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Umbrella-stones or mushroom-stones? (Kerala, southern India)

Zusammenfassung:

Schirmsteine oder Pilzsteine? (Kerala, Süd-Indien)

Der Autor diskutiert einige prähistorische Steinbauten in Kerala, Südindien. Sie gehören zu einer Megalith-Kultur, die wahrscheinlich in die Zeit von 1400 v. Chr. bis 100 n. Chr. fällt und mit der Eisenzeit auf dem indischen Subkontinent in Verbindung stehen. Diese Steinstrukturen, die in der Malayalam-Sprache *kuda-kallu* ("Schirm-Stein") genannt werden, sind 1,5 bis 2 m hoch und 1,5 bis 2 m breit. Sie bestehen aus fünf Steinen, und das ganze Ding mag an einen Sonnenschirm erinnern, sieht aber noch mehr wie ein großer Pilz aus. Der Autor hatte 1984 und 1994 Gelegenheit, die archäologischen Stätten zu besuchen, wo *kuda-kallu* existieren. Im Gegensatz zu anderen Megalithbauten am gleichen Ort wurde in den *kuda-kallu* niemals irgendein Grabtypus gefunden. Deshalb handelt es sich um keine Gräber. Wahrscheinlich war ihre Aufgabe das "Mahnmahl" für einen Toten. In der einheimischen Tradition werden sie gewöhnlich als Sonnenschirme gedeutet und als archaische Symbole von Kraft, Autorität und Heiligkeit angesehen. Auch wenn die Assoziation des *kuda-kallu* mit einem Sonnenschirm plausibel erscheint, trägt der Autor die Hypothese vor, daß diese Bauten Pilze darstellten, an deren Form sie beträchtlich erinnern. Mykologische und ethnomykologische Daten würden zusammen mit einigen Besonderheiten der Megalith-Denkmäler eine solche Hypothese stützen. Wenn die *kuda-kallu* Pilze darstellten, dann handelte es sich um psychoaktive Pilze, d. h. Pilze, die weit mehr als andere – z. B. Speisepilze – zur Assoziation mit dem Totenkult geeignet wären. Es scheint keine direkte Verbindung zwischen den *kuda-kallu* und den vedischen Soma zu geben, in dem Sinne, daß diese Denkmäler nicht als Ensemble eines Kultes erscheinen, der durch den Soma-Kult hervorgebracht oder beeinflusst sein konnte, denn der mit den *kuda-kallu* assoziierte Kult entwickelte sich in einer Periode, die mit Sicherheit dem Kontakt der Arier mit Südindien vorausging. Schließlich diskutiert der Autor die Frage, ob der Ursprung der südindischen Megalithkultur in Europa liegt oder nicht, und er schließt, daß die Hypothese einer Kenntnis und eines Kultes psychoaktiver Pilze bei den euro-asiatischen Megalithkulturen nicht *a priori* abgelehnt werden sollte. Dagegen würde der *kuda-kallu* sprechen.

I would like to discuss here about certain stone constructions present in some territories of southern India which aroused my interest when I visited this area. In particular, the so-called *kuda-kallu* ("umbrella-stone") attracted my attention. They belong to the prehistoric period of the southern Indian megaliths, whose finds

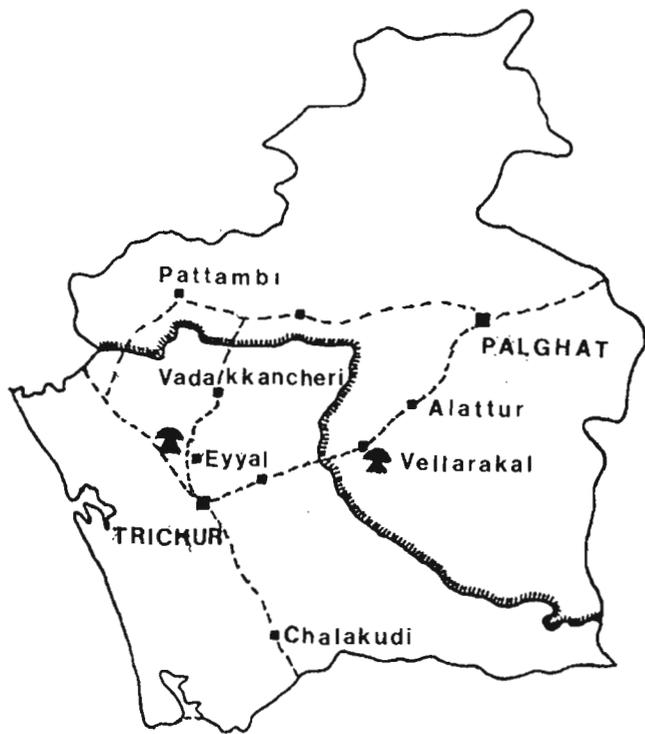


Kuda-Kallu in the Aryyannur site (near Trichur, Kerala State, India).

are mainly in the territories of Karnataka, of Kerala and of Tamil Nadu.

The megalithic culture of southern India is rather enigmatic, in particular as far as its origins are concerned, for which different and conflicting hypotheses have been advanced. Among these, the most trustworthy are the "diffusion" theories, which propose a historical-geographical unity of this phenomenon and see megalithic peoples coming from south-eastern Europe reaching the South of the Indian peninsula through Marakam, Baluchistan and Sind (Krishna, 1967), or driven out of their dwellings in north-western India at a later time by Aryan peoples (Chinnian, 1983), or reaching the coasts of Karnataka by sea. Some "autonomist" hypotheses have been also advanced, which consider an independent origin of the megalithic phenomenon in different parts of the world and, therefore, a local origin for the south-Indian one. These megalithic monuments belong to the Iron Age of the Indian peninsula. In Kerala the beginning of this period was dated to the beginning of the first millennium B. C., by means of radiocarbon determinations (Sathyamurthy, 1992). The megalithic monuments are thought to have been erected in the lapse of time between one thousand years B. C. and one hundred years after Christ, and the finds discovered together with these remains belong to the culture known as "Black and Red Ware". Chopra and coll. (1988) proposed a date within the period 700–400 B. C., whereas other scholars proposed a "lower" date (from 400–300 B. C. to 100 A. D.), and also more ancient ages were suggested, such as 1400 B. C. (Gurumurthy, 1983).

On the other hand, these as well as other authors are more unanimous as to the hypothesis that the constructors of south Indian megalithic works belonged to Dravidian speaking populations. Still today the States of Kerala and Tamil Nadu are inhabited by tribes of Dravidian origin, keeping megalithic traditions and customs – a rare case of historical continuity, with the usage, for



example, of erecting dolmens in honour of those who died in an unnatural way (it is the case for Malayarayans of Kerala, cf. Chinnian, 1983).

On the average the *kuda-kallu* are 1.5–2 m high and 1.5–2 m wide. They consist of four stones cut like half segments, forming a base which supports a fifth stone having the resting side flat and the other one convex. The whole thing may resemble a parasol, but even more a large mushroom.

I had the opportunity of visiting some archeological sites in which the *kuda-kallu* are present, during a couple of trips to India, the first in 1984, the second in 1994. The most important concentrations of *kuda-kallu* are in the region of Trichur and Palghat, north of Cochin, inside the coastal region. Among the different megalithic sites I visited, I remember those of Cheramangad (or Chermanangad, half a mile from Vellarakal), and of Aryannoor (near Eyyal), reachable from Trichur by car. The region is gently hilly and the rocky soil is made of laterite which can be easily carved. One of the *kuda-kallu* of the Cheramangad site was moved to Trichur and can be visited in the garden in front of the archaeological Museum. Another important concentration of *kuda-kallu* is in the megalithic site of Porkulam, in Kerala, which I was unable to visit.

Other megalithic structures present in the same archaeological sites, around the *kuda-kallu*, are: dolmens, menhirs, *topikal* ("hat-stones"), circles of stones, rock-cut caves, *hood-stones*. The *topikal* (or *topikallu*) consists of a dome-shaped stone lying on three standing stones forming a square base: the whole thing has the appearance of a truncated paraboloid. Another peculiar structure is the *hood-stone*, consisting of a single large dome-shaped stone, with the flat side resting on the ground, placed to close a tomb. To see these structures all together causes a certain impression. The site of Cheramangad mainly consists of *topikal*, *hood-stones* and

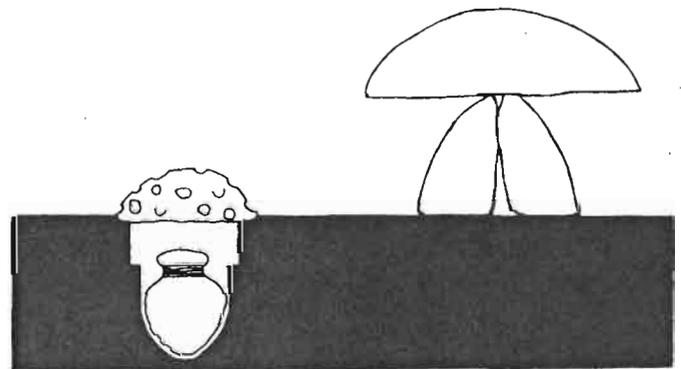
kuda-kallu "which look like a group of giant mushrooms from a distance" (Menon, 1991: 40).

The site is locally known with the name of Kudakalluparambu. Also Longhurst (1979: 11) reports that the monuments "from a distance resemble a crop of giant mushrooms".

Iyer describes the site of Porkulam in the following way: "What is most significant about Porkulam is that in an area of two acres, *kuda-kallu*, dolmenoid cists, and urn burials covered by granite slabs enclosed by circles and caves are found existing side by side, each keeping its respective place, as if all were contemporaneous and part and parcel of the same cultural unit" (Iyer, 1967: 25).

Unlike *topikal* and *hood-stones*, which were graves, in the *kuda-kallu* no type of tombs nor of pottery were ever found. Therefore, they are not graves.

According to A. H. Longhurst (1979), their function was of "memento" of the dead person, probably erected to mark the place where the body was cremated. The same author connects the *kuda-kallu* to the later *stupa*, a monument of hemispherical shape (it was like this at the beginning of its architectural evolution, then it was transformed into a brick tower placed on a high terrace), containing the Buddha's or other Buddhist saints' relics, or also only a memorial monument of important events in the life of the Buddha.



a

b



c

Design of hood-stone (a) and *kuda-kallu* (b) at the Cheramangad site. In some cases, as here represented, the cover-stone of the hood-stone is ornamented by several round cavities (c).

However, the strongest association, Longhurst reveals, is with the parasol, well-known as archaic symbol of power and authority, as well as of sacredness, widespread in ancient Egypt as well as among Assyrians and other Oriental civilizations of a later age. In some Buddhist countries the parasol is venerated. In India it mainly acquired a religious meaning: images of the Buddha never appear in the early Buddhist art, he is represented by symbols such as a wheel, a throne, a pair of footprints, and these are placed under one or more "honorific" parasols (wooden or fabric parasols are erected on top of *stupa*, too). There also was someone who saw in the *kuda-kallu* "a creduly executed stone model of umbrellas of palm leaf used by the local people" (Sathyamurthy, 1992: 3). The local tradition ascribes a Buddhist abode to the megalithic monuments. They were regarded as the abode of hermits when Buddhism and Jainism were popular in Kerala (Krishna, 1967: 25).

Even though I accept as plausible the association of *kuda-kallu* with the parasol, sacred and sovereignty symbol, I would like to advance the hypothesis that such constructions would represent mushrooms, to the shape of which they resemble considerably. *Kuda-kallu* is a term of the Malayalam language – the language most widely spoken at present in Kerala which became different from the Tamil language in the IX century after Christ – and it literally means "umbrella-stone". It is undoubtedly a late appellation, surely subsequent to the period of the erection of the monuments, and there are no well-founded proofs that it had the same meaning of the name attributed to it by the peoples who erected the monuments. Furthermore, as Longhurst affirms, very probably it was only in the period of Asokas, several centuries after the erection of the *kuda-kallu*, that the parasol was associated with the *stupa*, of which *kuda-kallu* are considered as precursors, both from the architectural and the symbolic point of view. Perhaps, the parasol was associated with the *kuda-kallu* as a result of the migration of Jainists and Brahmins toward southern India, which started during the same period of Asokas. Moreover, there is a substantial difference in the shape of *kuda-kallu* and that of the classic honorific parasols represented in Egyptian, Assyrian and Indian bas-reliefs: these latter are characterized by a thin supporting stick, by a parasol generally flat on both sides (the so-called "circular parasol", often with fringed rim, and by a short central pin sticking out of the upper part. The *kuda-kallu* has a stronger and more compact appearance, it has no plumes nor gaudy decorations (unless they were made of wood) and its shape recalls some large mushrooms of the *Amanita* or *Boletus* kind.

In this connection, I remind that the two species of psychoactive mushrooms *Amanita muscaria* and *A. pantherina* are present in southern India. They were found in forests of conifers in the region of Kodaikanal which is "only" 80 km from the sites where there are *kuda-kallu*, even though it is in Tamil Nadu (Madurai). It is also true, as pointed out by Richard Gordon Wasson, that "its presence there has been attributed by mycologists to plantings of exotic conifers in the past century" (Wasson *et al.* 1986: 136), but exactly the presence of the *kuda-kallu* and of a detail which will be described straight after, suggests a certain caution in



Kuda-Kallu in the Aryannur site (near Trichur, Kerala State, India).

accepting the hypothesis put forward by mycologists, before further checks.

In his monumental work on Soma, Wasson touched upon the presence of megalithic "mushroom-stones" in Kerala, however, it seems not that he visited them personally (I think that if he had the opportunity of being in the site of Aryannoor, in the middle of seven *kuda-kallu*, he would have been very impressed). He reports about these megalithic structures in a passage in which he discusses about the association between the mushroom and the parasol: "'Mushroom' in classical Sanskrit is *chattrā* (...) The word itself comes from the root *chad*, 'to cover', and its primary meaning is 'parasol'. For southern peoples the parasol furnishing protection from the sun, is of importance, and from Cambodia to Ethiopia it is a symbol of authority (...). Until recently the northern peoples

have not known the parasol or the umbrellas. When the Aryans invaded Iran and India, they gave to this newly discovered utensil an Aryan name, *chattra*, and later extended the meaning of that name to embrace the fleshy capped fungi (...) Nor, so far as I now know, are the RgVeda and Soma to be associated with the triple-tiered *chattra* ('parasol' and 'mushroom') that surmounts the great stupa at Sanchi, one of the earliest and most awe-inspiring Buddhist structures that survive; nor with the megalithic 'mushroom-stones' found in great numbers in Kerala, and less often in Nepal" (Wasson, 1967: 63-6).

The parasols standing above the stupa were known in ancient India as the *chhatravali*. Wasson himself had previously pointed out that: "the earliest surviving reference to mushrooms in Sanskrit, going back to several centuries before Christ, is *ahi-chattra(ka)*, 'snake's parasol', in the text called *Nirukta*" (Wasson & Wasson, 1957, I: 104).

This brings us back to the south Indian cult of the snake, *naga*, a cult still well established among Dravidian peoples. In the past the snake, the mushroom and the umbrella (parasol) could have been symbolically associated with each other in the same way as the toad, the mushroom and the lightning were associated with each other in Europe. However, one should not forget that, just in Dravidian territory, in the surroundings of Mysore, the lightning is associated with the appearance of some species of mushrooms (*Phallus* spp., cf. Wasson et al., 1986: 89), a fact which proves that the lightning is not unrelated with the mushroom symbolic spheres of the south Indian cultures. The presence of *ahi-chattra(ka)* in the *Nirukta* would suggest the hypothesis that archaic symbologies of the parasol and of the mushroom were not in contrast. The parasol itself, the emblem of the present State of Kerala, could have been associated with the mushroom since the origins of its symbolic value. Wasson underlined the likeness in shape between the mushroom and the parasol, noting that: "the mushroom has gills suggestive the struts of a parasol" (Wasson et al., 1986: 61).

Whatever the object that the *kuda-kallu* intended to represent was, its shape influenced the religious and funeral architecture of the whole subsequent history of the Kerala's peoples. A clear example is the modern Devi's temple in Ambalathara, a village located along the road connecting Covalam with Trivandrum (Thiruvananthapuram), in the coastal region of south Kerala. Even though it was intentionally constructed with the look of a huge parasol, 15 m high, again its shape resembles more that of a large mushroom than that of an umbrella or of a parasol.

To the mycologist Gaston Guzmán the *kuda-kallu* appeared as gigantic mushroom representations, recalling more species of the *Boletus* kind, rather than the fly agaric "because of the shape of the excessively thick stipe" (Guzmán, 1984). However, this author points out that they could represent other species of Basidiomycetes which were object of worship for their psychoactive properties (Guzmán, 1994).

One should not forget that some strong species of psilocybinic psychoactive mushrooms, such as *Psilocybe aztecorum* Heim var. *aztecorum* Heim emend. Guzmán, *P. aztecorum* Heim var. *Bonetii* (Guzmán) Guzmán, *P. cubensis* (Earle) Singer, *Copelandia cya-*



Devi's temple in the Ambalathara village, near Thiruvananthapuram (Kerala State, India).

nescens (Berk. & Br.) Singer, *C. tropica* Natar & Ram, *C. bispora* (Mal. & Bert.) Singer & Weeks, grow in the region of Kodaikanal (Natarajan & Raman, 1983). Some of these species grow on excrements of various four-footed animals living in the wild state and not only on excrements of domestic cattle, and their spread could reach the hilly and coastal regions of southern India, including the *kuda-kallu* region.

If *kuda-kallu* represented mushrooms, then they represented psychoactive mushrooms with visionary properties allowing vision of the other world, of the after life, therefore mushrooms appropriate more than any other ones – for example edible mushrooms – to be associated with the cult of the dead.

Though one has not forcibly to see in the *kuda-kallu* the image of *A. muscaria* or of *A. pantherina*, and the possible psychoactive mushrooms of the region are numerous, a more rigorous observation of the archaeological site of Cheramangad made me notice a detail which could be of the utmost importance for the determination of the mushroom species represented by *kuda-kallu*.

The *hood-stone* could be seen as a *kuda-kallu* without pedestal ("stipe"), in which the stone forming the "hood" rests directly on the ground, where it covers a cylindrical shaped tomb in which a funeral urn is set. With a little bit of imagination, one could catch sight of the missing foot of the *hood-stone* in the shape of the cylindrical tomb placed underground, and thus the likeness in the

shape of the two structures would be clear. The tomb carved in the laterite is large enough to contain a red terra-cotta urn, with piriform bottom, fitting together with the tomb bottom. This kind of piriform bottom recalls the shape of the terminal part of the stipe of several large mushrooms, in particular those springing up from an ovule, like the species of *Amanita*. Also the look of several stones forming the *hood-stones* is similar to that of the upper stones of the *kuda-kallu* (the "hats"), even though generally smaller. It is not by chance that archaeologists consider the *kuda-kallu*, the *topikal* and the *hood-stones* all belonging to the megalithic monuments "of the parasol series".

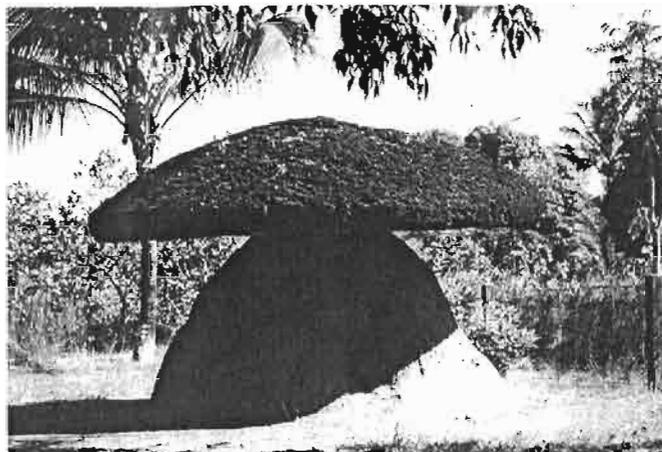
On many of the *hood-stones* I could observe at Cheramangad there are deep holes which, however, do not reach the opposite side of the stone (the one resting on the ground): one or two holes presumably having the purpose of facilitating the removal of the stone by inserting poles into them to lever. But on some *hood-stones*, besides these deep holes, there are several cavities hollowed out on the whole exposed surface of the stone. Although the surface is rather rough (because of the kind of the laterite rock), the deliberatedness of their presence is unmistakable. 2–4 cm deep and 4–7 cm wide (however some are wider than 10 cm) these cavities had a clear decorative function, or else they evidenced a distinctive feature of the object that the *kuda-kallu* represented.

There are only two mushrooms having whitish punctiform spots on the cap surface and both are endowed with psychoactive properties: *A. muscaria* and *A. pantherina*. It is a distinctive feature of these two species and the most practical way to represent it on the stone is just that of carving round cavities on its surface. At this point, the hypothesis that the *topikal* and the *kuda-kallu* represented precisely one or both these mushrooms becomes more convincing.

It is an hypothesis which would arise important questions, the first of which already known by intuition by Wasson: which relationship is there between this megalithic cult and the cult of the Vedic Soma?

According to Wasson' hypothesis, the sacred beverage of immortality and divinity Soma much-praised by RgVeda should be identified, in its original form, with a psychoactive beverage obtained by extracting the juice from the fly agaric. The knowledge of the psychoactive properties of the fly agaric is supposed to have been spread by Aryan peoples during the Indo-European migrations. With a more general view, the proto-Indoeuropean culture of Asiatic origin, from which several waves of people moved towards northern and southern Europe, Iran and India, carried the knowledge and the cult of the fly agaric with itself. It would therefore be plausible the fact that such knowledge was preserved in the subsequent ages among the civilizations which were formed by the impact between Indo-European and native peoples. As recently affirmed by Jonathan Ott in an article in which he analyzed the criticism to the Wasson's hypothesis, his identification of Soma with the fly agaric is still more important than any other alternative proposed so far (Ott, 1994).

However, the prevalence of the Indo-European peoples in the spread of the knowledge of the psychoactive properties of this



Kuda-Kallu in the Aryannur site (near Trichur, Kerala State, India).

mushroom in Asia and in Europe is not to be considered as an indisputable consequence of Wasson's hypothesis. As Wasson himself affirmed many times, and as the picture of the Epipaleolithic Saharian period (Samorini, 1992) would seem to confirm, the relationship of man with psychoactive mushrooms fades away at the beginning of time and originates in the long Stone Age. Therefore, in the history of the numberless human migrations, and of the invasions of one people over the other, one must sense a story of confrontations, of absorptions and synergisms of the respective "hierobotanic" knowledges, rather than a story of striking impositions or annihilation of the knowledge of one people over the other.

It is true, however, that it would seem that there was an important geographic-cultural point of diffusion of the knowledge of fly agaric – roughly central-western Asia – but it would be a misleading idea to think that it was the only original area of diffusion of this knowledge, or that such diffusion was promoted only by Indo-European peoples during the long period of their migrations. The *kuda-kallu* constructed not by Indo-European peoples, but by Dravidian ones right in the middle of Indo-European migrations would seem to invalidate such a view.

There seems to be no direct relationship between the *kuda-kallu* and the Vedic Soma, in the sense that these monuments do not appear as an emblem of a cult originated or influenced by the cult of Soma. Almost certainly the Dravidian peoples of southern India were not native of this territory, but came from some regions of

western Asia, of eastern Europe or of Middle East, and when they reached the South of India, they were mixed with the local neolithic peoples. The racial composition of the present peoples of southern India is represented by a mix of proto-Australoid, Mediterranean and Aryan (Indo-European) characteristics. The proto-Australoids were the neolithic "native" peoples, whereas the mediterranean characteristic is associated with the Dravidian peoples: "They are alleged to have left their original home in the Mediterranean in the face of mounting aggression from the Greeks and came to India in three distinct waves, one of which settled down in South India, another in Western India, and the third in North India, viz. in the Indus Valley. It is believed that these Mediterranean people really built up the Dravidian civilization of the South. Their kinsmen who settled down in the Indus Valley are credited with having built up simultaneously the Indus Valley Harappa cultures. With the beginning of the Aryan invasions of North India the Dravidians of the Indus Valley are said to have migrated and joined their kinsmen in the South (...) The Aryans began to enter Kerala two or three centuries B. C." (Menon, 1991: 43-4; cf. also *id.*, 1990: 8).

According to this historical prospect, the megalithic cult associated with the *kuda-kallu* developed in a period certainly preceding the actual contact of Aryans with southern India. The megalithic peoples are supposed to have migrated towards India from their Mediterranean or middle-Eastern "original" territory following the migratory pressures of the same Indo-European peoples who went towards southern Europe from the Asiatic homeland. Driven out by Indo-Europeans, centuries later, the megalithic peoples had to settle account with other Indo-Europeans (the Aryans) who had by then lost the knowledge of the original Soma and practised the cult using substitutes of Soma.

The megalithic culture of southern India has features common to the southern and northern Europe megalithic cultures, even though between them there is a chronological hiatus of at least one thousand years; a hiatus which would appear as a serious obstacle for the theories which would like to see a direct cultural origin of the former from the latter ones. Nevertheless, the likeness of certain features of these cultures is striking and involves the shape itself of the *kuda-kallu*.

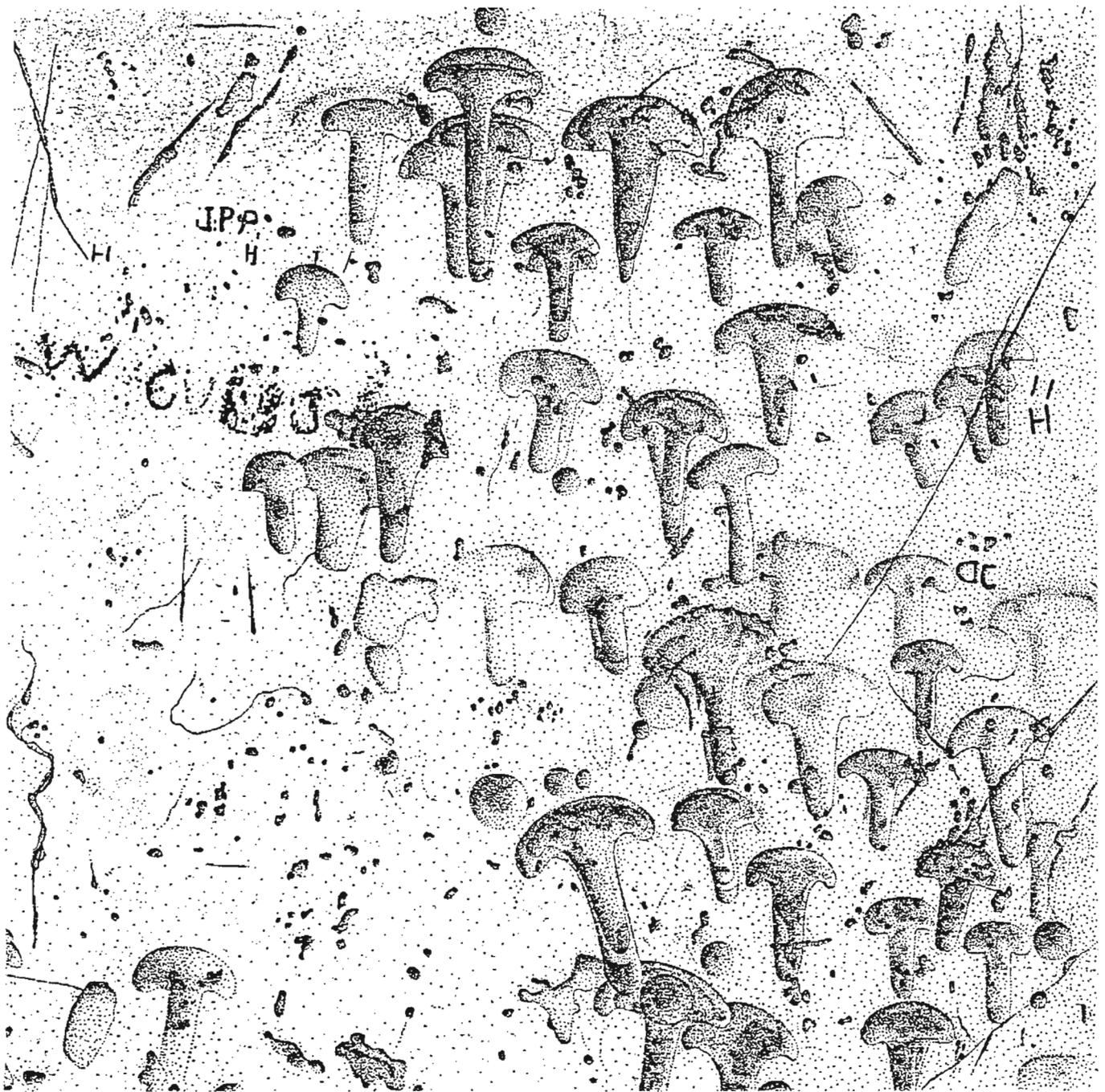
Some *dolmen* built in Great Britain and in northern France recall the *kuda-kallu*, and all the European megalithic production would deserve a careful ethnomycological study. In confirmation of this, it is sufficient to observe some rock-engravings on two of the gigantic monoliths forming the famous megalithic ceremonial site of Stonehenge, in Great Britain. These engravings depict images going back to the same figurative motif, interpreted by archaeologists as the symbol of the sacrificial axe, an implement really found among the objects which furnished the megalithic burials. Nevertheless, the outlines of the axes engraved on the Stonehenge monoliths look anomalous in comparison with those of the axe usually represented on the other types of monuments of the same megalithic culture. The dissimilarity of the shape of the Stonehenge "axes" would seem peculiar to this archaeological site, and it is such as to lead to ethnomycological interpretations and hypotheses. As discussed by Gilberto Camilla and myself in a recent



Rock art at Stonehenge (Great Britain) over the monoliths nn. 4 and 53 (undetermined source).

article on Greek art, "in the interpretation of known and repeated symbols depicted on archaeological documents, too often do scholars base themselves on generally accepted interpretations, perhaps not to hurt the feelings of who, sometimes more than one hundred years before, set a first reading, or maybe because of interpretation slothfulness and routine" (Samorini & Camilla, 1995). This could have happened, in addition to the study of Greek Art, also in the interpretation of Stonehenge rock-engravings and of the Kerala *kuda-kallu*, in the same way in which it happened in the interpretation of the Maya "mushroom-stones" in Guatemala, obstinately interpreted as phallic symbols or potter's molds for decades (Lowy, 1975 and 1981).

Without discussing the merit of the question concerning the origin or not of the southern Indian megalithic culture from the European one, the fact remains that the hypothesis of a knowledge and of a cult of psychoactive mushrooms among the Euro-Asiatic megalithic cultures should not be discarded *a priori*. The *kuda-kallu* would advise against doing so.



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