

MEGALITHIC TYPES OF SOUTH INDIA

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The Prehistorian of the Department of Archaeology reviews in this paper the existing confusion in the use of the megalithic terminology and attempts its scientific definition and standardization which has been accepted by the Department and is considered suitable for adoption by all students of archaeology and allied sciences. He also discusses the types of megalithic monuments so far discovered in South India and compares them with those of North-east India where megaliths still constitute a living culture among some aboriginal tribes.

THE initial requisite for any systematic exploration is a precise and self-explanatory nomenclature. In this respect the current terminology of Indian megalithic literature is of no help, for terms such as cromlech, dolmen and cairn are used by various writers in entirely different senses. Thus Taylor²⁰ (1848) uses the term 'cromlech' for both a dolmen and a closed cist, while Rea¹⁶ in 1912 (and recently others also) uses it for a stone-circle round a burial urn or sarcophagus. The word 'dolmen' again is used in Pudukkottai²¹ indiscriminately for underground cists and single urn-burials with a capstone. The word 'cairn' is used in Hyderabad²⁰ for a cist-grave; Brecks³ working in the Nilgiris uses it to mean stone-circles of any kind, while elsewhere it means nothing except a promiscuous heap of rubble hiding any kind of grave. Again, working in Hyderabad as late as 1923, Hunt¹² merely follows the past local usage in calling a cist-burial a cairn.

The terms 'menhir', 'alignment' and 'avenues' denote monuments which may not prove to be really such, for it often happens that a series of stone-circles suffer mutations which may give to unrelated stones the appearance of 'alignments' and 'avenues'. Also one stone of a circle sometimes happens to be taller than the others and may be mistaken for a menhir; in such a case the circumstance is not necessarily insignificant but menhir is a wrong description. Fragmentary stone-circles have been so described at Tachampatti and Surandapatti in Pudukkottai, while both 'false' and real menhirs occur in the Hyderabad State (a false example at Lingampalli, and real ones at Hanamsagar and Evathalli). Care must be taken, therefore, in the application of our terminology.

Next in importance to an unambiguous terminology for purposes of classification are regional surveys of the prehistoric tombs and their accurate planning with uniform conventions. This necessity has been emphasized even in England by Dr. Daniel⁶ writing as late as 1938 and Dr. Clark⁹ in 1939. The necessity is all the greater in India, where a 'survey' has not been attempted yet and all megalithic work has been quite casual and unrelated and mystified in language scarcely to be understood. The 'murky fog' surrounding the megalithic question in India remains as dense as ever and no pains will be too much for accurate planning of megaliths on conventions internationally acceptable. Dr. Clark's conventions are the ones adopted in our Survey. Monuments are defined through the morphological and other intrinsic features they actually present and the descriptive terms in current usage such as dolmens, cists, cairns, menhirs, etc. are adapted with precision.

Since 1944 three regions have been submitted to detailed ground survey in South India—Chingleput District * adjoining Madras and the States of Pudukkottai † and Cochin. ‡ The prehistoric monuments in each of these three areas, while belonging to a common megalithic complex, are so varied in type that it is necessary to describe them in some detail before evolving a provisional terminology. Definitions of the technical terms adopted in our Survey are tabulated at the end of this paper (vide Appendix B).

Quite a different megalithic complex is found in North-east India (vide Appendix A) in Assam and Chota Nagpur where the Austro-Asiatic languages are spoken. Megalithism here is still a living characteristic of the Khasis and the Gonds. Menhirs for instance are still erected by the Khasi woman to 'memorialize' her husbands indicative of the antiquity of the polyandric characteristic of their society.

—From the types of monuments alone in South and North-east India irrespective of their eschatological nature, it may be inferred that several megalithic waves must have reached India both from the West and the East.

Chingleput, on the Coromandel Coast (approximately three times the size of either Pudukkottai or Cochin State) is a megalithic province in itself, differing in certain respects from both the States named, which in turn differ from each other. Chingleput has a megalithic individuality of its own in that the 'dolmenoid cists', so far as known, invariably enclose a terracotta legged sarcophagus, a feature not known in the other two regions.

Cochin, typical of the Kerala Coast, is famous for its 'hood-stones', *topi-kals* and underground rock-cut caves, none of which crosses over to the east of the Ghats.

Pudukkottai is characterized by the elaborate transepted port-hole cist which has yet to be found outside the State.

I. TYPES IN CHINGLEPUT

Two distinct types of megaliths are found in the Chingleput area. They are styled (a) the 'dolmenoid cist' and (b) the 'cairn-circle', denoted respectively by the terms D and C.

(a) The dolmenoid cist is a burial-chamber made of stones both for the sides and the cap, the whole circumscribed usually by a single stone-circle or sometimes by double circles.

In the northern lateritic region the dolmenoid cist (pl. IX A) is made up of dressed lateritic orthostatic stones either monolithic or multiple to form a compact rectangular chamber. The chambers are invariably oriented in an east-west direction. The stones are cut and dressed only on the inside of the chambers. The major part of the chamber is sunk underground rising only 1 foot to 2 feet above ground. Thus the monument is a large cist rather than a dolmen. Usually the chamber is circumscribed by a stone-circle of externally dressed boulders. This is type D₁ and is characteristic of the lateritic region and maintains these characteristics even when it straggles into the southern granitic region. The type-sites are at Pottur, Amarambedu and Pondavakkam.

In the southern granitic region, there are two sub-types of the dolmenoid cist, namely D₂ and D₃. Sub-type D₂ (pl. IX B) is characterized by rude granite blocks (just as they

* Obviously the existing political boundaries and the ancient cultural limits of the Chingleput region and the States will not coincide. We have yet to delimit by further explorations the spread of the respective funerary cultures of these three regions.

† The Survey in Pudukkottai State in October 1945 was facilitated by the generous hospitality of the late Sir Alexander Tottenham and by the collaboration of Mr. K. R. Srinivasan, the then Curator of the State Museum.

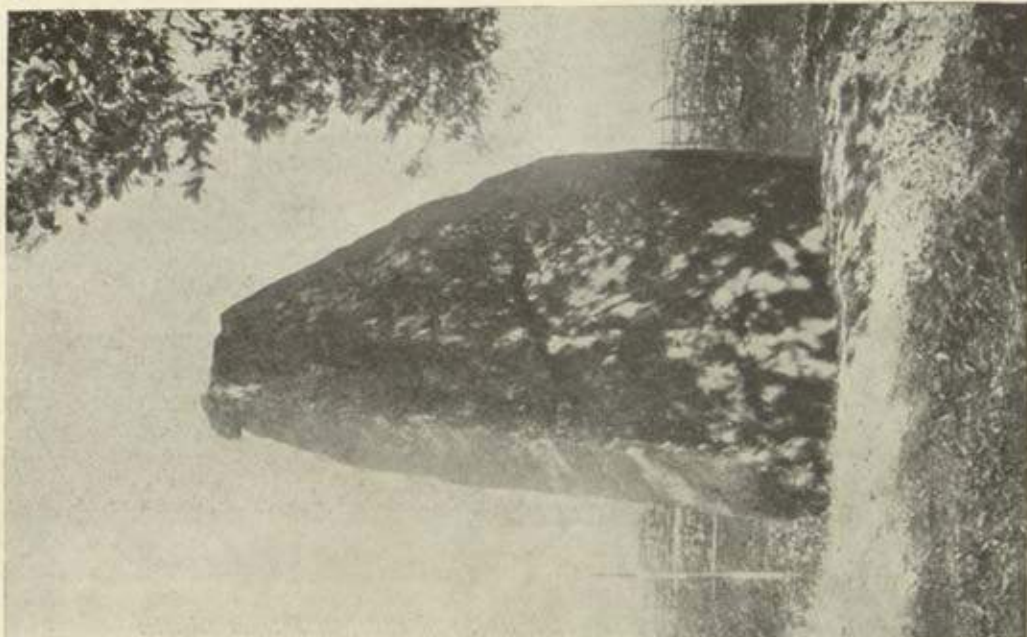
‡ In Cochin State Sir George Boag rendered valuable help in February 1946 in the carrying out of the survey of megaliths which was possible through the collaboration of Mr. P. Anujan Achan, the State Archaeologist.



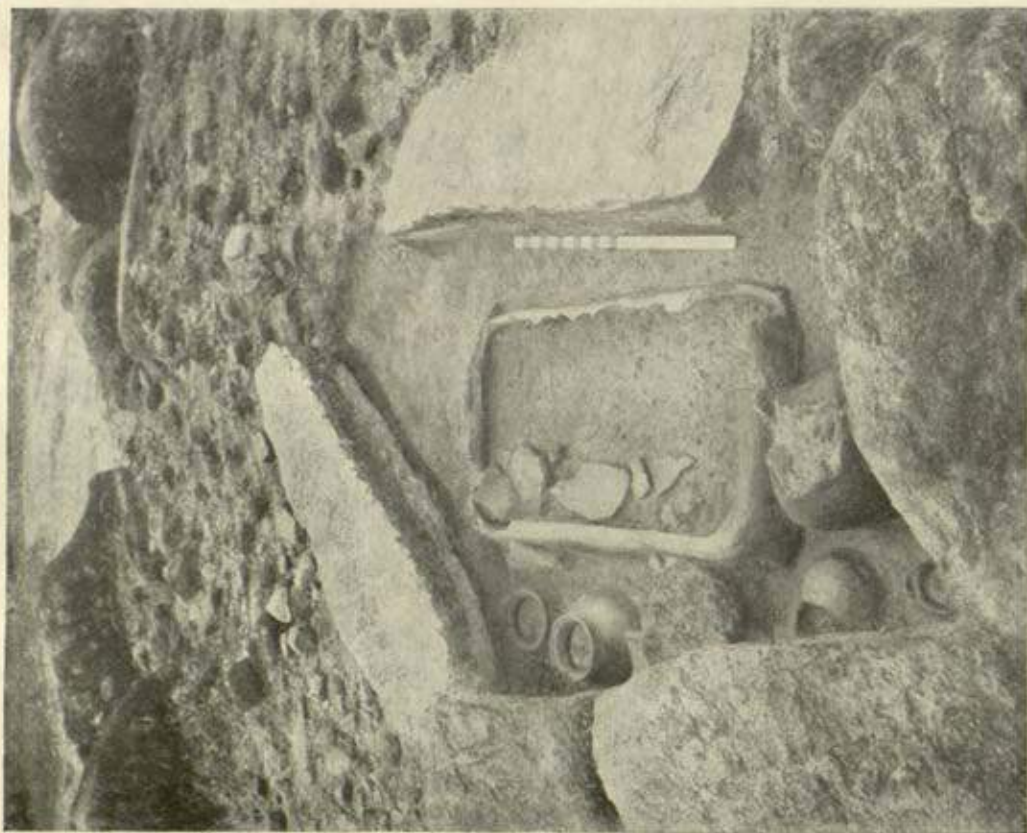
A. Dolmenoid cist (type D₁) at Pottur, Red Hills, Chingleput District



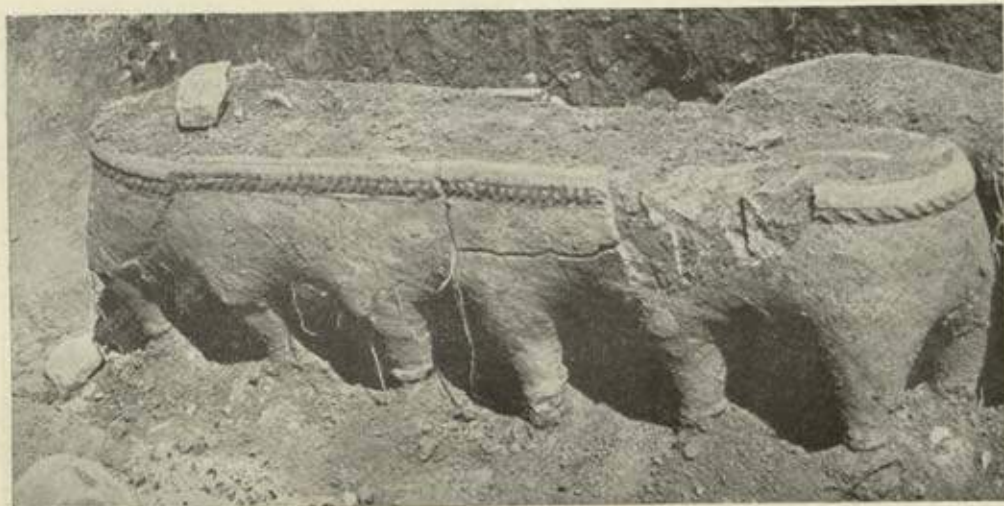
B. Dolmenoid cist (type D₂) at Sankarapuram near Conjeeveram, Chingleput District



B. Menhir at Anapāra (Villadam) near Trichur, Cochin



A. Sarcophagus within dolmenoid cist (type D₂) at Kāvānur near Madurāntakam, Chingleput District



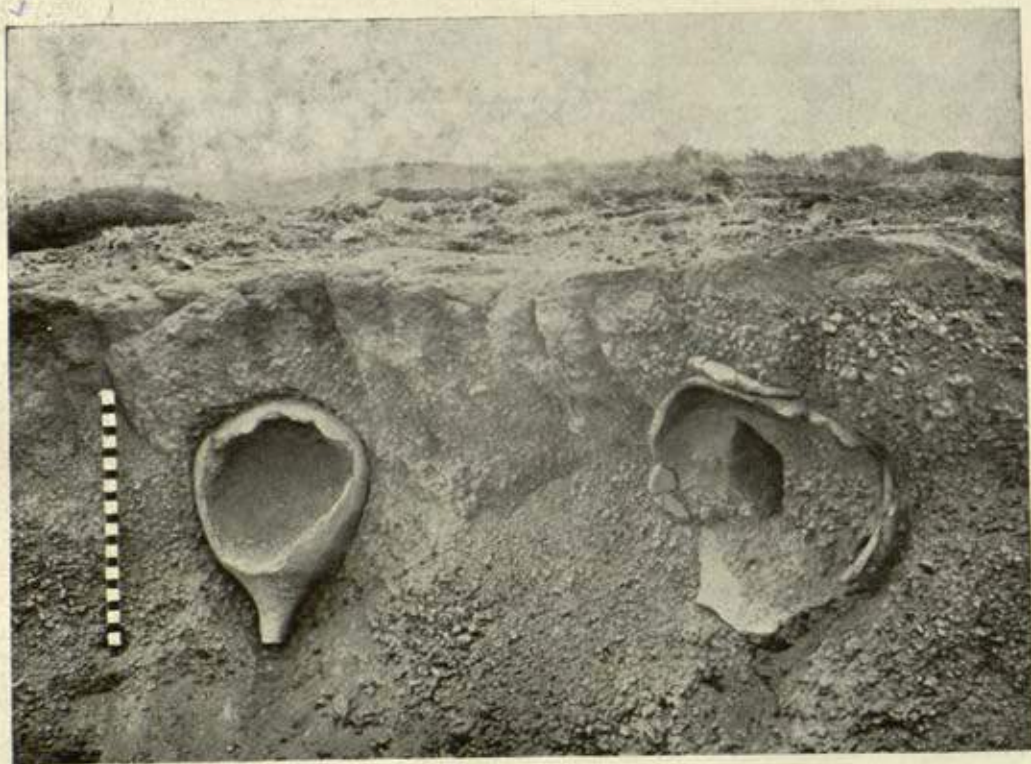
A. Legged terracotta sarcophagus at Pallāvaram, Chingleput District



B. Dolmenoid cist (type D₂) at Vaiyāvur near Madurāntakam, Chingleput District



A. *Cain circle (type C.U._m) at Madavilāgam near Madurāntakam, Chingleput District*



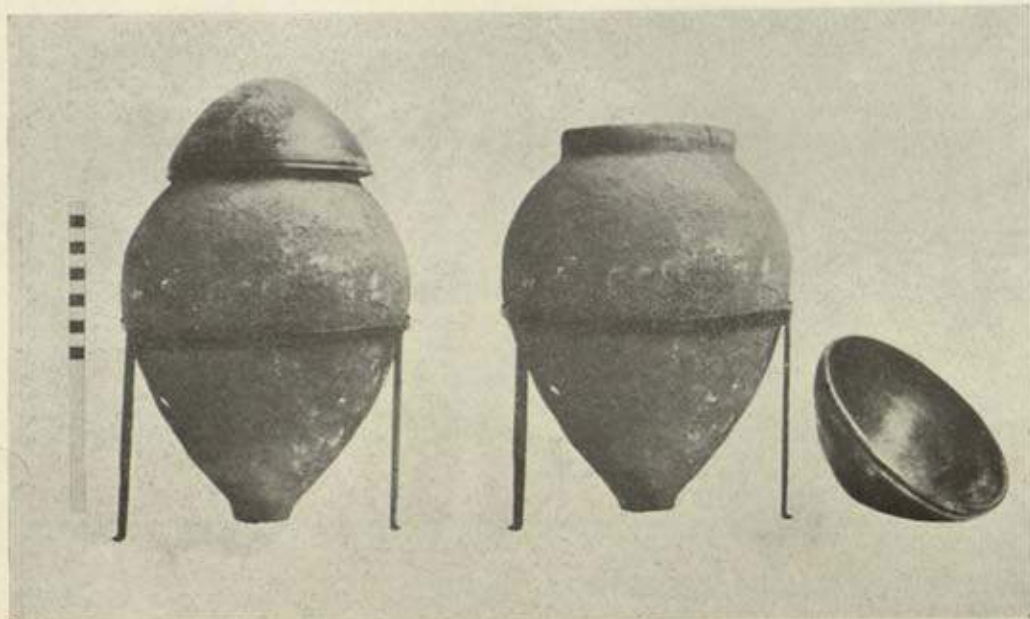
B. *Pyramidal urns under barrows at Amrithamangalam near Satyavedu, Chingleput District*



A. Cairn (type C.U._γ) at Kalasakkādu near Pudukkottai



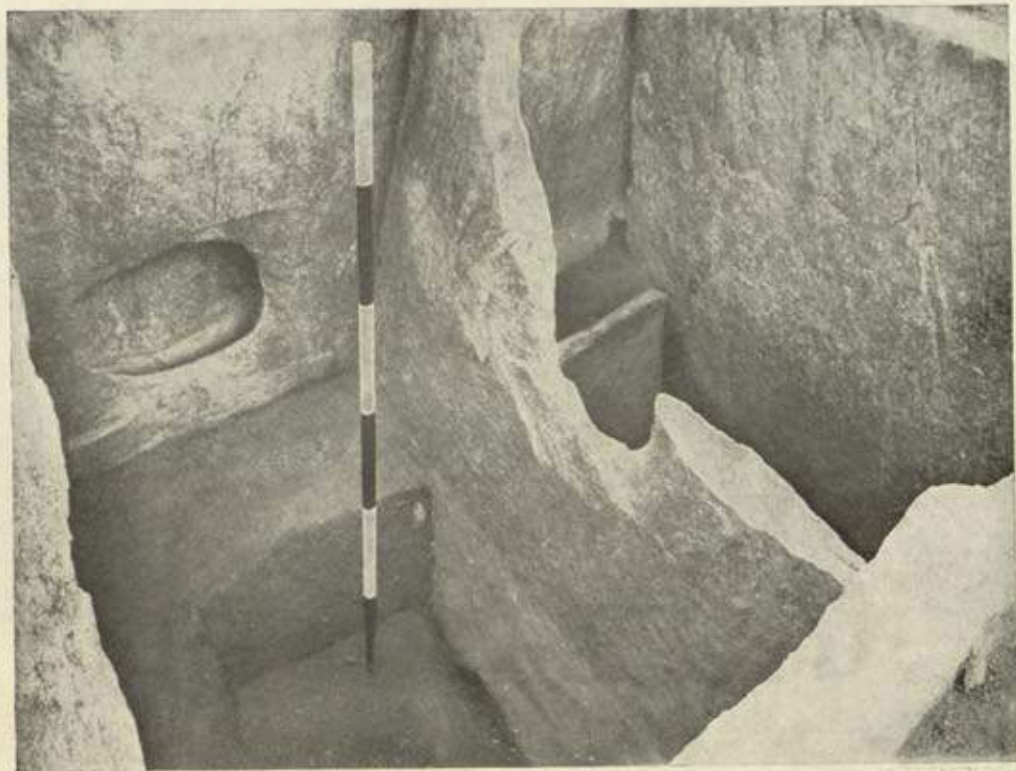
B. Cairn circle (type C.U._μ) at Poyyāmani, Pudukkottai



A. *Pyramidal urn found beneath cairn (type C.U.), Pudukkottai Museum*



B. *Transepted cist with antechamber (type K.T.) at Tāyinipatti, Pudukkottai*



A. *Transepted cist (type K.T.), showing internal features, at Sittannavāsai, Pudukkottai*



B. *A typical port-hole cist at Brahmagiri (cf. Ancient India, no. 4, pp. 187 ff. and pl. LXXXI B)*



A. Hood-stone at Cheramanangād near Eyyal, Cochin

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B. Handleless umbrellas or kundan-kudai used by Pulayas near Pālghāt, Malabar District

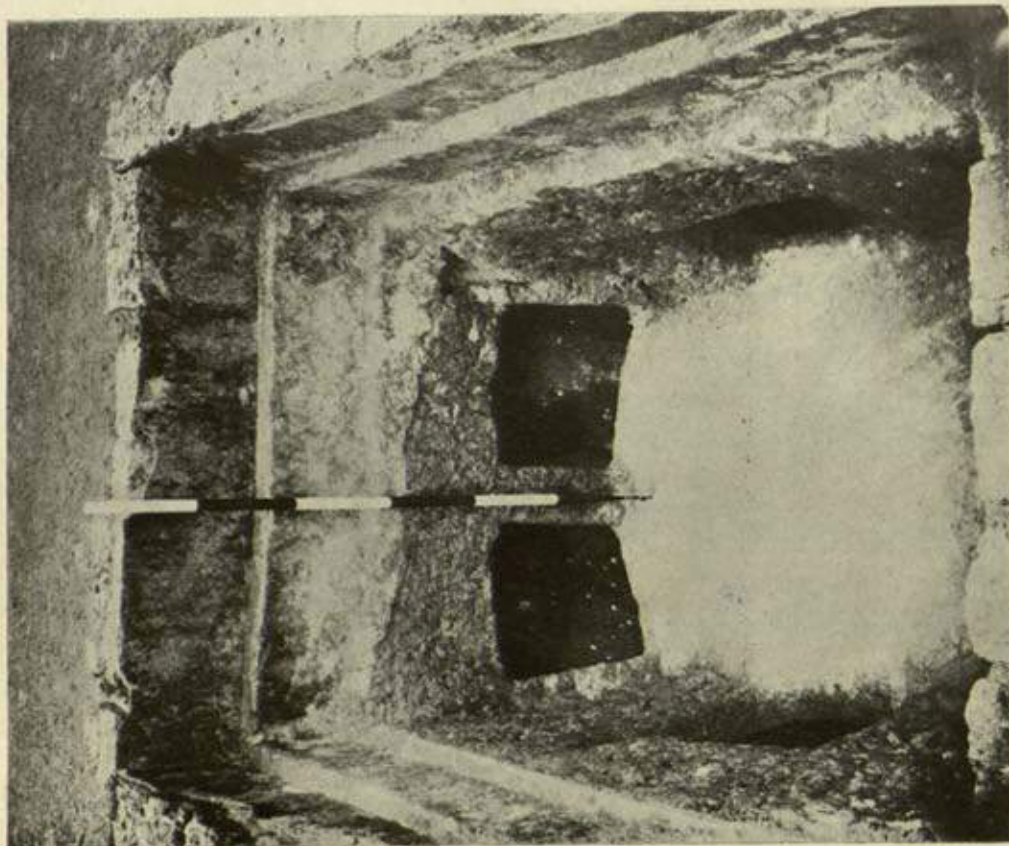


A. Multiple hood-stone at Cheramanangād near Eyyal, Cochīn

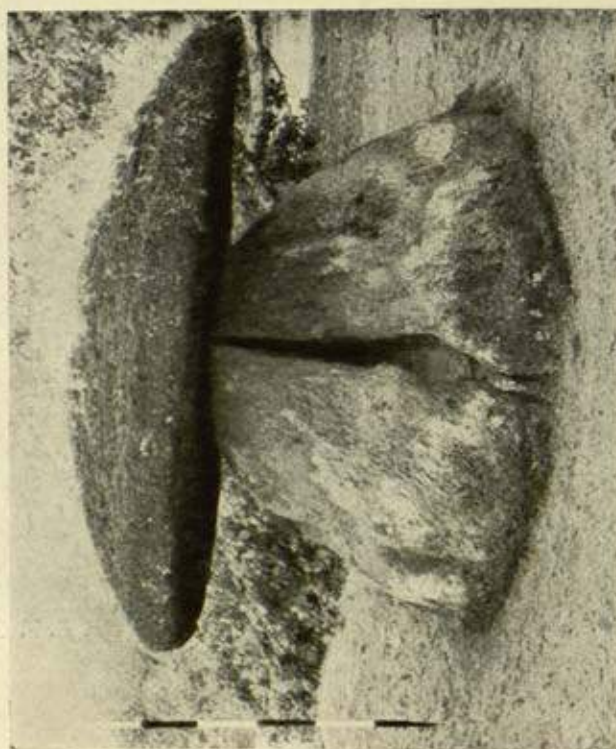


B. Alignment with a table-stone at Laikor in Assam. (After P. R. T. Gurdon)

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B. Multiple-chambered rock-cut cave at Kättakampal
near Kunnankulam, Cochin



A. Topi-kal at Cheramanangād near Eyyal, Cochin

come from the hills or rocky outcrops) both for the chamber and for the bounding stone-circles. There is complete absence of dressing in the majority of sites. The orthostatic rude stones do not therefore form a compact chamber though the gaps between the orthostats are packed with débris. On the orthostats is set a rude capstone and the whole monument resembles a half-submerged dolmen. The capstone also in its turn is sometimes monolithic and sometimes multiple. The chamber being irregular, with gaps between the rude stone orthostats, there is no definite orientation for the chamber or for the capstone that covers it. The significant orientation is, presumably, that of the enclosed sarcophagus (pl. X A), which is invariably placed east-west in this region. These monuments are surrounded by rude stone-circles with rubble packing. When the chamber is low, the cairn packing sometimes covers the entire monument including the capstone. This type is very common.

Sub-type D_3 (pl. XI B) is a variation of type D_2 , the only difference being that the rude stone orthostats in this class are almost completely buried so that the capstone poised on them appears to be at ground level. In such cases a cairn sometimes conceals the entire monument, including the capstone. This type occurs side by side with type D_2 but in smaller numbers.

(b) The cairn-circle (pl. XII A), symbolized by the letter C, comprises a stone-circle surrounding a cairn. Beneath the cairn is found a single urn, multiple urns or a legged terracotta sarcophagus. These varieties will be connoted by the symbols $C.U._1$ (cairn with single urn); $C.U._2$ (cairn with two urns); $C.U._m$ (cairn with multiple urns); and C.S. (cairn with sarcophagus).

Of these $C.U._m$ is the most common and is always found in association with D_1 , D_2 and D_3 . $C.U.$ and C.S. were observed by Rea in 1905 at Perumbair in Madurāntakam tāluk. In the northern lateritic region the cairn-circles show dressing in the stones used, whilst in the southern granitic region the stones are all rude granitic blocks. The actual burial-contents, however, appear to be similar in both regions.

In association with the megaliths of the northern (lateritic) part of the district, is occasionally found a third type of monument, the barrow or earthen mound. Round about Red Hills near Madras and at Amrithamangalam are vast areas of high lateritic ground in which are discerned both pyriform urns (pl. XII B) and legged sarcophagi without cists or other enclosures (pl. XI A). On the surface, the site is indicated by low barrows, made almost imperceptible by erosion but distinguishable by the chips of granite-spread* over the individual barrows. This type is styled B. Similar burials are alleged by Rea¹⁷ to have existed at Pallāvaram round about Trisulam, but this is essentially a megalithic area and the observation may be faulty.

II. TYPES IN PUDUKKOTTAI STATE

This small State abounds in megalithic monuments of two major types:—(a) *the cairn type* and (b) *the cist type*.

The sub-types of the cairns are $C.U._1$ (cairn with single urn), $C.U._2$ (cairn with two urns) and $C.U._m$ (cairn with multiple urns) as at Chingleput. The terracotta sarcophagus is wholly absent in the State. The stone-circle of $C.U._1$ is always less than 12 feet in diameter. The (large) circles of $C.U._m$ are in a few places (e.g. Kalasakādu and Sokkanāthapatti) invisible but may be inferred.

* A superficial observation of these is likely to be mistaken by archaeologists or geologists for weathered remnants of intrusive masses of granite. In reality the sections at Erumaivettipalayam and at Ambattur show that the underlying rocks are grits of the Cuddalore series passing down into Sriperumbudur shale.

C.U.₁ is typical of Kalasakādu (pl. XIII A) and occurs in association with C.U._m and also with the cist type. C.U.₂ is scarce but C.U._m (pl. XIII B) is the most common. The last is found invariably associated with the cist type in most of the sites.

The cist type.—Here the orthostats are all monolithic slabs. They occur with one exception as transepted cist K.T._n (cist, transepted with antechamber).

The exceptional non-septed type K presents itself as a solitary instance only at Sittannavāsal. The arrangement of the orthostats in it is in clockwise *svastika* pattern.

The other or the transepted type (pl. XIV B), which forms the majority, presents in all cases an antechamber with port-hole in the main cist-wall which partitions the two. The antechamber is, except on one site at Tayinipatti where it occurs to the west, always to the east of the cist. The location of the antechamber is sometimes on the northern and sometimes on the southern half of the cist. The septum of the cist (pl. XV A) is always oriented east-west and divides the cist into two roughly equal parts. One of these, not approached from the antechamber, is again divided into an upper and a lower half by a horizontal slab and access to each is through separate port-holes, cut into the septal slab, one vertically below the other. This type of cist is always surrounded by a demarcation stone-circle and when the cist is nearly or wholly underground, is covered by a cairn. The transepted cist of Pudukkottai is the most elaborate type of cist-burial in South India and has not yet been met with elsewhere.

The cairn-circle and the cist types are not mutually exclusive in this region but occur promiscuously.

III. TYPES IN COCHIN STATE

In Cochin State, as in the whole of Kerala the geological and physiographic features fall into three well-defined parallel strips, each of which contains distinctive monuments; the nature of the monuments being determined largely by the material available.

Thus, dolmens, both 'multiple' (i.e., several within a single stone-circle) and 'isolated', are to be found in the eastern mountainous region composed of granitic gneiss and charnockite; the rock-cut caves, menhirs and megaliths of the umbrella series on the lateritic plains; and urn-burials with some menhirs on the alluvial sea-board.

MULTIPLE DOLMENS

A number of dolmens bounded by a single stone-circle would indicate the communal character of these monuments. Groups of such monuments—one group containing as many as nineteen at a place near Varadarappalli in the Palappilli Reserved Forest—occur mostly on the gneissic uplands of the Kerala region, and they are built on bare rock within 3 or 4 feet of each other. Each dolmen has five stones, four for the orthostats and one for the capstone. The orthostats made of rude stone-slabs, 6 to 8 inches in thickness, are placed in a *svastika* pattern, either clockwise or anti-clockwise. The orientation of these dolmens is invariably east-west, and on the average they measure 5' 0" × 2' 6" × 2' 3" in height on the inside. The inner surface of the orthostats is smooth and indicates dexterity in slab-quarrying. Such dolmens, with the number of monuments in each group and the size of the bounding circle varying, may be seen near Varadarappalli in the Palappilli Reserved Forest at Karikulam near Kannathupādam within a Rubber Estate at Pattikād on the hills of Vellanimalai Reserved Forest and in the Vāniampāra tract. Similar rude slab dolmens have been reported also in the neighbouring Travancore State, but so far neither their plans nor any grave goods recovered from them have become available to archaeologists.

Dolmens of a similar character, but isolated, are also to be found in the State, and some of them have also a port-hole opening. Near Adirapalli falls of the Chālakudi river, for

instance, is a low dolmen surrounded by a cairn of gneissic rubble concealing the monument almost up to the capstone. The monument is oriented north-west to south-east and there is a U-shaped opening cut from the top of its north-western orthostat.

PORT-HOLE CIST

It is an underground box-like structure made first by scooping out a rectangular chamber in the laterite and then lining the floor and the sides with granitic slabs and lastly by covering the whole with a granitic roof-slab. The trapezoidal port-hole in the eastern orthostat is externally blocked by a separate smaller slab on the outside. On the ground-surface the cist is surrounded by a stone-circle, of dressed lateritic boulders.

A clear port-hole cist with a bench inside occurs at Porkalam and three more dilapidated cists in its vicinity, two of them surrounded by a common stone-circle, must also have belonged originally to the same type. This port-hole cist is, therefore, allied to the Sülür type¹⁵ of cist in Coimbatore and to the port-hole cist at Tiruvilvāmala discovered by Govinda Menon,⁹ which has yielded the red-ware, decorated with yellow wavy lines, dating probably from just before the beginning of the Christian era to the first or second century A.D. Within the same class, probably, fall the dolmens reported on the slopes of Pattiattukunnu on the borders of Palayannur Reserved Forest.

MENHIRS

Menhirs, in the Kerala country, are rooted mainly to the laterite and are scattered far and wide. Usually they are monolithic rude granitic slabs, oriented north-south and standing high above the laterite ground. The menhir at Ānapāra (pl. X B) is locally known as *Patakalku* or *Pulachikallu*, the former name suggesting a memorial-stone on a battle-field, while the latter would commemorate a Pulachi who died at the spot. Similar monoliths are seen at Kuttūr, Choorakāttukara and Muttam. The area round Kuttūr menhir is dreaded by the local people as being haunted by ghosts. Similar monoliths are also met with in Malabar and Travancore State, and trial excavations made by Vasudeva Poduval¹³ on a group of four menhirs at Devikulam revealed a burial-urn underneath, with pottery and iron objects placed inside it.

An 'alignment' of menhirs of different sizes, the largest 12 feet 9 inches high, 7 feet 6 inches at foot and 1 foot thick at the top, is reported at Komalaparathala. Another monument near Tiruppunitara is a variant and consists of a monolithic pillar of laterite, round in section and rudely dressed. In its vicinity is the broken stump of another menhir.

UMBRELLA-STONE

Topi-kal and *kudai-kal* are the two terms used by local people for the monuments belonging to the umbrella-stone series, and they were first rendered into English as 'hatstone' and 'umbrella-stone' by J. Babington¹⁴ in 1819.

Each *topi-kal* (pl. XVIII A) or 'hatstone' (*kal-kudaikal*) rests upon four quadrantal clinostatic stones joining up together into a square at the base on the outside and bevelled in such a way as to close up along the diagonals of the square. The outer surface of each clinostat is finely dressed so that the figure of the monument becomes a well-finished paraboloid. This is truncated near the top for the circular capstone to rest on a rather small flat surface. The 'hatstone' proper, i.e. the capstone, is a low cone on a wide circular base, the edge of which is chamfered towards the inside presenting a circular edge with a pendant appendage. At close quarters these characteristics make a *topi-kal* or a 'hatstone' resemble a crudely executed stone model of the elevated ceremonial umbrella common all

over Kerala. *Topi-kals* have a definite orientation in that each of the quadrantal clinostats faces one of the cardinal directions.

Ariyannur and Cheramanangād in Cochin State are the two main sites containing *topi-kals*, which, seen from a distance, resemble a crop of giant mushrooms.

HOOD-STONE

The 'hood-stone' (pl. XVI A), a dome-shaped dressed lateritic stone, is, like the *topi-kal* described above, except that it has no parabolic support of clinostats. The capstone, which is all the stone used, rests directly on the ground. Locally it has a resemblance to the *kundan-kudai* (pl. XVI B), the handleless hollow umbrella, whence Babington¹⁴ translated the term as 'umbrella-stone'. Porkalam and Cheramanangād are the main sites where 'hood-stones' are to be found.

Within the hood-stone class must also fall the irregular granitic rude stone-slab, as at Cheramanangād, placed likewise flat on the ground and possibly concealing an urn-burial below.

MULTIPLE HOOD-STONE *

Intermediate between the 'hood-stone' and 'umbrella-stone' is the monument which may be described a 'multiple hood-stone'. In this monument (pl. XVII A), the striking feature visible from above is a big circle of sectorally dressed clinostatic lateritic stones presenting the same pattern of dressing as is observable in the quadrantal stones of the *topi-kal*. The number of stones in the circle varies from 5 to 12 and, though all tend to converge towards the top, they do not join up, as the quadrantal stones do in a *topi-kal*. These leave a big circular gap in the middle and the upper surface of the stones does not show any indication of a stone being placed on top. Erosion of the interior earth-pack in some of these monuments revealed multiple hood-stones or *kudaikals* at ground level, 3 in one case and 5 in another. Two monuments of this nature may be seen at Cheramanangād.

ROCK-CUT CAVES

For the construction of these caves the surface mass of laterite is first scooped out by the cave-builders, sinking thus a stepped pit into the rock, usually rectangular or nearly rectangular of varying depth. Into the straight face of rock is then cut a small rectangular entrance, either a little above the floor-level of the open quadrangle or flush with it. Through this narrow opening, measuring on average $1\frac{1}{2}$ feet square, which hardly permits a man to crawl through on all fours, is the hard laterite hollowed out and the cave shaped and fashioned. The floor of the interior of a cave is invariably 1 foot to 2 feet lower than the floor of the court outside. In most of the caves it is circular or oblong on plan while the vault is dome-shaped, although caves with a rectangular floor and horizontal ceiling are also known. On the sides of a cave are benches (which are raised platforms) cut out of the rock and varying from 6 inches to 2 feet in height. But the benches are a variable feature. Some of the caves have a single bench, only on one side, while others have no bench at all.

A rock-cut pillar, square, rectangular or round, is sometimes left standing in the middle of the floor rising to the centre of the vault; for instance in the caves at Porkalam and one of the twin caves at Eyyal. But the central pillar is, sometimes, absent, as at Chovvanur, Eyyal and in the multiple-chambered cave at Kāttakampāl (pl. XVIII B). In yet another type there is a circular opening in the centre of the domed vault. The caves at

* First discovered in our survey as a new type, though casually remarked on by Sen Gupta.¹⁹

Kandānasseri and Kakkād belong to this class. In a multi-chambered cave the same outer court leads to different caves in front and on sides. At Eyyal the common court leads to the main chamber and on the right hand side to a smaller chamber. At Kāttakampāl two chambers are situated laterally in front, while two others, one on each side, face each other across the open court.

The pottery and iron implements recovered from these underground caves, as also the fact that they sometimes occur in association with cists and monuments of umbrella series, clearly endow them with a sepulchral character.

APPENDIX A

Megalithic types in North-east India

The aboriginal tribes of Assam,¹⁰ Chota Nagpur and Bastar⁸ have a living megalithic culture. At the present day that culture is ridden with superstitious rituals and 'taboos', and in many places the megalithic monuments have been giving place to symbolic wooden counterparts. While most often the megalithic monuments prevalent among these tribes are commemorative rather than sepulchral, at the present day they have lost their funerary significance by getting associated with the gorgeous but unrelated memorial feasts or *gota mela*¹¹ as they are called among the Bondos and Gadabas. The salient types of monuments are discussed here.

The existing tribes of these areas are principally the Maria Gonds in Bastar, the Oraons and Mundas in Chota Nagpur, the Bondos and Gadabas in Orissa and the Nagas and Khasis in Assam. Though their monuments exhibit an essential unity in their megalithic character they are diverse in ritualistic minutiae, due apparently to influences principally Austro-Asiatic and in a lesser degree Dravidian. These monuments include menhirs and their alignments, dolmens and stone-circles, stone-seats and 'cromlechs'.^{*}

Among certain tribes like the Maria Gonds of Bastar⁸, the menhirs and their alignments are known as *uraskal* (from Gondi: *urasna*, to bury) and the dolmens or table-stones are called *dānyakals*, which consist of a flat stone over supporting boulders, the latter being known as *odiyal*. The most common substitute in the present day among the Bastar Marias for the *uraskal* is either a cairn of stones with a flat capstone on top, called the *marmakal*, or a wooden pillar at the top of which are carved representations of birds.

With the Khasis² and Nagas of Assam the menhirs are very imposing and are in alignment (pl. XVII B) of odd numbers with heights varying from 2 to 14 feet though there may be exceptionally high menhirs¹⁰ as the one at Nartiang, 27 feet high. The central menhir in the alignments is the tallest usually and is called *mawkni*, and a table-stone known as *mawkynthei* which is a sort of low dolmen about 2 feet above the ground (sometimes two such) is found in front of the central menhir. The alignments do not have any fixed orientation. In accordance with the matrilineal character of the Khasi society⁷ menhirs are set up in honour of maternal uncles while the low dolmen represents a female ancestor. Here the menhirs appear usually to mark different stages in the journey of the soul to the clan ossuary where the bones are deposited ultimately.

The stone cineraria or clan ossuaries, called *mawbah*, are very common among the Khasis but not found among the Nagas; they are rectangular built-up chambers made of

* The term 'cromlech' is loosely applied (1) to denote sometimes a *hanāl gharia* (ghost-throne), which is placed at the foot of the menhir and on which oblations are sprinkled; or sometimes (2) to the structural clan ossuary built of stone blocks and serving as repository for the uncalcined bones and ashes of the different members of a clan dying at different times. These clan ossuaries are most often rectangular chambers.

stone blocks. Access to the interior of these is got by removing one of the heavy stone blocks in front, since they are closed on all sides and there are no port-hole openings.

Stone-seats constitute large slabs of stone placed within the village, under which the bones of the dead are sometimes buried (possibly before their transfer to the clan ossuary, while an upright commemorative menhir is simultaneously erected outside the village).

In Chota Nagpur, among the Oraons and the Malers, the cairn-burial is practised. Here the dead is laid in a ditch dug out in which dry leaves and branches have been previously spread and wooden planks, personal belongings like cot, umbrella, etc. are laid, the ditch being then filled with earth and over it heavy stones of various sizes being heaped to form the cairn.

According to Walter Ruben¹⁸ the ancient 'Asur' tombs and the megalithic culture of the Mundas of Chota Nagpur have a western origin, which reached India through Palestine and Persia in the early Iron Age and split in North India—one branch moving southwards and the other reaching eastwards as far as Chota Nagpur. The fact that all 'Asur' and Munda graves hitherto opened have contained iron implements may perhaps denote, according to von Haimendorf, an ancient contact here between the Austro-Asiatic populations and the materially more advanced people of the powerful South Indian dolmen-grave civilization, though Walter Ruben's theory is not enough to explain the kinship between the Central Indian and Assam megalithism and ritual differences.

Among the Bondos and Gadabas of Orissa,¹¹ we have what are called the stone-circles known as *sindibor*, the dolmens known as *gunom*, and the groups of stone-seats comprising some menhirs also, situated under the village trees, called *sodor*. While to the Gadabas, the *sodor* and *sindibor* mean merely aggregations of memorial stones, the Bondos look upon them as the seats of the earth deity so necessary for the promotion of fertility. The megalithic monuments of both these tribes belong undoubtedly, according to Haimendorf, to South-east Asiatic type (i.e., inclusive of Austro-Asiatic and Austronesian cultural influences). According to him the essential elements of the megalithic cultures of Assam and Chota Nagpur and Orissa, which belong to the 'South-east Asiatic' type, must have developed and moved with the great Austronesian migration in the movement of the Austro-Asiatic races westwards into Peninsular India.

The combined ethnological and archaeological evidence leaves no doubt that both these migrations occurred in neolithic times. This is shown by the clear co-ordination in India in the distributions of the neolithic shouldered polished celt and of the Austro-Asiatic languages; no other wave of people but the Austronesians could have been responsible for the spread of the highly developed neolithic civilization characterized by the long polished celt with quadrangular section, observed in the Peninsula as far south as the Godāvāri.⁴

On the other hand, the prehistoric megalithic monuments of South India belong to an altogether different culture which appears to have come into contact with the South-east Asiatic current; it is such a contact that could have given rise to the mixture of influences in monuments and rituals observable in these cultural regions which hitherto had remained difficult of reconciliation. Ehrenfels' correlation⁷ of megalithism and Mother-right in India also seems to indicate that the former must have reached India not only in a series of cultural waves but also alike from the West and from the East.

The main factors of difference between the North Indian and South Indian prehistoric megalithic cultures are: (1) while the monuments of the former are memorials often unconnected with graves, almost every megalithic monument in South India is a tomb; (2) while the megalithic culture of the former belongs to the late (Neolithic) Stone Age, the South Indian megaliths seem to be essentially rooted in the Iron Age, supported as it is by the Brahmagiri excavations in 1947²²; and (3) while structurally there seems to be some link between the South Indian and the Mediterranean megalithic culture in their architectural

features and 'port-holes', etc., none of these is patent in the megaliths of North-east India.

APPENDIX B

Glossary of megalithic terms

The terms now used by the Department of Archaeology in India for megalithic and related monuments are given below. They are, of course, subject to extensive sub-division and amplification. By way of introduction it may be affirmed that megalithic (from the Greek: *me-gas*, great, and *lithos*, stone) monuments are made of large stones, usually but not invariably rough and unhewn, which conform to certain well-marked types.

1. *Alignment*.—A series of menhirs arranged in lines on some definite system.
 2. *Avenue*.—Two or more alignments approximately parallel with one another.
 3. *Barrow*.—A barrow is a mound (tumulus) made of earth. It may be either (a) circular on plan, in which case it is called 'round barrow' or (b) oblong or oval on plan, in which case it is called 'long barrow'. It may or may not contain a stone cist, built on or below the original surface of the ground. It may or may not be defined by a circle of stones or a ditch, or both.

4. *Cairn*.—A cairn is a barrow made of heaped-up stone rubble. Otherwise it may resemble any of the various types of barrows.

5. *Cist*.—A cist is a box-grave (pl. XV B) built of stone-slabs, normally below the natural surface of the ground; usually, but not necessarily, it consists of a single stone of orthostat for each side and a cover or capstone on top; it may also have a floor-stone. One of the orthostats is sometimes pierced with a circular, semi-circular or trapezoidal opening. When the opening is semi-circular it is cut into the top of the orthostat immediately under the capstone. The opening is called a 'port-hole'; and a cist with such an opening is called a 'port-hole' cist.

Cists are classified as 'small' up to 3 feet in length internally or 'large' above 3 feet in length internally. A large cist built above the natural surface of the ground and 3 feet or more in height may be described as a 'dolmen'.

6. *Clan ossuary*.—A cyclopean rectangular chamber built of stone blocks opened by removing one of the blocks in the front. This is erected either directly on the ground or on a stone platform and serves as a repository for the uncalcined bones and ashes of the dead. Known as *mawbah* among the Khasis of Assam.

7. *Cromlech*.—(Welsh: *crom*, bent and *lech*, stone). Also known as Cyclolith. This term has a varying connotation and will not, therefore, be used by the Department of Archaeology in India.

8. *Dolmen*.—(Celtic: *dol*, table and *men*, stone). A single slab of stone supported by several orthostatic boulders or slabs built on the surface of the ground in such a way as to enclose a space or chamber beneath the capstone. It may or may not be wholly or partially covered by a barrow or cairn. A dolmen may be with or without a port-hole.

Known in Bastar State where it is placed at the bottom of the memorial pillar as *hanāl gharia* (ghost-throne). Also known as *dānyakal* when the dolmens are low, the orthostats of which are locally known as *odiyil*. Known among the Bondos of Orissa as *gunom*. Tablestones, in association with menhirs among the Khasis in Assam, are known as *mawkynthei*.

9. *Hat-stone*.—Vide Topi-kal.

10. *Hood-stone*.—A dome-shaped dressed lateritic stone resting with its flat face directly on the ground. This type of burial is restricted to the Kerala region and is locally known as *kudai-kallu* as it bears a resemblance to the *kundan-kudai* the handleless hollow umbrella. Babington calls it 'umbrella-stone'.

11. *Menhir*.—Simplest of all the megalithic monuments, consisting of a single monolith set up, as a rule, at or near a burial spot. The monolith may be small or gigantic in height with its base fixed into the earth. In Bastar State, it is known as *uraskal* (Gondi: *urasna*, to bury and Dravidian: *kal*, stone) and usually occurs there in an alignment of menhirs. It may be either sepulchral or commemorative. The central menhir in an alignment among the Khasis of Assam is known as *mawkni*.

12. *Rock-cut caves*.—The practice of placing the dead in tombs (caves) cut out of the lateritic rock in Kerala is definitely to be associated with the megalithic structures.

13. *Sarcophagus*.—A cist (pl. XI A) often with legs or feet. In the present context it is always of baked earthenware or terracotta.

14. *Stone-circle*.—As its name implies it is a circle (sometimes oval or irregular in plan) built of juxtaposed stones. It is normally but may not always be an adjunct to a burial-ground. Known among the Bondos as *sindibor*.

15. *Stone-seats*.—The stone-seats of Assam tribes are mere stone slabs ceremonially placed under a village tree and apart from serving a ritualistic need are useful as seats for the travellers. Sometimes they overlie a pot of bones, prior to their removal to the clan ossuary. A group of them under the village-trees serve as a venue for village-council and disputes. Known as *sodor* among the Bondos of Orissa where they include some upright menhirs also.

16. *Topi-kal*.—(Umbrella-stone). (Hindi and corrupt Tamil, *topi* meaning 'cap') Known also as 'hatstone' following Babington and restricted to the Kerala region. Each *topi-kal* rests upon four quadrantal clinostatic stones joining up together at the base into a square, and dressed so as to give the shape of a truncated paraboloid to the entire monument. The *topi-kal* or the hatstone rests on the truncated surface.

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