shown ruffled.

In the second place the painting is seen on the northern rock face of the shelter. Two men are facing each other; the head is represented as a horizontal line, and their body depicted as in previous painting as upright drum.

The third group of paintings is drawn on the wall of the rock shelter on the southeastern side of a rock called Pamparamalai. Two men are

seen holding their hands together and another tall figure with stretched hands trying to trap a deer near by. The head of the deer was seen eroded, only the portion of the head and the horn were visible slightly. Two men standing at a distance also appeared to help the tall man in trapping the deer. Below this figure, three men were painted in a circle and a small deer is shown in the middle. There are some traces of paintings found, but they are not clear in some places. Next to these paintings, two life size figures are noticed. Of these the one seen on the left was taller than the other. The right arm of the tall figure is folded and held up while the left arm is stretched straight. These figures have five fingers in each of the foot and hand. The right side figure of the smaller one has a slim body compared to that in the left, the right arm is stretched straight, and the fingers are not seen. The left arm of the figure is partially eroded, while the left side fingers are not seen. A few smaller figures are also painted near the main figures.

The rock shelter on the southern side of Pamparamalai has good number of paintings. They are seen scattered all over the wall. Some figures were painted on the right side, while a small figure drawn seated on an animal is found in the right side. The figures are painted with white pigment.

Date:

There are megalithic cairn circles and a Tamil Brahmi inscription noticed nearby suggest that these paintings belong to the early historic period datable to 300 B.C.E. 300 C.E.

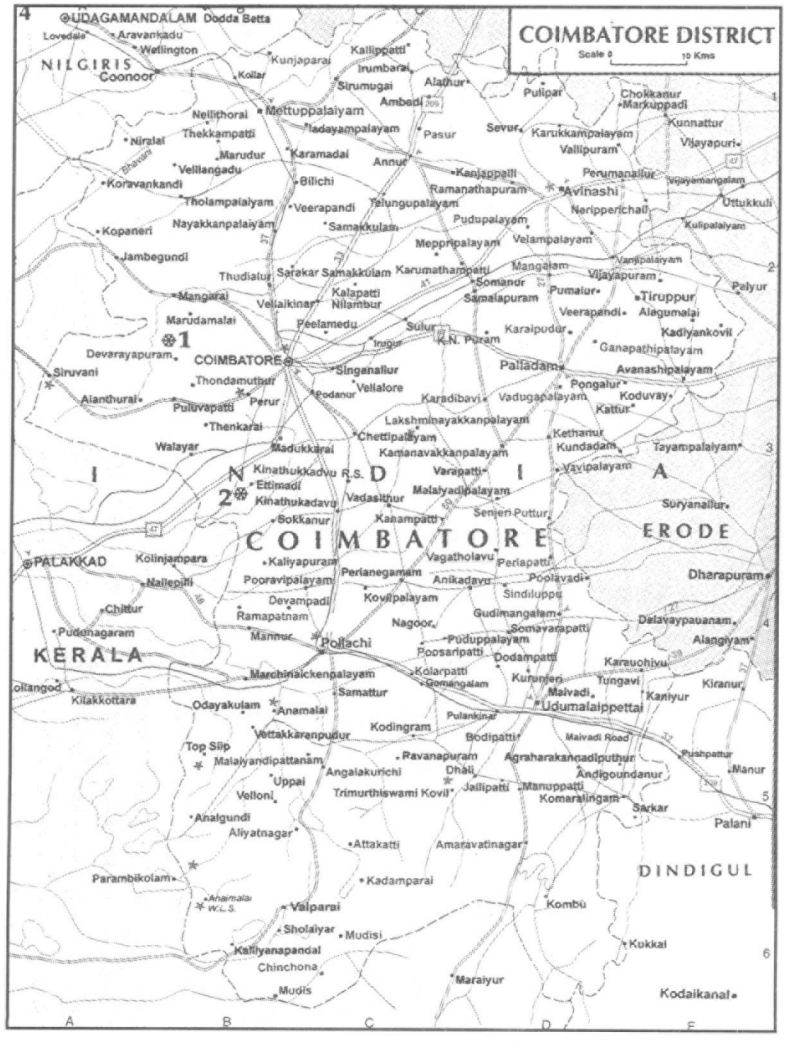
Discovered & Interpreted in the Year 1984: by:

Thiru : V. Vedachalam, Epigraphist, T.N.Mahal, Madurai

COIMBATORE DISTRICT

Coimbatore is an inland district bordered on the west by Kerala state and on the east by Erode taluk. The district is marked by the hill ranges of Sathyamangalam. The hill ranges of Nilgiri and Anaimalai of western ghats are located bordering the district on the north-west, west and south direction. The chief rivers are Moyar and Bhavani (tributaries of Cauvery). The rock types met in this district are granulite group of rocks, mesocratic-gneissic group of rocks and coarse pink pegmatoidal and granitoid rocks. Overlying these rocks at places is thin cover of 'Kankar',locally known as odaikallu. The plains of Coimbatore are mostly covered by different types of soil such as red loamy and sandy soil, reddish brown and brown soil and black clayey soil. The most important minerals are Limestone, Gypsum and Magnetite.

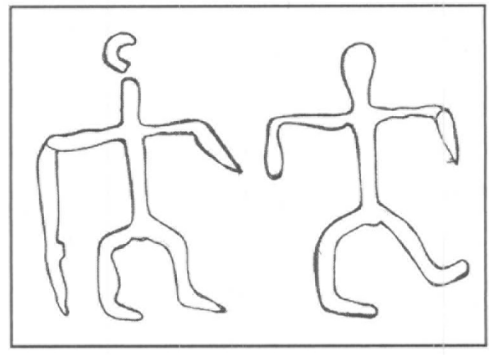
PLACES: 1.Vettaikaranmalai, 2.Kumitippathi



VETTAIKARANMALAI

Latitude : 11° 3' N

Longitude: 76' 48' E



Location:

Vettaikaranmalai is a hill situated near a village called Vellurkkanpalayam about 25 kms from Coimbatore city. The paintings are found at about 2500-meter height in a natural cavern.

Description:

The paintings of animals like Elephant, Deer, Horse are found here; one man is shown on an elephant's back while another is seated on a horse with a spear in his hand. (Plate - 31) The spear is shown in a throwing posture, it might be the depiction of a fight between two tribes or a hunting scene. (Plate - 33)

Another interesting painting is that of men dancing in a row holding hands together; (Plate - 32) the colour of the painting is white.

The paintings show the beginning of communal life of the people. The Toda tribes in Nilgiri hills practise this kind of community dancing even today.

Date: Historic period.

Discovered by: Thiru. I. Ramaswamy, Boluvanpatti, Coimbatore
Thiru. Ragavan, Teacher

Deciphered in the Year 1984 : Dr. R.Poongundran, the then Registering Officer
Thiru. R.Selvaraj, Archaeological Officer, Chidambaram
Thiru. K.S.Sampath, Epigraphist, Chennai
Thiru. T.Subramanian,Archaeological Officer,Thanjavur

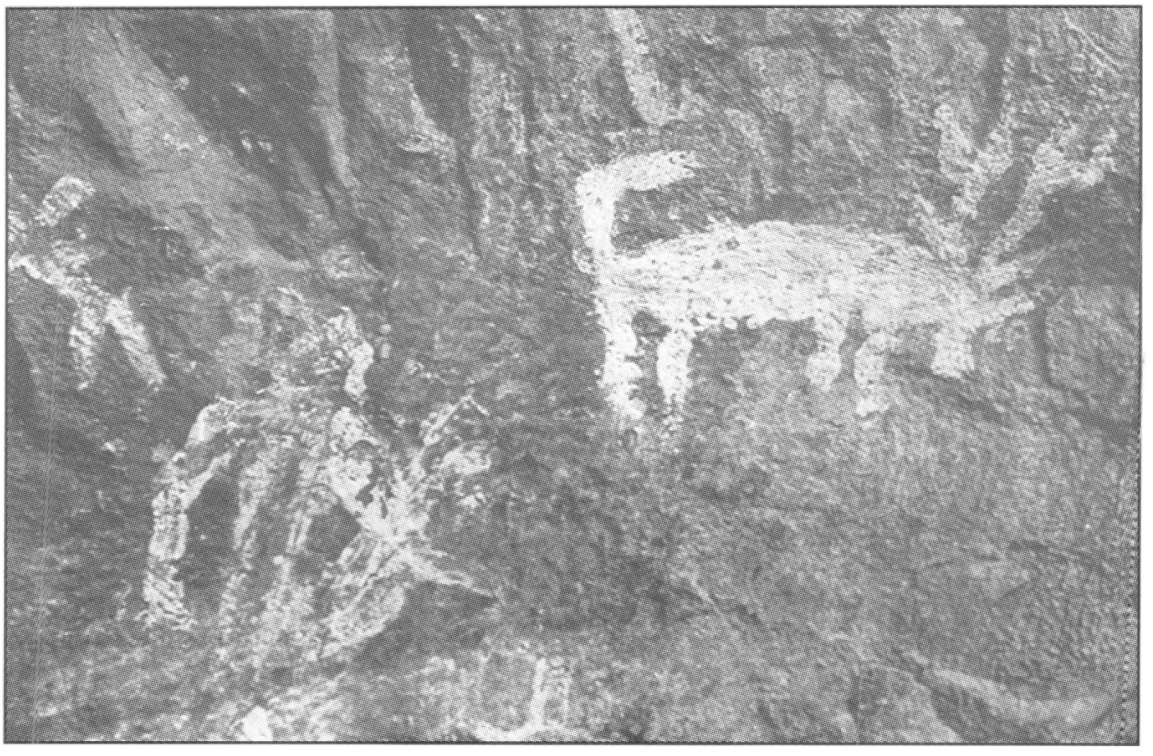


PLATE - 29



PLATE - 30

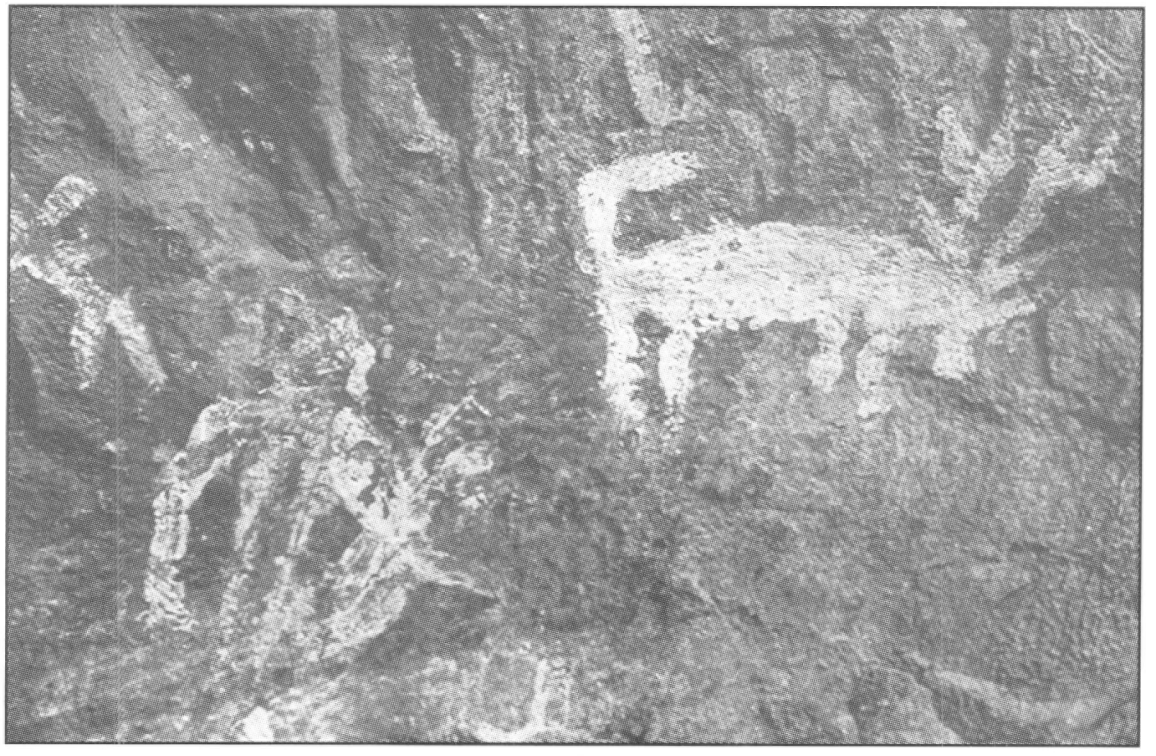


PLATE - 29



PLATE - 30

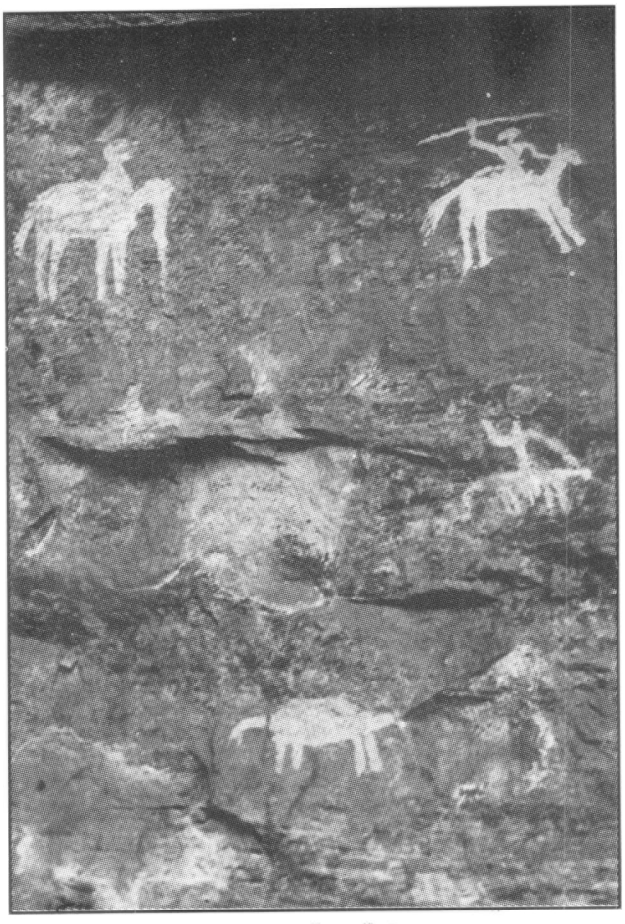


PLATE - 31

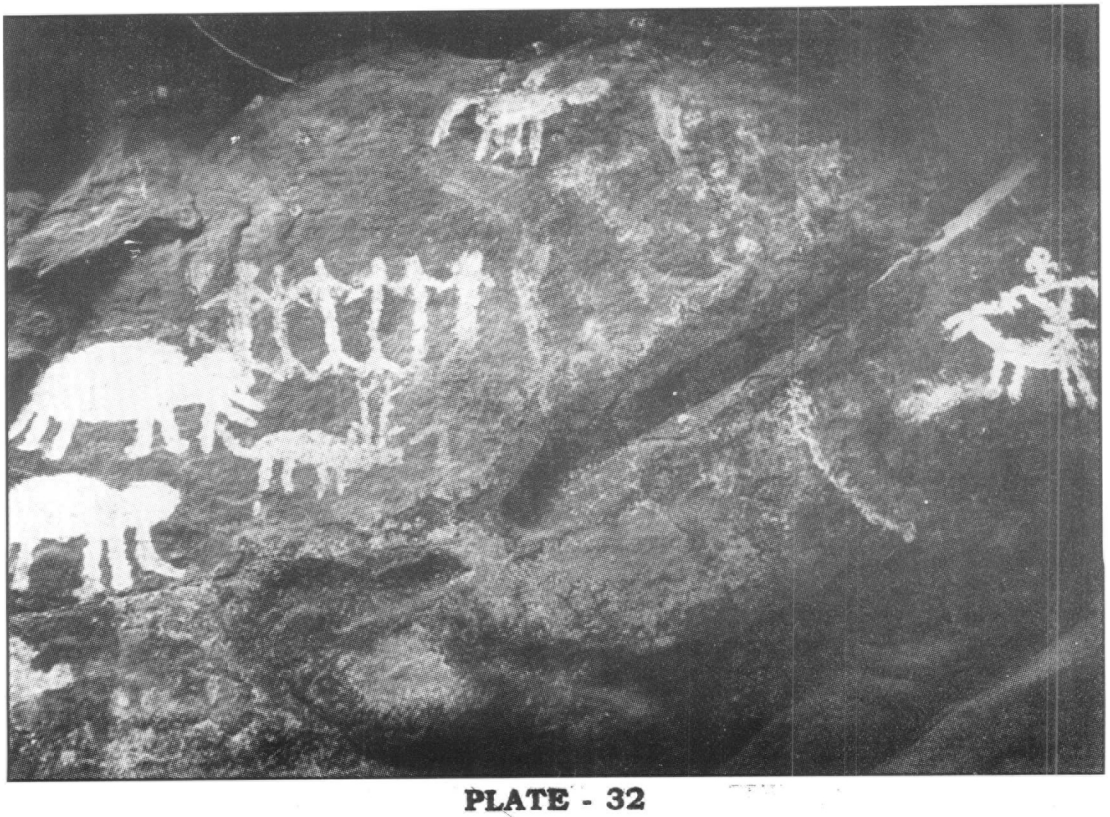


PLATE - 32

KUMITIPPATHI

Latitude : 10° 50' N

Longitude: 76° 53' E

Location:

Near Coimbatore about 22 km from Coimbatore town towards west of Pathinimalai, rock cavern.

Description:

The human beings are shown in a row holding hands. They are holding an unknown object in their hand. Another man is seated on an elephant with a weapon in his hand. The elephant is shown with its tusk; another man is standing nearby; a painting of a man carrying two poles on his shoulder is interesting.

Near this rock cavern towards left side, some heroes are depicted in standing posture.

Colour: white pigment

Period: Megalithic

Comment: These paintings are near the Vettaikkaranmalai paintings, and similar kind of scenes proves the fact that the authors of the Kumittippathi might be the same people who have painted the figures at Vettaikkaranmalai. There are megalithic implements found at Appachikkavundanpathi, Marivettippathi, Kumittippathi. These paintings may belong to the same age.

Discovered and Interpreted in the Year 1984:

Thiru Natana Kasinathan, the then Director of Archaeology

Thiru R.Poongundran, the then Registering Officer

Thiru R.Selvaraj, Archaeological Officer, Chidambaram

VELLORE DISTRICT

Vellore district is located in the northern part of Tamilnadu, bounded on the north and northwest by Andhrapradesh state and on south by Tiruvannamalai district. Javadi and Elagiri are the important hill ranges of this district. It is mainly drained by river Palar. The greater part of this district is covered with metamorphic crystalline rocks of Archaean age belonging to Charnockite Group of rocks. The minerals namely feldspar and baryte with quartz in the form of veins are encountered in this district.

Places: 1. Chennarayanapalli, 2. Alangayam, 3. Chandurapuram

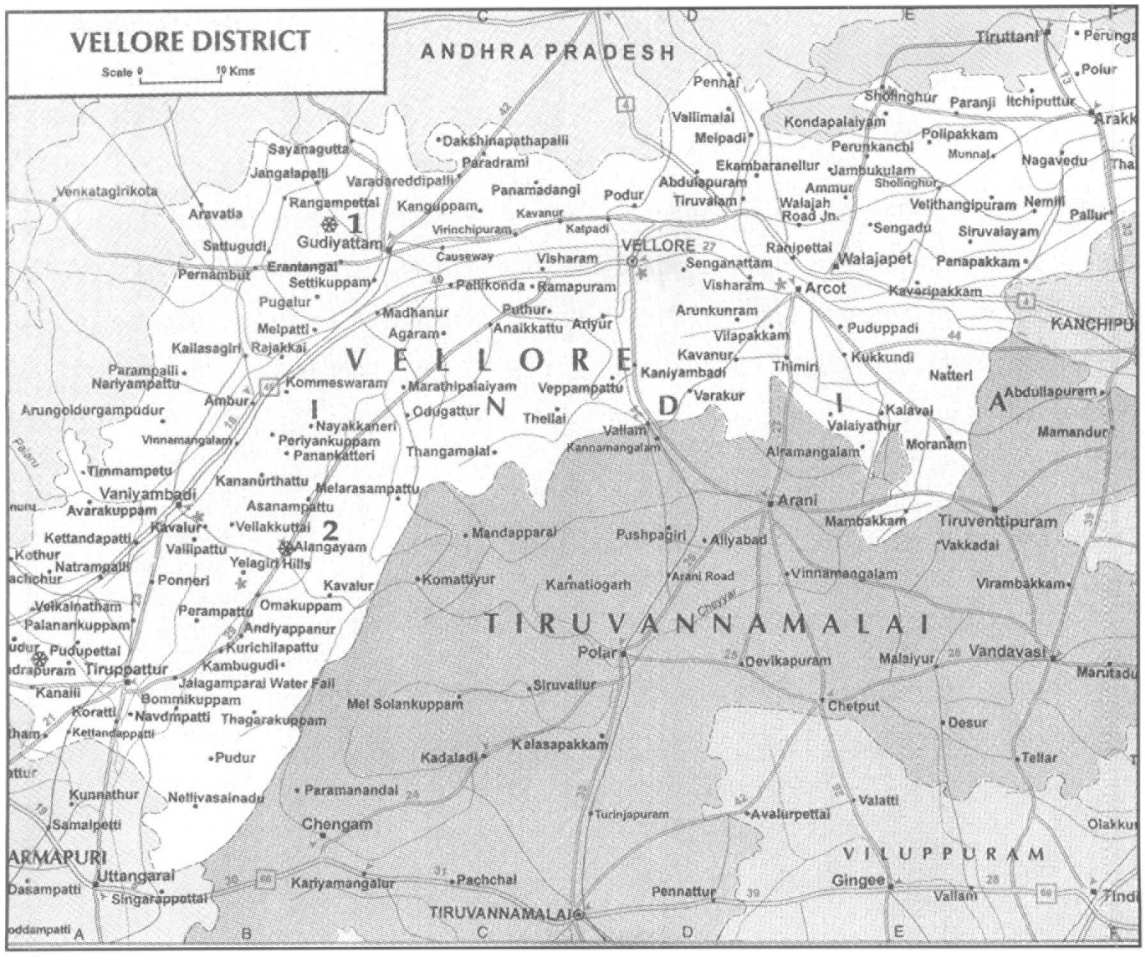
CHENNARAYANAPALLI

Latitude : 12° 57' N

Longitude: 78° 54' E

Location:

Near Chennarayanpalli about 3km from Gudiyathom.



The paintings are found in the eastern portion of a hill locally known as Sothaimalai. This hill is situated towards the northeastern direction of Payyampalli Talaithappu malai. The cave where the painting is located is about 10 mt in breadth, 6 mt in length and 7 feet height.



Plate - 35

Description:

A huge figure is drawn near which two men are seen holding their hands. These figures are noticed in the inner wall portion of the northern side of the cave, while in the southern wall, the figures of horse, elephant horse rider (Plate - 35) and a few men are shown, some figure of human beings are shown lying down. This might be the encounter between two tribes. Some grass and plants are also noticed. The sun, stars and birds are the other important drawings found, two big pots with two handles are drawn. In the northeastern corner a small tree and a damaru is also drawn. The colour pigment used here are red and white.

Date: Historic period

Discovered and Interpreted in the Year 1984: Madras University

ALANGAYAM

Latitude : 12° 33' N

Longitude: 78° 45' E

Location:

Alangayam hill is situated at a place called Durgam.

Colour: White pigment

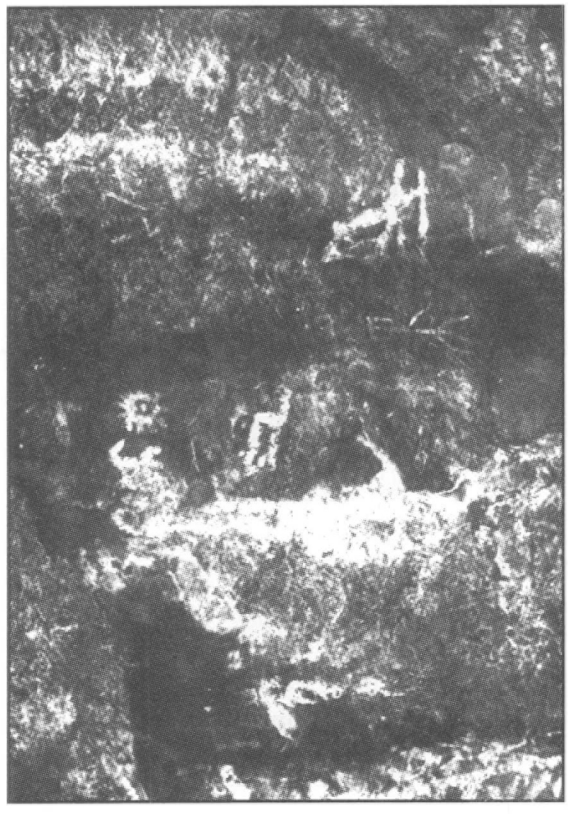
1. X ray fish drawing such paintings are found at Alambadi (cow) and settavarai.

2. Some symbols such as Trisula, bow and arrow are also found.
3. Sun symbol with a human being. (Plate 38)
4. Men are shown standing in a row or aournd. This kind of paintings are noticed at Vettaikaranmalai
5. A man aboded on a long bodied animal?
6. For the first time big dots are found in and around the paintings.

Period: Historic period

Discovered and Interpreted in the Year 1984:

1. Thiru Natana Kasinathan, the then Director of Archaeology
2. Tmt.R.Vasanthakalyani, Epigraphist, Chennai



CHANDRAPURAM

Latitude : 12° 28' N

Longitude: 78° 18' E

Location:

About 12 km from Tiruppathur in Vellore district, rock paintings are located at Chandrapuram in a cavern locally known as Kalyanagugai.

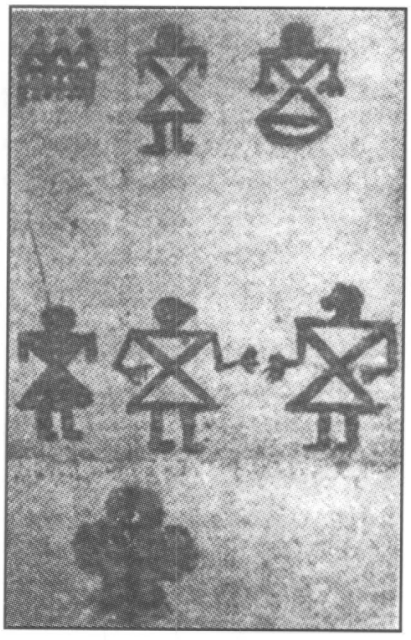


Plate - 36

Description:

The paintings of horse rider, a few horses, some human beings are some of the decorations that are noteworthy. Four horses are depicted as if they are running. A horse rider is seen holding the bridle of the horse, while the wavy lines might be the representation of a river; near this figure two figures are found with three tower like paintings. Out of the two figures one is different from the other with a curve line bottom. So we can assume that the tower may be the representation of a temple. In another group of painting one man is standing with arms in receiving posture, while the other figure is shown with welcoming posture, their heads are shown with beaked nose. The body portion is picturised like cross or Dhamaru. (Plate - 36).

Period: Historic period.

Discovered and Interpreted in the Year 1989:

Thiru.Thamaraikannan, Teacher,
Government High School, Achirappakkam.

CHAPTER - V

ANALYSIS

Since Tamil Nadu is in the peninsular region, our attempt to analyse and date the rock arts found in the neighboring states namely Karnataka, Kerala and Andhra Pradesh is of great importance in order to have a clear picture of the environment, and the religious & social aspects of the primitive men, who lived in the strong granitic formation of Archaean age.

KARNATAKA:

The region covering Benekal forest and Piklihal in Raichur District and the Sandstone hills around Badami in Bijapur District are the far most important rock art in Karnataka. The rock arts found at Hire Benakal and Badami area are in various shades of red colour and depict decorated animals and human figures which are projected with head dress and protruding eyes like that of an Owl. In the paintings at Piklihal drawings of animal like bull, human figures with weapons in white colour and hunting scenes in red on a white back ground are noticed. Besides this, rock bruising and engravings are also seen at Piklihal. Majority of them are depiction of bull. The occurrences of bruisings and engravings are also noticed from Kupgal, Hunsgi, Hallur, Kodemathi and Sanganakallu.

The predominance of cattle in the painted figures and the style of their representation in some of the rock paintings assign it to Neolithic period. However, majority of the rock paintings at Hire Benakal appear to be of the Megalithic age.

KERALA:

The art of Edakal cave in Khozikodu District is the best-known rock art of Kerala. It displays deeply engraved peculiar human figures, stylized animals and geometric symbols. The Edakal cave which depicts masked dancers involved in ritual activity is in close proximity to large cist burial field. Other rock arts of Kerala are Maraiyur in Kottayam District, Attala in the Western Ghats near Maraiyur and Ezhuttu Ala. All the rock art found in Kerala region are assignable to Megalithic age.

ANDHRA PRADESH:

Rock art in Andhra Pradesh are mainly concentrated in three geological zones namely Granite, Limestone & Sandstone and Shale. More than 28 rock art sites have been recorded from various districts of this State. The rock paintings executed with figures of deer species along with figures of rabbit, porcupine, tortoise, carnivorous like fox, hyenas and geometric figures, human figures and masked human figures are found at number of sites here. Since deer species are confined to Mesolithic period, most of the paintings of Andhra Pradesh are datable to same age. Noteworthy feature in the Mesolithic rock art is that no hunting scenes are seen. Female depictions are almost absent in all sites except at Chintakunta. Sanganunpalli, Kethavaram, Dappalle and Chintakunta are some of the important Mesolithic rock art in the state. All the rock arts are painted in red colour.

Depiction of humped bull cattle in association with or without human figures and appearance of Petroglyphs are salient features of paintings of Neolithic age. They are all executed with red colour. The humped bull occurs in Budagavi, Velpumadugu, Tenagal, Chintakunta and Budigapalli. At Chintakunta an interesting petroglyphic mark ' cupule mark' is noticed and found in rock shelter walls where Mesolithic painting occur.

Symbols and anthropomorphic figures in rock art represent megalithic period. The megalithic art of Andhra Pradesh occurs at Mudumula, Naidupalli, Budigapalli and Ramachandra puram. Megalithic paintings found here are drawn with red, black and white colour. The rock paintings at Ramachandrapuram are most important megalithic rock art as it represents Petropictographs (painted engraving) form. Human figures with bows and arrows, swords and shields, riding animals could possibly be assigned to this period.

The rock art of this state with religious symbols, personages and inscriptions and animals like horses, elephants with warriors riding them are identified as historical period. Some of the notable historical rack arts are found at Kethavaram, Chintakunta, Dappalle, Bollaram, Durgam, Rekonda and Naidupalli.

TAMIL NADU

Most of the rock art paintings in Tamil Nadu have been recorded from the districts of Villupuram and Krishnagri. Besides, a few rock arts are also located in the hills of Coimbatore, Madurai, Sivaganga and Dindugal, Nilgiri Districts. Except the paintings at Settavarai and Kilvalai, other paintings are found in white colour. Characteristic features like symbol, group dancers of men folk, human with animal headgear and the location of rock shelters in close vicinity of megalithic sites, stress that they might belong to Iron age or megalithic age. The presence of deers, are the salient feature of Mesolithic Era, as seen in Andhra Pradesh, While in Tamil Nadu the sites with deer paintings are datable to Iron age. Because concentration of Mesolithic period sites are located in Tirunelveli District and no rock art of this period are noticed in the districts of Tirunelveli and Tuticorin. The depiction of menfolk in group and dancing sequences in some sites of Dharmapuri district are found in the Megalithic period dolmens. The rock art at Vettaikaranmalai in Coimbatore depicting men with a spear on horse back confirms that they belong to historic period.

The dating of the rock paintings is everywhere a complex problem and it is so even in the Indian situation. The paintings are on the surface and no technique is at present available for dating them directly. So far no fragment of rock paintings has been found buried in an archaeological layer at any site. Therefore we have to depend on indirect and circumstantial evidences to date the paintings. Hence, theme, style, superimposition in the rock as well as artefactual evidences locally available are taken into account for dating the chronology of the paintings in Tamil Nadu.

The Iron Age or Megalithic monuments (burials), can be defined as a burial marked by huge stone appendage; though most of these burials show structural components of stones there are others like urns, deposited in pits without any significant lithic accessories, which nevertheless share the same cultural significance of usage of iron implements and black & red ware potteries as that of lithic varieties. The megalithic burials are located near large tanks or near natural springs or in dry areas where the rock bench is high and the soil cover is thin while some are found in monsoon fed lateritic areas. A closer analysis of the distribution of these burials would show that their location was conditioned by the availability or access to resource materials like water, plenty of game, iron and gold.

Apart from the occurrence of black and red ware potteries, distinctive element of this culture was the use of iron. The equipments for horses included bridle bits, snaffle bits and barbed bits with looped ends, a copper sheet with iron- riveted knobs stitched over leather, and the head ornament of a horse for mounting on a leather base are the note worthy discoveries of this period. The chronology for the megalithic culture or Iron Age in South India can be ascertained as 1000 BCE–100 CE.

In Tamil Nadu the Neolithic period is assigned to 4000 BCE – 1000 BCE while the megalithic period is dated from 1000 BCE to 500 CE. Rock paintings have been found close to sites where Neolithic and megalithic cultural traits are noticed. The painting tradition might have been initiated by the Neolithic people and continued during the megalithic and up to historic period, when the rock shelters were abandoned and the people started living in settled life. The occurrence of megalithic burials, typical black and red ware potteries, and the paintings of the horses show that they were bearers of Iron Age culture, around 1000 BCE to 500 CE.

The presence of symbols and anthropomorphic forms of megalithic rock art of Tamilnadu more or less coincide with the megalithic rock art of Andhra Pradesh. But, the representation of beaked men at Kilvalai and Settavarai of Tamil Nadu is an interesting feature as it is influenced by the mythical features of Egypt. Such kind of paintings is not found in the rock shelters of neighboring states. Besides this, the depiction of inner Alampadi part of animal at is a peculiar feature of rock art of Tamil Nadu, which belongs to megalithic period. But, these are not found in Andhra Pradesh, Kerala and Karnataka states.

CHAPTER - VI

INFERENCE

To have a proper understanding of the meaning or ideas that are reflected from the rock art, one should be endowed with imagination, creativity and relative ideas, together with scientific approach. Generally, the rock arts portray the social setup, activity, leisurely mood, dancing in group or isolated, symbols, animals, human and anthropomorphic features, mythical forms, hunting or warfare scenes. According to the social set up, the rock art forms varies and are limited in number. These rock art features by the nomadic people were to convey their perception and record the local environmental changes together with prevalent fauna and flora.

The colour used for drawing are white and red. The usage may be due to availability of natural colours; and depend on the rock formation on which paintings are drawn. It is perceived that usage of red and white colour was limited to light coloured granite rock shelter and dark coloured basaltic and dolerite rock formation respectively. Also, it is understood that red colour usage was for ritual purposes. Due to its good perception for eyes from a distance, the Red colour pigment might have been used in early times for identification of their settlement. However, the presence of rock art in the isolated boulders in Villupuram district confirms that these paintings are drawn enroute by the nomadic people, who migrated from nearby hills and emphasizes that these sites are not permanent settlements.

Men with clutched hand in rows indicate that they lived in harmony by engaging themselves in dancing during their leisure time and to have interaction within their community. Most of the painting scenes do not portray female participation in dancing. So, females might have led a secluded life. The general absence of musical instruments both percussion and wind blown in the rock art paintings infers that dancing was not mingled with music. However, the depiction of musical instrument like 'Udukai' (Dhamaru) at Kilvalai, stresses their knowledge of music.

Depiction of animals, is undoubtedly, a reference to the prevailing environment and their interaction with nature. The paintings of wild animals in the rock art indicate the status of forest environment that

existed then. The presence of cows, deers and other herbivorous animals indicate that they might have been domesticated for their daily need. Depiction of deer species in front of fire in the rock paintings of Settavarai could be a reference for ritual purpose or a symbolic representation of eating cooked flesh.

THE CAUSES FOR THE DETERIORATION OF ROCK ART:

There are many causes for the deterioration of Rock paintings as they are fragile and can be damaged due to the action of wind, sun, rain and human action, weathering of rocks resulting in splitting, flaking, and formation of salt on the painted surfaces. There are acute stains of clay and siliceous materials due to the flow of water over the rock shelters. The growth of microorganism such as moulds, fungi, algae and lichens and the acids produced by them also cause deterioration to the paintings. The penetration of tree roots causes cracks on the rock art surface, which is also another reason for the destruction of the rock paintings. Though these can be prevented by protecting and conserving them, the greatest threat comes from the human vandalism due to scribbling and encroachments.

The rock arts can be protected by routine removal of dust mechanically. Chemical cleaning can be done only after the study of the pigments as the hard chemicals may cause damage to the rock paintings. Before the starting of the conservation work it has to be well documented, by digital photography, and line drawings. The surface of the rock paintings has to be cleaned by the solvents such as toluene, methanol, acetone, petroleum spirit, ethylene glycol. The removal of stains might be done with hydrogen peroxide. The weakened paintings may be consolidated with the help of 5% solution of poly vinyl acetate in acetone or toluene.

CHAPTER - VII

SUMMARY & CONCLUSION

The occurrence of rock paintings is found to be located in the rock shelters; these are found in the sedimentary or metamorphosed rock formations or granite & trap rocks, which witnessed differential weathering by natural agents. The rock art are even located in the separate or isolated rock boulders, rolled down to plains from higher altitudes. Rock shelters in the sedimentary formation are formed by the erosion (weathering) action of running water. In the course of action, the rock formations susceptible to weathering found between harder rocks, are easily leached away to project or over hang prominently as shelters. It is observed that the location of shelters in many cases in higher altitude provided a conducive environment for the nomadic men to live safely and thereby kindled their thought leading to expression in the form of drawings.

Rock art in the separate boulders are not taken as shelters. However, it may be assumed that in geological time surrounding environmental setting might be conducive for man to rest and depict his ideas in the form of pictures on these rock boulders, during leisure time. Unlike in France, no paintings are so far encountered in the caverns found in India. However, the word 'cave painting' are often applied to refer to rock arts in shelters.

Art on rocks are found to be executed in two different forms i.e one form is petrograph or pictograph painting in which the hues of red or white colour are used. The material or tools used might be the locally available natural tender twigs of shrubs, dry grass species or other convenient stems. So far no archaeological evidences have been recovered to have a knowledge on the brushes used in ancient time to paint art on rocks. The second type is petroglyphs where we find projections or embossed form of zoomorphic, anthrop- omorphic figure, etc., in the chiseled back ground. The method executed might be an advanced technique with the help of hard tools; it is presumed that such type of art might have been adopted in the absence of availability of natural pigments in the vicinity.

The colour pigments used for rock art vary between red and white. The red colour pigment as residual deposits from Heamatite, might be collected in the nearby river bed while the white colour is nothing but

Kaolin (white clay or china clay). The formation of Kaolin is possible on weathering from aluminous and iron-bearing rocks under condition of poor drainage, but laterite are formed in well-distributed rainfall and good drainage under warm, humid climate.

In Tamil Nadu the rock arts are concentrated in the Eastern Ghats area of Villupuram district, Western Ghats, and in the hills of Coimbatore and Nilgiris district, etc.,. Unlike other states, the rock art found in Tamil Nadu are mostly encountered in the isolated rock boulders and megalithic dolmens. The rock art in megalithic dolmens are drawn with white colour alone. However, the rock art located in various sites in the state are drawn both with red and white colour. It is to be noted that the occurrence of laterite which is believed to be the source rock for red and yellow ochre, and iron ore deposits are wide spread in the district where we locate rock arts. But, we cannot conclude that pigments were taken in the close proximity of such deposits, which might be recovered from other sources known to nomads, but unknown to us.

It is the opinion of some scholars that pigments used for drawing painting might have reacted with rock surface and left a stain which is unaffected by weathering action of water, in due course. It is believed that though the paintings were executed with pigments mixed with water base, it became water resistant with natural protective cover of chemical precipitations of calcium and silica, in course of time, as seen in the paintings found in Gandhi Sagar in the Chambal valley. Since the natural mineral pigments alone were used for rock paintings, it was untouched by the action of natural agent.

The study of rock art paintings requires a scientific approach to systematically analyse the social, cultural and historical phases of human behaviour and his initation into the ritualistic and religious beliefs.

While consolidating the pictures and figures that are painted in the surveyed rocky areas, the paintings range from three inches miniature of animal figures to very huge life size paintings of deer, buffaloes and human beings. Animals were the most frequent subject matter of paintings, next comes the humans and then the symbols; Indian bison, buffaloes, antelope, deer, elephants, wild boar and horse were the frequently drawn animal figures. The paintings of human beings are shown singly or in groups. Dancing, fighting and hunting scenes were often drawn. The symbols like

cross, sun, circle, swastika, fence like, hut like, human palms, wavy lines were commonly noticed symbols. It is clear that dance had a central role in the communal life of those people. It was encircled around the fear of the wild animals, rituals and conveys communal co-operation. Dancing could have served as a means of inducing disciplined common effort in capturing large animals. The later paintings of settled life showed the conflict between two different groups of man as noticed at Mallapadi and Vettaikaranmalai. The Neolithic paintings at Settavarai, Alambadi and Kollur show skins of animals left drying which indicate that man had acquired the art of tanning skins for clothing and shelter. At Alambadi the painting of men wearing masks of birds or animals or human beings, might have established a link with the influence of ritualistic belief. Even today masked dances are an integral part of Indian culture in rustic & tribal living.

Among the rock paintings so far discovered, only in Kilvalai do we find some signs similar to Harappan symbols. According to Dr.H.D.Sankalia, "these paintings can be compared with the signs and bear some resemblance with the Indus symbols, whereas in the Indus symbols there were just lines, but in the Kilvalai paintings the figures are much fuller possibly due to the development from the Indus signs". He is however of the view that we should have more data for forming any option. The occurrence of four men rowing a boat and a big sign before them indicate the direction by which they had to travel. Such transport indicates the migration of people to other places.

The ancient man could have observed the loss of breath after death, hence he would have understood that breath was necessary to live and believed in the existence of the soul. He had a blind belief that breath or soul was not destroyed but changed into some other form. Breath being volatile and rising upwards was imagined by him as having become a bird. Thus the beaked human being would have been his vision to represent a soul or the God of Death.

The rock paintings are the earliest evidence of regular art activity in Tamil Nadu. They also tell us the contemporary fauna life, which is otherwise inadequately known because of the paucity of the skeletal remains. The gradual and intellectual development of art and civilized living was then progressing into the historical time. The analysation of

the latitude & longitude brought out the fact most of the paintings found in the plains close by or in the same line.

It is interesting to note that in places like Kilvalai, Maharajakadai and Mallasamudram the symbols and markings observed on the rocks show similar features to the graffiti found in the megalithic period potsherds. Probably the paintings have more convergence to the megalithic period. Investigations on the above interesting finds can be undertaken in the future.

Art lovers and archaeologists are anxious about the indiscriminate encroachment and damage being done to rocky ranges. This should be checked; otherwise it may lead to loss of such valuable artwork. The concern for conservation of rock art must be inculcated in one and all.

DATING ROCK ART

The major methodological limitation in rock art studies is that art assemblages can be difficult to date. However, chronological data is crucial to many types of analysis in which rock art evidence is integrated with other archaeological and environmental information. This section will briefly survey the range of dating techniques used in contemporary rock art studies. These fall into two broad categories:

a) Relative dating methods such as degree of weathering, superimposition analysis, stylistic analysis and inter-site patterning.

b) Absolute dating methods such as analysis on the basis of subjects depicted, consistent association with datable deposits, the dating of stratified deposits associated with rock art and the direct dating of the art itself.

RELATIVE DATING

Weathering

Once an engraving has been pecked or abraded into the rock, it is immediately subject to chemical and physical weathering. If this proceeds at a steady rate the degree of weathering can be used as an indicator of absolute age.

Differential weathering of art has also been used to suggest relative age differences (e.g. Lorblanchet 1992). This is based on the notion that a less weathered engraving will be younger than an engraving with greater signs of weathering. However, there are other factors which affect weathering rates, such as micro- environment, depth of engravings and so forth. Even so, there are some instances where significant differences in weathering clearly indicate significant differences in age.

Superimposition analysis

The basis of the method is stratigraphic in that a design occurring over, or through, another was executed later in time. Simple as the idea sounds on paper, there are complications. For instance, an artist may deliberately superimpose motifs for ideological reasons (e.g. Lewis - Williams 1974). Moreover, there are a number of technical difficulties associated with the recording of superimpositions. For example, some colours are more intense than others and tend to come through overlying

layers. Also, some colours may adhere badly on a pre-existing tint. It is also clear that in many studies totally inadequate data bases have been used to construct regional, or in some cases continental, rock art sequences without any regard for the methodological, statistical or interpretive problems involved in the analysis of superimpositioning.

Stylistic dating

Stylistic sequences are established on the basis of the differential weathering and superimposition of motifs as well as their formal attributes and consistent associations. This information is used to produce a chronology in which rock art styles are established in relation to other rock art styles. A classic stylistic sequence is that proposed by Leroi-Gourhan (1968) for European Upper Palaeolithic art.

In some circumstances, parts of the sequence may be anchored to absolute dates through the depiction of items of material culture dated in excavated contexts (e.g. Bronze Age tools at Val Camonica in Italy, see Anati 1976); the depiction of extinct fauna or contact items (e.g. Thylacines in Arnhem Land rock paintings, see Lewis 1977), or by relating changes in the art to environmental changes (e.g. the Arnhem Land rock art sequence, see Chaloupka's 1993).

Spatial analysis

At some sites differential weathering and superimpositions indicate that 'bursts' of artistic activity occurred over considerable time periods. In these cases intra-site patterning can reflect chronological patterning. By implication, there may be sites which were used for a short period only in which techniques, motifs and colours in use at one time have been 'stranded' by previously held cultural values determining site significance. If so, trends in the inter- site distribution of artistic variables can also provide evidence for sequence, assuming other determinants of such patterning can be monitored and taken into account (Morwood 1980).

ABSOLUTE DATING

Historical information

There are many instances in which rock art production has been observed and documented. This provides an absolute date for the art (e.g Chaloupka 1993: 238).

Subjects

Subjects depicted in rock art may permit an estimate of the maximum or minimum age for rock art production.

The portrayal of extinct fauna in art is one means by which minimum ages may be gauged (e.g. mammoth in the European Upper Palaeolithic, thylacines in northern Australia). Conversely, the appearance of 'introduced' items or animals provides maximum ages (e.g. European and Maccassan items in Arnhem Land, the bow and arrow in North America).

In some cases changes over time in the faunal assemblages represented in rock art assemblages — as distinguished by relative dating techniques — can be related to patterns of dated environmental, economic or social changes, enabling the artistic sequence to be broadly dated. Examples include the Tassili region of the Sahara (e.g. Muzzolini 1986), the Somalian and Ethiopian regions of Africa (Brandt and Carder 1987) and Western Arnhem Land (Lewis 1988; Chaloupka 1993).

Stratified art

The most common method employed for the direct dating of rock art has been to use situations where art is 'stratified' in a dateable context. This can occur at the macro or the micro level.

Art occurs in macro-stratified contexts when it is covered by, or covers, dateable archaeological deposits. Depending on the nature of the association this can provide a maximum age (e.g. where pieces of decorated shelter wall have fallen and become incorporated in deposits) or a minimum age (e.g a panel of rock art covered by deposits). For instance, painted spalls and stones excavated at Apollo 11 Cave, Namibia, date as far back as 26,000 b.p. (Thackeray 1983: 24-5).

Rock art can also be 'micro-stratified' when it is covered by, or covers, mineral or biogenic coatings. Examples of such datable micro-deposits include— desert varnish (e.g. Dragovich 1984; Clegg 1987); silica skins (e.g. Watchman 1985, 1996), oxalate crusts (e.g. Watchman 1993), secondary carbonate deposits (Bednarik 1985), mudwasp nests (Morwood *et al* 1994) and lichen (e.g. Joubert *et al* 1983). A range of dating techniques have been applied to these materials, including AMS radiometric dating of organics, CR dating of desert varnishes, OSL dating of quartz particles in mudwasp nests, and lichenometric dating of lichens over art.

Association

Rock art can be closely associated with deposits when an art site briefly used becomes sealed by rockfall or a build-up of deposits at the entrance. This has occurred at a number of the Upper Palaeolithic art sites in France (e.g. Fontanet in the Ariège, France).

There are other situations where the association between rock art and deposits is less secure, but where dates for the art can still be inferred with varying degrees of confidence, depending upon the exact circumstances. For instance, when specific types of art consistently occur with occupation deposits, or implements, of a certain age range, or with occupation of limited duration, it is often assumed that the art and the occupation are contemporary. Dates for the occupation (or other activities) are then assumed to date the associated art (e.g. Macintosh 1965). At present the oldest date for Australian rock art is based on this method: at Koonalda Cave on the Nullarbor Plain (South Australia), finger markings and abraded grooves on walls deep underground are probably associated with evidence for flint quarrying around 20,000 years ago (Maynard and Edwards 1971: 75-6).

Elsewhere consistent associations between dated pottery types and rock art at habitation sites has been used to infer age (e.g. Schaafsma 1985) as have ceramic/rock art stylistic affiliations.

Direct dating

In some cases it is possible to directly date the art itself. This can be done with pigments containing organic materials, such as charcoal, plant fibres, protein binders, as well as with beeswax figures (e.g. Cole *et al* 1995:155; Taçon 1996). However, some studies have shows that, with the small samples required for AMS dates, the question of provenance is crucial. For instance, McDonald *et al* (1990) recently obtained inconsistent radiocarbon dates, ranging from 6 085 bp to 29795 bp from charcoal taken from the same motif at a rock art site in the Sydney Basin, Australia. The important point to be drawn from this study is that micro-contamination may not be identified in those cases where only one sample is taken (McDonald 1996).

However, taking samples of rock art for direct dating is problematic since the sampling procedure necessarily damages the art to a certain

extent. Moreover, it is not always possible to be certain in the field when sufficient organic material for dating purposes has been collected. The dilemma for archaeologists is the necessity to minimise sample sizes in order to protect the art versus the futility of collecting a sample which is too small to contain sufficient organic material for dating. This highlights the necessity for sampling to be undertaken only with expert technical assistance (Rosenfeld and Smith *in press*).

ROCK ART DATING TECHNOLOGIES

Recent advances in dating technologies have significantly increased the number of dating opportunities for rock art relative to standard radiocarbon dating. In particular, the development of the Accelerator Mass Spectrometer (AMS) radiometric dating means that milligrams of organic material can now be dated (van der Merwe *et al* 1987). Other 'new' techniques include Cation Ratio (CR), amino acid racemisation, Optically Stimulated Luminescence (OSL), lichenometry and micro-erosion.

The **Cation Ratio** dating of desert varnish is based on differences in the mobility of different chemical constituents of desert varnish with some cations like potassium (K+) and calcium (Ca+) leaching out of the varnish faster than others like Titanium (Ti+). If the cation-leaching curve can be calibrated using such techniques as K-Ar dating of basalt flows, tandem accelerator mass spectrometry radiocarbon dating of organic fractions, and ratios from surfaces of known age, the varnish can be dated to provide a minimum age for underlying engravings (Whitley and Dorn 1987; Nobbs and Dorn 1988). This dating method is still controversial at present.

Amino acid racemisation depends upon the presence of albuminous binders, such as blood or egg white, in paintings. The technique is based on the observation that the number of amino acids present in proteins decreases over time, which forms the basis of a decay curve using paint samples of known age. However, this technique is restricted to dating paints less than 1800 years old. Moreover, amino acid decay rates also are dependant upon micro-organisms and environmental conditions, which means that results from different regions are not directly comparable (Thackeray 1983: 22).

OSL measures the number of electrons trapped in micro-fissures in quartz grains. This is correlated with to the length of time that the quartz

has been removed from sunlight, which 'bleaches' out any trapped electrons. This technique can be used to date mudwasp nests and termite tracks, which contain 'buried' quartz grains. When such nests or tracks cover, or are covered by rock art, this allows assessment of a maximum or minimum age for the art (Roberts 1996).

Lichenometry depends upon the development of a species-specific, lichen-growth curve by measuring lichen thallus diameters on dated rock surfaces: this can then be used to calculate the minimum age of rock surfaces by measuring the thallus diameters of the same lichen species growing on these surfaces (e.g. Joubert *et al* 1983).

Micro-erosion analysis uses the weathering of individual crystals in different rock types to determine the age of surfaces exposed when engravings were produced (Bednarik1992.) The technique requires calibration data for the specific type of crystal being studied (e.g. silica).

DISCUSSION

The number of examples of dated rock art is increasing rapidly. However, most dates have not been particularly informative because their sampling and analysis was not directed towards general questions. Clearly, there is a great range of possible dating techniques for rock art, and any particular body of such art will offer a unique combination of potential approaches. The most convincing dated art sequences are those based on a range of data and the complementary use of relative and absolute dating methods. A productive approach is to use relative methods to establish a large data base for sequential changes in rock art and to test and anchor this with a comparatively small number of absolute dates.

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