1. WHAT WAS SŪKARA-MADDAVA?

Upwards of a dozen scholars in the past century have commented on what the Buddha ate at his Last Meal, ca. B.C. 483, and the puzzling mystifications in the evidence. The meal was served to him and his suite of monks by his host the metal-worker Cunda at Pāvā, a village that lay near Kusinārā where the Mahāparinirvāṇa—the “Great Decease” as the Rhys Davidses translated it—was scheduled to take place some hours later. The canonical Pāli Text says that Cunda served his august guest sūkara-maddava, a hapax in Pāli. Walpolā Rāhula, the Buddhist monk and scholar residing in the West, has assembled in a memorandum for us the relevant Pāli texts with his translations and notes, and this document is appended to our paper.

The first part of that compound word, sūkara-, is simple: “pertaining to swine,” sūk- being cognate with Latin sus. The second element is generally thought to mean tidbits, dainties, but whether as a specially delicate part of the pig’s meat or as a food of which swine were specially fond, whether a subjective or objective genitive, no one can say. Rhys Davids, noticing that in Bihar there was a common edible underground fungus, translated sūkara-nimittū by “truffles.”^2 This was a successful pitch, considering that by “truffles” he meant an underground fungus common thereabouts, although no truffle (=Tuber) has been discovered so far in Bihar. His underground fungus was a Sclerotéderma, a little snow-white ball that is gathered just as soon as it appears on the surface. There are a number of genera of underground fungi of which truffles are one, and each genus has many species.

The two canonical Pāli Commentaries discuss but do not agree on the meaning to give to sūkara-maddava. One of them is the canonical Pāli Commentary on the Dīgha Nikāya, Sumanāgalavilāsini, and the other, the Paramatthajotikā, the canonical Commentary on the Udāna. These Commentaries took their

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2 See note 1, entry under 1910, p. 137 fotn.
present form in Pāli under the guidance of the celebrated monk Buddhaghosa early in the fifth century of our era, mostly from Sinhala sources available to him. Each of these commentaries suggests various dishes as possibilities. Both include pork and an “elixir” (a chemical preparation) in the list of choices. The canonical Pāli Commentary on the Dīgha Nikāya adds soft rice with the broth of the five products of the cow. The canonical Pāli Commentary on the Udāna, deriving its authority from the Great Commentary (now lost) that dates from the third century B.C., offers two further choices: bamboo shoots (sprouts) trodden by pigs, and mushrooms grown on a spot trodden by pigs.

That the Buddha was eating his last meal was known to everyone thereabouts: nothing that happened there could have escaped those within eye-reach nor have been forgotten by them, not least because of the awesome event to take place a few hours later, the Buddha’s translation to Nirvana that he had been predicting for that night since he was in Vaiśali three months before.

Dr. Stella Kramrisch, building on the work of the late Professor Roger Heim and me in eastern India, has identified with finality the Pātiṅka, a plant that figures conspicuously in the Brahmanas and other early post-Vedic sacred Sanskrit texts. In this paper I will examine the Last Meal at Pāvā and the death of Gautama the Buddha at Kusinārā in what is today northern Bihar. I will focus attention on what he ate at his Last Meal—a matter of little theological importance to the Theravadin branch of Buddhism and none at all to the Buddhists of the Greater Vehicle, but pertinent to our mushroomic inquiries and notably, as I shall show, to the identity of Soma.

Of all the scholars who have dealt with the Last Meal of the Buddha, I believe only one, Andrée Bareaux, has addressed himself to the surprising anomaly offered by the possibility of either pork or mushrooms being served to the Buddha at this meal. Here is what Bareaux has to say:

En effet, la viande de porc et plus encore les champignons sont des choses pour lesquelles les Indiens impregnés de culture brahmanique, comme l’étaient le Buddha et une grande partie de ses disciples, éprouvent un profond, un insurmontable dégout et que ne consomment guère que certains tribus sauvages ou des gens de basse caste, rejetés par la bonne société et pressés par la faim. L’idée d’offrir au Bienheureux, pour l’honorer et le régaler, comme un mets de choix, . . . de la viande de porc ou des champignons est aussi insolite que si, dans une légende occidentale, on offrait à quelque éminent personnage un festin dont le plat principal serait une cuisse de chien ou une purée de goémon, des sauterelles frites ou des chenilles grillées; cela paraitrait à juste titre une plaisanterie ou ferait croire à une erreur de copie. [Recherches sur la biographie du Buddha. Tome I, p 267. Paris. 1970. Publications de l’Ecole Française d’Extrême-Orient, Vol LXXVII]

Confirming what Bareaux says, Chap V-5 of the laws of Manu, believed to have been committed to writing around the beginning of the Christian era, declares that:

garlic, leeks-and onions, mushrooms and (all plants) springing from impure (substances), are unfit to be eaten by twice-born men.

and this proscription is repeated in V-19:

A twice-born man who knowingly eats mushrooms, a village-pig, garlic, a village-cock, onions, or leeks, will become an outcast.

Here the prohibition carries a dire penalty. Mushrooms are forbidden in two further clauses, VI-14 and XI-156. The repeated prohibition applies expressly to twice-born men, which embraced the three upper castes.

The ban on mushrooms was no dead letter. Sir William Jones quotes from a commentator on the laws of Manu named Yama:

. . . the ancient Hindus held the fungus in such detestation that Yama . . . declares “those who eat mushrooms, whether springing from the ground or growing on a tree, fully equal in guilt to the slayers of Brähmens, and the most despicable of all deadly sinners.” [The Works of Sir William Jones, Vol V, pp 160-161, London. 1807.]

This is the most extravagant outburst of mycophobia that we have found anywhere, surely the most extravagant to be found in the Indo-European world, which is saying a good deal. The learned Brahman tells us that the simple mushroom-eater is as bad as the

Wasson: The Last Meal of the Buddha

murderers of Brahmans! Why such passionate, such exaggerated censure? Bareau, in comparing the Hindu eater of mushrooms to one among us who eats dog’s flesh, was engaging in understatement.

Three months before the Last Meal at Pāvā and before his Mahāparinirvāṇa, the Buddha had been sojourning at Vaiśali and thereabouts. While in the vicinity of Vaiśali he had suffered a grave illness, attributed from ancient times to a chronic gastric upset, probably dysentery; had felt the weight of his years, had called himself an “octogenarian,” and had announced his intention to go to Kusinārā and there three months later to experience the Mahāparinirvāṇa, the Final Extinction. He was predicting the time and place of his own end. He made his way to Kusinārā with his followers on foot, teaching the doctrine as was his wont, and it took him three months to cover the 140 kilometers. To his disciples and the villagers he made freely known his purpose: he never wavered in his resolution, nor did he hide it from anyone.

The day before the Buddha reached Kusinārā he arrived at the nearby village of Pāvā and passed the night in the mango grove belonging to one Cunda, a metal-worker or blacksmith, and therefore a śūdra, the lowest of the four castes in Hindu society. Cunda, appearing almost immediately, inquired what the Buddha desired. According to one of the Chinese recensions of the Buddha’s life, the Buddha explained that he was to undergo the Mahāparinirvāṇa in Kusinārā: lamentations followed. Cunda invited the Buddha and his many followers to take their single meal the next day with him. and by his silence the Buddha accepted. Cunda withdrew to assemble the food and prepare it. In the morning Cunda came to summon the Buddha and his followers to the meal that he had prepared.

Cunda, as we said before, was a śūdra, a man of the lowest caste. On the other hand, as the metal-worker of the region he was a technician, comfortably off, extending hospitality on a moment’s notice to the Buddha and his numerous followers, one accustomed to meeting and mixing with travelers including individuals of what are today called the “scheduled castes,” —aboriginal tribesmen who were not Hindus and therefore not a part of the dominant Hindu society. His forge may well have been the raison d’être for Pāvā. When the Buddha arrived at Cunda’s dwelling-place and was seated in the place prepared for him, he (according to the Dīgha Nikāya) addressed Cunda saying,

As to the sūkara-maddava you have made ready, serve me with them, Cunda, and as to the other food, sweet rice and cakes, serve the monks with them. [Chap. IV, ¶18, p. 138]

The Buddha then said to Cunda,

Whatever sūkara-maddava are left over to thee, those bury in a hole. [¶19]

In a hole, not just throw away, and we are told that the surplus sūkara-maddava Cunda buried in a hole. Apparently Cunda had brought sūkara-maddava for the whole company, as he had thought all would share in them, so there must have been an ample surplus.

Then the Buddha added these remarkable words,

I see no one, Cunda, on earth nor in Mara’s heaven, nor in Brahma’s heaven, no one among the Samanās and Brāhmans, among gods, and men, by whom, when he has eaten it, that food can he properly assimilated, save by a Tathāgata. [¶19]

Obviously the Buddha had recognized at once what he was being offered, the sūkara-maddava, and he knew the mushrooms were of a species that would shortly smell bad (“stink”) if they were not eaten or buried in a hole. (To this day the custom among some Santal seems to survive to bury any surplus sūkara-maddava in a hole.) Perhaps it was the first time in his life that the Buddha, of ksatriya origin, was being offered mushrooms to eat. But these particular mushrooms were familiar to him because of their unique role in the Hindu religion in which he had been brought up.

André Bareau appreciates to the full the solemnity of this dish of sūkara-maddava, though he did not know what it was. He says:

... cette nourriture, la dernière que consomme le Bienheureux avant son Parinirvâna, est une nourriture en quelque sorte sacrée, dont les riches qualités, la puissance essentielle, vont lui permettre d’accomplir cet exploit surhumain, la suprême Extinction. Cette richesse, cette puissance sont trop grandes pour être supportées par les autres êtres, hommes ou dieux, qui n’auront jamais, et de loin, à exécuter une action comparable. [Recherches sur la biographie du Buddha, Tome 1, p. 271. Paris, 1970. Publications de l’Ecole Française d’Extrême-Orient, Vol LXXVII]
Here was the Buddha, at one of the two supreme moments of his life, unexpectedly offered at his last meal a dish that Hindus of the upper castes were forbidden to eat, an edible mushroom, a dish that was the surrogate for Soma when formally sacrificed in an utterly different manner and setting. Bhaddaghoṣa quotes the Great Commentary (Mahā-āṭṭhakathā) as saying of Cunda’s motives in offering this dish to the Buddha and his monks:

They say that Cunda, the smith, having heard that the Exalted One would attain parimibhāna that day, thought it would be good if he could live longer after eating this dish, and offered it wishing for the Master’s longevity. [p. 27 infra]

Walpola Rāhula’s comment on the Great Commentary from which we have extracted this quotation is as follows:

The Mahā-āṭṭhakathā (Great Commentary) is the most important of the ancient original Sinhala commentaries dating back at least to the 3rd century B.C., on which are based the present available Pāli commentaries of the 5th century A.C., including the Commentaries on the Dīgha Nikāya and the Udāna from which these two commentarial passages are taken. [p. 27 infra]

The Great Commentary cites hearsay (“They say . . .”) as the reason that Cunda served those particular mushrooms on that day. The hearsay may be right, but if indeed Cunda felt the dish of Pūtika would extend the life of the Buddha, he must have confused the properties of Soma and of the Pūtika. The Pūtika enjoyed a unique status as the exalted surrogate for Soma, but, whereas Soma was consumed, the Pūtika, as Kramrisch quotes the sources, were mixed with the clay and then fired ritually in the making of the Mahāvīra pot and there is no reason to think that the Hindus of the three upper castes or even the Brahman hierarchs ate these fungi. Does not the text of the Great Commentary permit another interpretation: Cunda, a śūdra accustomed to eating the Pūtika, served them because it was the season of the rains (which had started when the Buddha and his suite were in Vaśāla) and the mushrooms, which he had known all his life, were fresh from picking? If so, it was the Buddha who at once recognized them because of their role in the Hindu religion and stopped Cunda from serving them to the others. The Buddha was certainly not accustomed to eating mushrooms of any kind, and here he was being invited to eat those slimy mucoid excrescences, as the twice-born Hindus with loathing would view them. May not this, combined with the emotional tension of his imminent extinction, have provoked a recrudescence of his intermittent attacks of dysentery?

I now interrupt our account of the Buddha’s progress on his last day to set forth certain discoveries bearing on sūkara-maddava.

II. THE SANTAL AND THE PŪTKA

By an accident of fortune the Santal people living now in western Bihar and Orissa have preserved for us, as though in a time capsule, the identity of the Sanskrit Pūtika, a plant until recently unidentified, an ingredient in the clay of the Mahāvīra vessel that was fired in the course of the Pravargya sacrifice. The Pūtika is known as having been the surrogate for Soma, though probably today by no Santal, and it figures conspicuously in the Brahmanas and other early sacred Sanskrit texts. As I said before, it was identified by Kramrisch on the strength of evidence produced by Heim and me. (Roger Heim, outstanding French mycologist, had served as President of the Académie des Sciences and was Director of the Muséum National d’Histoire Naturelle: he accompanied me on many of my field trips.)

The late Georg Morgenstierne, the Norwegian linguist, specialist in the Kafir and Dardic languages, also a Sanskrit and Persian scholar, first called my attention to an oddity of the Santal language of special interest to me, as it affected their mushroom vocabulary. Santali was not a specialty of his but he was a vast reservoir of general linguistic knowledge.

The Santal, who number some millions, live in villages scattered in the area of eastern Bihar known as the Santal Parganas, in the western north-and-south strip of West Bengal, and in Orissa as far south as the Simlipal Hills. The Santal are slight in build, neat in dress, with sleek, black hair and dark almost

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4 See Manfred Mayrhofer: A Concise Sanskrit Etymological Dictionary, entry under pūtikā, also Vol. 3, p. 761.
5 Cahiers du Pacifique #14. September, 1970: “Les putka des Santals, champignons doués d’une âme.” p. 77. For those interested, the mushroom was Scleroderma hydrometrica (Pers.) H. var. maculata (Pat.) H. In Europe it breaks out into an Astraeus, but in India remains closed, a Scleroderma.
black regular features, their houses of red earth ornamented with curious painted geometric patterns and neatly disposed within and without, in these respects contrasting with the Hindus. By tradition they are food gatherers, hunters, fishermen, but are now taking to agriculture.

From the Indo-European point of view, the Munda languages, of which Santali is the biggest member, are peculiar: in Santali there are no genders,—no masculine, feminine, neuter. Their nouns are either animate or inanimate—endowed with a soul or without a soul. The entire animal kingdom is animate, has a soul. The whole of the mineral kingdom is inanimate, without a soul. There are oddities: e.g., the sun, moon, stars are animate. Strangely, the vegetable kingdom—herbs, shrubs, trees, the fungal world—is inanimate, but with a single exception, one species of mushroom, the putka. The Santal do not know why the putka is animate, or so they say. The putka is an underground fungus that is gathered for eating just as it appears, a snow-white little ball, in mycology identified by Heim as a Scleroderma, well known in Europe. In season it is commonly highly prized as food by the Santal, and much sought for by women and children.

For the last century the Norwegian Lutherans have made a vigorous play to be helpful in India by missionary activity among the Santal. The Rev. P. O. Bodding, a resident of the Santal Parganas from 1890 to 1934, mastered their language and compiled an admirable Santal-English dictionary in five large volumes, pointing out among other things the oddity of putka, which enjoyed in the vegetable kingdom the unique attribute of a soul. He could not explain this anomaly, nor did he venture an etymology for putka. The Rev. A. E. Strønstad, Bodding’s successor, and Mrs. Strønstad put me up and Mrs. Strønstad graciously served as my interpreter. We asked elderly and knowledgeable Santal in Dumka and the surrounding villages why putka was animate. No one could tell us. Our best informant turned out to be Ludgi Marndi, the widow of a native Lutheran pastor. She told us that there was one entheogenic mushroom.⁶ Was it the putka? No, not at all. It was merely or’, “mushroom” of the soulless class. No one was able to find an example of this inebriating mushroom, but the description (big, growing only in dung mostly of cattle, and white reaching an intense cream color in the umbolate center) tallied with Stropharia cubensis. Neither were there any putka at the time of my visit: they would come after the monsoon broke. Ludgi Marndi and some other informants suggested that the putka was animate because it was found regularly in the sacred grove of sarjom trees near every village. (Santali sarjom = Hindi sāl = Shorea robusta.) But the sacred sarjom trees were not animate so why should a mushroom growing from their roots be? Furthermore, the putka grew also in mycorrhizal relationship with other species of trees. Ludgi Marndi seemed an especially good informant and just before we were leaving for New Delhi, defeated as we thought, I asked if I might talk with her again. We went over the same ground. Suddenly she leaned forward across the table to Mrs. Strønstad and in a whisper (as translated to me) said that she would tell her why she thought the putka were animate: “You must eat them within hours of gathering for they will soon stink like a cadaver.” She spoke under considerable emotion. We knew not what this meant but at once I jotted down her translated words in my notebook and her remark appeared later, somewhat toned down, in the paper⁷ that Heim and I published.

My 1965 visit was followed by another with Heim in July-August 1967; he flying from Paris to Calcutta and I from New York. We started our quest in the Simlipal Hills and the village of Bisoi in Orissa, where the Santal and their close linguistic kin the Ho intermix, as well as several other peoples. Again we questioned the natives about why the putka were animate. In Nawana in the Simlipal Hills I spent the evening with Ganesh Ram Ho, the chief of the village, and he, as Ludgi Marndi had done, volunteered the information that there was an entheogenic mushroom, and his

⁶ “Entheogen” is a word devised by some of us for those plant substances that inspired Early Man with awe and reverence for their effect on him. By “Early Man” we mean mankind in prehistory or proto-history, before he could read and write, whether long long ago or since then or even living today in remote regions of the earth. “Entheogen” (or its adjective “enteheogenic”) has the advantage that it does not carry the odor of “hallucinogen,” “pschedelic,” “drug,” etc., of the youth of the 1960s. See Journal of Psychedelic Drugs, Vol. 11 (1–2), Jan-June 1979, pp. 145–6.

⁷ Fn. 5, p. 65.
description tallied with Ludgi's; his testimony confirmed that it was probably *Stropharia cubensis* or a close cousin. (That these two excellent informants volunteered to speak of an inebriating mushroom, doubtless *Stropharia cubensis*, is a lead not to be neglected: it may have played a part in the cultural past of the Santal and of Soma.) But, just as before, it was "ud" and soulless. "Ud" is "mushroom" in Ho.

We published the account of our trips to the Santal country in *Les Cahiers du Pacifique*, n.14, September 1970. Kramrisch in time saw our paper and she grasped immediately that the *puika* of the Santal was the *Putika* of the Brāhmaṇas, of the Pravargya sacrifice and the Mahāvīra pot. The *Putika* had been the surrogate for Soma and naturally it would possess a soul! Kramrisch deserves a rich accolade for discovering that Santali *puika* was a loanword from the Sanskrit *Putika*. When Soma was being abandoned, probably over a long period that ended shortly after B.C. 1000, the *Putika* took its place, not as an entheogenic drink like Soma in the earlier sacrifice but as a component with the clay in the ceremonial firing of the Mahāvīra vessel. Its stench (of which Ludgi Marndi and I had spoken) was turned into fragrance when the pot, held by tongs, was fired in the course of the rite. No one had ever known what plant it was. We now know that, like Soma, it was a mushroom, but a common mushroom, and it possessed divine qualities though less than Soma's.

In Santal culture not only is the *puika* animate, endowed with a soul; it possesses another of Soma's attributes. The belief is apparently universal among the Santal that the *puika* is generated by (mythological) thunderbolts. Long after the Brahmans have lost any use for or knowledge of this mushroom, and have lost all special contact with the Santal, these humble, hardworking people, untouchables, still believe that the *puika* is procreated by the lightningbolt, as the Vedic Brahmans believed that Soma was procreated by the Vajra of Indra, or Parjanya, the god of lightning. Here is another manifestation, another proof, of the breathtaking cultural intensity millennia ago of the religion of the hierarchs of the Aryans. The lightningbolt was thought of as the sperm, the spunk, fecundating the soft mother earth with the entheogenic mushrooms.

The Santal believe there are two kinds of *puika*, the *hor puika* and the *seta puika*, one smooth and the other rough. Heim said the two kinds were merely different stages in the life cycle of the one species. The *hor puika* is the "man puika," not in the sense of male but of a human being, or of the "Santal" whom they naturally regard as par excellence the human being. The *seta puika*, which is rough, is the "dog puika," the dog not being despised as it is in Hindu culture. A few of the Santal spoke to us of a third *puika*, the *rote puika* or "toad puika." Most Santal did not recognize this term and of those who did, most could not say what kind of mushroom it meant. But when we were in Kathikund, a village in the Santal Parganas, we witnessed from our veranda a violent midday thunderstorm and within hours and then throughout the night a host of puffballs appeared on the plain before our bungalow. One of our Santal companions told us with assurance that these were indeed *rote puika*. In this instance the puffball was *Lycoperdon pusillum* but probably any other puffball coming in response to a thunder shower would be a *rote puika*. In short, the *rote puika*, which is not eaten by the Santal, is a false *puika*. . . . The entheogenic mushrooms of which Ludgi Marndi and Ganesh Ram Ho had told us, probably *Stropharia cubensis*, are not *puika*: they are merely *ot*, or *ud* in the Ho language, enjoy no grammatical distinction in the languages, and so far as I learned no distinction in folklore. But it is imperative that this be explored much further. Does its entheogenic virtue account for the colored geometrical designs, endlessly varied, that decorate the exteriors of many Santal houses?

Throughout our visits to the Santal country the people we spoke with said that pigs dug for the *puika*, thus confirming what the canonical Pāli Commentary on the *Udāna* say of sākara-maddava (p. 27, infra). But I was seeking a quotation and after returning to New York the Rev. Johannes Gausdal, a retired missionary living in Oslo, put me in touch with Mr. Gora Tudu, principal of Kaerabani High School, and we asked Mr. Tudu through Mr. Gausdal whether swine sought out the *puika* in the forest. Here is what he replied:

> Whether the pigs eat *puika* or not? In this case also I got some *puika* from the forests. I tried them on a few pigs—the old *puika* were not liked, but the new ones seemed to be delicacies of the pigs. They ate them with relish. Also in the forest I found at several bushes where *puika* usually come up several marks of upturned earth, indicating that the pigs had been digging for the *puika*. [Letter in my Munda file]
I was careful not to divulge the reason this question was being asked. There are a number of genera of underground fungi divided among scores of species, and I should be surprised if they all drew pigs but perhaps they do.

Mr. Gausdal asked also about the smell of aging putka. Mr. Tudu replied, with unconscious humor:

I collected some putka, both hor putka and seta putka, and put them in dishes in dry condition as well as wet, just to see what the smell would be like after decomposition. In both the smell emitted was that of decomposing wood material, not at all bad in the sense of any blooded being. The smell was never too strong or filthy. The worst I could compare, the smell was that of rotting jute in muddy water.

Kramrisch tells me that rotting jute in muddy water creates a fearful stench. Mr. Tudu possesses the endearing quality of dirt farmers everywhere: their fondness for the smell of dung heaps, for example, is powerfully colored by what dung means for the crops. The earthy smells of farm yards also possess a likeable integrity.

The Gausdal-Gora Tudu correspondence was conducted in Santali, but my questions and his answers to them were in English.

We know that the Santal have not always lived where they do now. Six hundred years ago they lived to the west of Benares on the Chota Nagpur plateau, and tradition has it that long before then the Santal had lived much further to the West, just where no one knows, but possibly near the ancient center of Brahmanical sacrifices, where they could have had close relations with the Aryans, perhaps serving them before and through the shift from Soma to the Pātika. This would also explain the other Sanskrit words in Santali that Mr. Bodding notes. Indeed he remarks in his preface to his Santal Dictionary that “the description of the Dasyus in the Vedas and the Mahābhārata seems to be adaptable to many a Santal.”

III. THE DEATH OF THE BUDDHA

Having completed the Santal interpolation, we will now revert to the text of the Dīgha Nikāya as translated by the Rhys Davidses.

After the discussion of the sākara-maddava, the Rhys Davids translation continues with an astonishing development:

¶20. Now when the Exalted One had eaten the rice prepared by Cunda, the worker in metals, there fell upon him a dire sickness, the disease of dysentery, and sharp pain came upon him, even unto death. But the Exalted One, mindful and self-possessed, bore it without complaint. [Chap. IV]

This was a disconcerting turn of events, since the Omniscient One has but lately said that he sees no one, save a Tathāgata, who can properly assimilate the sākara-maddava, which he has just eaten. If the circumstances were invented, as Bareau thinks, what a strange set of circumstances for utterly devoted followers of the Buddha to have invented! The mushrooms, now that we know precisely, were sound and there was never a risk: moreover, aged Pātika would declare their age by their stench! And Cunda was a responsible man to buy and cook them. However, let us remember that in the upper Hindu castes where the Buddha had been brought up and lived out all his early life, even though he was now free from food tabus and caste distinctions, all mushrooms would be shunned as inedible; but here, at a critical moment of his life, he was being offered Pātika. Did Cunda know the role of the Pātika in the religion of the twice-born castes? Did he perhaps know it by rumor, inaccurately? Or did he not know it at all and was he serving these mushrooms solely for the excellent reason that they were fresh and in season? It is clear from the testimony of the Dīgha Nikāya that the attack suffered by the Buddha was sudden; it was violent; it alarmed the whole company; it was virtually over quickly, for not long afterward the Buddha instructed the faithful Ānanda that they should walk on to Kusinārā close by. But what could be more natural than a violent reaction in one brought up as a ksatriya to consider mushrooms inedible? And with his large intestine being chronically inflamed with dysentery, his diarrhoea was a natural sequence. “Dysentery” is a translation of the Pāli lohita-pakkhandika, which means “bloody flux” in old-fashioned English.

The account in the Dīgha Nikāya is as though written to order for this explanation. Two quatrains, apparently independent of each other, are inserted in the text of the Dīgha Nikāya (¶20, p. 139) at this point. Buddhaghosa adds a note: “It should be understood that these are the verses by the Theras [Elders] who held the Council”—the Council that took place at Rājagṛha, at which some months later the initial plans were laid for mobilizing detailed recollections of the Buddha’s teachings and for organizing the Buddhist religion. The first quatrain shows how those
present murmured against Cunda, and, according to the second, there was also murmuring about the mushrooms. Here are the quatrains in the Rhys Davids translation:

When he had eaten Cunda’s food,
The copper-smith’s—thus have I heard—
He bore with fortitude the pain.
The sharp pain even unto death.

When he had eaten, from the mushrooms [=sākara-maddava] in the food
There fell upon the Teacher sickness dire.
Then after nature was relieved the Exalted One announced and said:
I now am going on to Kusinārā.

After the episode the Exalted One went out of his way to exonerate Cunda of blame, thus making even more tenable my explanation of his illness. For if Cunda had been guilty of negligence in choosing the mushrooms, why should the Omniscient One have exonerated him?

Bareau concedes that Cunda and Pāvā may be original elements but, if so, thinks that they are the sole original elements in the narrative of the Buddha’s stay in Pāvā:

Deux siècles après le Parinirvāna, ces deux noms, ici Pāvā et Cunda, étaient les deux seuls éléments anciens, peut-être même historiques, de l’Épisode du dernier repas du Buddha. Aucun souvenir n’avait donc été conservé ni des incidents qui avaient pu s’y produire ni de la nature précise des aliments qui avaient été servis alors au Bienheureux. [Tome I, p. 258 in his Recherches sur la biographie du Bouddha, Ecole Française d’Extrême Orient]

Perhaps in the light of our discoveries Bareau may grant more to the history of the Buddha’s Last Meal in Pāvā as told in the Dīgha Nikāya. Too many had witnessed the episode with the mushrooms to permit the Theras to suppress it: his sudden illness had provoked too much talk.

Here is the account of the Buddha’s death according to the Dīgha Nikāya, Chap. V.

1. Now the Exalted One addressed the venerable Ānanda, and said:—‘Come, Ānanda, let us go on to the Sāla Grove of the Mallās, the Upavattana of Kusinārā, on the further side of the river Hiranyavati.’

‘Even so, lord!’ said the venerable Ānanda, in assent, to the Exalted One.

And the Exalted One proceeded with a great company of brethren to the Sāla Grove of the Mallās, the Upavattana of Kusinārā, on the further side of the river Hiranyavati: and when he had come there he addressed the venerable Ānanda, and said:-

‘Spread over for me, I pray you, Ānanda, the couch with its head to the north, between the twin Sāla trees. I am weary, Ānanda, and would lie down.’

‘Even so, lord!’ said the venerable Ānanda, in assent, to the Exalted One. And he spread a covering over the couch with its head to the north, between the twin Sāla trees. And the Exalted One laid himself down on his right side, with one leg resting on the other; and he was mindful and self-possessed.

In a note on this passage the Sinhala commentator added an explanation:

Tradition says that there was a row of Sāla trees at the head of that couch, and another at its foot, one young Sāla tree being close to its head, and another close to its foot. The twin Sāla trees were so called
because the two trees were equally grown in respect of
the roots, trunks, branches, and leaves. There was a
couch there in the park for the special use of the
(periodically elected) chieftain of the Mallas, and it
was this couch which the Exalted One asked Ānanda
to make ready. (Fnt. p. 149)

In the last watch of the night the Buddha died,
precisely as he had been predicting for three months,
since he was in Vaissāli.

There have been individuals in various parts of the
world, and especially among the holy men of India,
who have acquired by "concentration" (samādhi) con-
trol over some of the muscles that ordinarily function
in response to stimuli beyond the human will. A. L.
Basham has remarked on this in The Wonder That
Was India, p. 327:

The ancient mystical physiology of India needs further
study, not only by professional Indologists, but by
open-minded biologists and psychologists, who may
reveal the true secret of the yogī. For whatever we
may think about his spiritual claims there is no doubt
that the advanced yogī can hold his breath for very
long periods without suffering injury, can control the
rhythm of his own heartbeats, can withstand extremes
of heat and cold, can remain healthy on a starvation
diet, and, despite his austere and frugal life and his
remarkable physical contortions, which would ruin
the system of any ordinary man, can often survive to
a very advanced age with full use of his faculties.

Basham fails to mention that occasionally death is the
goal of this "concentration," but there is no reason to
question that death can be the purpose of such an act
of will. In recent years, when death has been the end
result of this manifestation of will power, mahāsa-
mādhī has sometimes been the term used when speak-
ing of it.

The Buddha predicted the day of his death three
months before and thenceforward announced freely
the time and place of his own extinction. After his
Last Meal the narrative says that on his initiative he
walked the short distance to Kusinārā. Since the time
of his death, no Hindu, no Buddhist, has ever sug-
ested that he died of mushroom poisoning. His death
has not provoked discussion among Buddhists. Know-
ing as we now do what the mushrooms were that
Cunda served, they could have provoked a stomach
upset in a Hindu mycophobe but they could not have
causcd his death. He died of his own will power, of
his own mahāsāmadhi Or, rather than provoking his
own death, did he not use yogic power, under trying
circumstances, to postpone his translation to nirvāṇa
until he had reached his place of choice?

The surrogate for Soma explains and justifies the
extraordinary words used by the Buddha in limiting
to himself alone this dish. By consigning to a hole the
surplus Pāṭika, he showed himself familiar with its
everyday properties. Now that we know the precise
properties of this mushroom, its etymology as cognate
with "putrid" is clarified, and its strong link with
Soma is a good explanation for the Santal belief that
it is generated by the divine lightningbolt.

Up to this point we have concentrated on only one
source—the canonical Pāli Text of the Dīgha Nikāya
—for our details about the life of Buddha. It is the
Holy Scripture of the Theravadin branch of Buddhism
with its headquarters in Śrī Lanka. There are, in
addition, five other master recensions of his life, four
in Chinese and one in Sanskrit. All five mention the
stop in Pāvā and name Cunda as the host there, but
none of them mentions sākara-maddava. An obvious
explanation for this omission is that the Chinese are
natural mycophiles: they eat with relish all kinds of
edible mushrooms and they know their mushrooms.
They would not understand why the Buddha honored
the Pāṭika, saying he alone could digest it. For the
Chinese all this would have been incomprehensible.

The Buddha and his followers were mostly Hindus
of the upper castes who had withdrawn from obedi-
ence to the Hindu religion. When the Theras as-
sembled at Rājagṛha, they were inevitably, even if
they were rebels, heirs to the infinite complexity of
habits, practices, subtle ways of thinking and feeling
of the Brahmanic religion. When Buddhism became a
world religion, it liberated itself from the Brahmanic
religion and this included the mighty tradition of
Soma and the Vedic hymns, and of course from the
less powerful hold of the Pāṭika. In the early days of
Christianity, before it became a world religion, the
pull of Jewish ways such as circumcision and the ban
on pig-meat exerted influence on Jewish converts to
Christianity, and the early Church faced a parallel
conflict.

IV. THE BUDDHA'S LAST MEAL

The episode at Pāvā lends itself to various explana-
tions; the written record contains a number of anom-
alies. If we were to offer the solution that we think is
most likely, here it is.

There is only the Commentary on the Udāna, which
Buddhaghosha presented as hearsay, to show that
Cunda the śudra knew of the use made by the Brahmans of the Pāṭīka. Cunda certainly knew this mushroom as a universal favorite among mushroom eaters when it was in season and it was in season right then: he was taken aback when the Buddha recognized the mushroom and asked him, in astonishing language unfamiliar to his ears, to serve them to the Buddha only. Cunda had done himself proud in assembling mushrooms for the whole company, and now he was forbidden to give them to the guests or even to himself.

Shortly after the Buddha had eaten his mushrooms with rice he fell violently ill. This must have caused consternation and chagrin. Alarm was felt, and there was murmuring against Cunda and the Brahman proscription on mushrooms for the twice-born castes accidentally involved the Buddhist religion at the very moment of its birth. We still do not know—we will probably never know—when that proscription came into force, perhaps over centuries while the Vedic hymns were being composed, or possibly when the hierarchs among the Brahmans learned of the entheogenic virtues of Stropharia cubensis as known to the lower orders living in India, or when Soma was finally abandoned and the Pāṭīka adopted as its surrogate. But we do know how effectively the Buddhist Theras fudged the facts in the Dīgha Nikāya, until an inquirer 2,500 years after the event appeared, assembled the evidence, and with the help of Georg Morgenstern, Roger Heim, Stella Kramrisch, Wendy Doniger O'Flaherty, and above all of the Santal people, fitted together the jigsaw pieces.

Now we see for the first time in how dramatic a predicament the Brahman proscription on mushrooms for the twice-born castes accidentally involved the Buddhist religion at the very moment of its birth. We still do not know—we will probably never know—when that proscription came into force, perhaps over centuries while the Vedic hymns were being composed, or possibly when the hierarchs among the Brahmans learned of the entheogenic virtues of Stropharia cubensis as known to the lower orders living in India, or when Soma was finally abandoned and the Pāṭīka adopted as its surrogate. But we do know how effectively the Buddhist Theras fudged the facts in the Dīgha Nikāya, until an inquirer 2,500 years after the event appeared, assembled the evidence, and with the help of Georg Morgenstern, Roger Heim, Stella Kramrisch, Wendy Doniger O'Flaherty, and above all of the Santal people, fitted together the jigsaw pieces.

V. THE INDUS VALLEY AND KASHMIR

When we published SOMA Divine Mushroom of Immortality in 1968 I pointed out in it that in the 1028 hymns of the RgVeda there was never a mention of the blossoms, fruit, seed, leaves, branches, bark, or roots of the plant—a telling clue where to look for the divine herb. But there was another botanical fact that deserved full recognition, but I had not yet focussed on it.

Botanists divide plants between phanerogams and cryptogams. The phanerogams include all flower- and seed-bearing plants, whether trees, shrubs, creepers or climbers, herbs and grasses, whether cultivated or uncultivated. The cryptogams are lower orders of vegetation, less developed along the evolutionary trail, and the mushrooms are the cryptogams that interest us. Only in recent centuries have three or four species out of thousands lent themselves to commercial exploitation, and a meager handful also to expensive cultivation in laboratories. In Aryan times, in the Indus Valley and Kashmir, there was the widest variety of climate, owing to the variety of accidented terrain therein—lofty mountains, low lying plains, valleys, wetlands, arid stretches—and any needed phanerogam could probably have been grown in some part of that large country. But only those mushrooms grew there that the country produced spontaneously. Since we know that the supply of Soma was limited at best to the mountains and must have been further reduced when the monsoon failed, conforming to what we know about Soma in Vedic times, this points to the entheogenic mushroom Amanita muscaria for their Soma. That the birch and also the conifers act as
hosts to *A. muscaria* was not realized by anyone among the Aryans, and therefore no one thought of planting the host trees to see whether by this means man could thus increase the yield of the holy plant.

Other fungal entheogens grow at the lower levels. They come in cattle dung, are easily identified and gathered, and are effective. But they fail to conform to Brahman practices: they are known to tribals and *śudras*. Soma on the other hand exacts self-discipline of the priests, a long initiation and training: it is, for proper exploitation, an affair of a priestly *élite*. But the possible role of *Stropharia cubensis* growing in the dung of cattle in the lives of the lower orders remains to this day wholly unexplored. Is *S. cubensis* responsible for the elevation of the cow to a sacred status? And for the inclusion of the urine and dung of cows in the *pañcașāvya*? And was that a contributing factor in the growth in India only as an intense and glowing memory of an ancient rite. The cult of Soma must have been shaped by the peculiar circumstances prevailing in the area, but ultimately those circumstances must have doomed that cult. Today it lives on in India only as an intense and glowing memory of an ancient rite.

Under the British Raj the rich and diverse vegetation of India was admirably studied, and George Watt’s encyclopaedia *Dictionary of the Economic Products of India*, 1889–1896, in eleven volumes, edited and partly written by him, is a major legacy of the British rule in India. However, the mycophobic British did little to advance knowledge of mycology, and the Hindus nothing. No one ever suggested a mushroom for Soma, let alone *A. muscaria*. Our *SOMA* came out in 1968 but no *A. muscaria* since then has yet been found in Pakistan or Kashmir: there have been numerous reports of finds but voucher specimens have not been deposited in herbaria. Dr. Roy Watling, mycologist of the Royal Botanic Garden of Edinburgh, spent three weeks in the field in 1978 on a general survey of the Kashmir area, in the vicinity of Srinagar. He collected in stands of birch in two areas but he arrived there late in the growing season and moreover the season was dry. In his printed report he writes, “The species *A. muscaria* is almost certainly native to the *Betula*-zone of northern India.” There he found *Betula utilis* from 9,000 feet up to the timber line at 10,500 feet but no *A. muscaria*. In the Northwestern Himalayas the birch grows intermixed with *Rhododendron* in scrub-vegetation up to 11,500 feet.

We may think we are feeling the frustrations of the Aryans but by comparison with them we are making only lackadaisical efforts to find a few voucher specimens, whereas the Brahmans must have developed urgent need for quantities of fruiting bodies to dry, and then to reflate, and bring to the pressing stones. Their needs must have been constantly increasing with the increasing population. Whatever may have been the case later, the relations at first with the natives were surely hostile. The natives seem to have come to occupy the intermediate mountain heights, precisely where *A. muscaria* grows, and the *RgVeda* time and again says Soma grows. As we know from the *Satapatha Brāhmaṇa*, the Brahmans depended for their Soma supplies, in large part at least, on the natives living in the mountains. The supply depended on the weather and the state of the relations with the natives, whereas the needs were swelling with every generation. The Brahmans must have found it in their interest to cultivate the Dasyus and the Dasyus would have found it advantageous to discover every spot where *A. muscaria* grew, above all the stands of birch but also other host trees. (*A. muscaria* has been reported lately from Tamilnadu, especially from the Nilgiri Hills, in Southern India, but its presence there has been attributed by mycologists to plantings of exotic conifers in the past century.) Most of the Soma sacrifices must have used make-do phanerogamic substitutes and in the post-Vedic Brahmans and other writings we learn how the priests from early times faced this scarcity with such make-do plants.

The Brahmans probably continued to trade with the mountains of Afghanistan seeking Soma, and with the Hindu Kush, but there is no knowing whether these tribesmen were friendly, perhaps intermittently. The *Afghanistan Journal* 6.2, 1979, announced the finding of *A. muscaria* in Nuristan, in the Shetul Valley high in the Hindu Kush in the extreme northeast of the country. The authors, Gholam Mohtar and Hartmut Geerken of Kabul, talked with three old codgers, ostensibly *habitües* of the “ravens’ bread,” claimed to be *A. muscaria* from which an inebriating concoction is made. The episode is insufficiently documented to permit conclusions about its bearing on *Amanita muscaria* and the Soma question. Their report antedates the Russian invasion.

The use of substitutes by the Aryans must have been a reluctantly adopted practice from the start. They are mentioned for the first time in the last batch of hymns incorporated into the canon, Mandala X 85.

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through to the end, 191. In SOMA we failed to take into consideration these hymns of Mandala X, since they were admitted to the canon at a late stage, shortly before the Vedic age ended. But some years ago Professor Clifford Wright, in a lecture delivered at Cambridge University, took the position that many of those hymns, the last to be admitted to the canon, on strong stylistic grounds were by no means the last to be composed. There is a verse in these hymns that speaks of the substitutes. That hymn may well have been composed centuries earlier.

RgVeda X 85.3: One thinks one drinks Soma because a plant is crushed. The Soma that the Brahmins know that no one drinks.

This conforms to our present thinking: the scarcity of Soma was not to be explained by the spread of the Aryans southward, then eastward down the Yamunā and beyond the confluence with the Ganges. The scarcity had always existed, and the make-do substitutes had been a chronic problem.

MEMORANDUM
BY WALPOLA RĀHULA OF THE EARLY SOURCES
FOR THE MEANING OF SŪKARĀMADDAVA

SŪKARĀMADDAVA


\[\text{Athā kho Cunda kammārāputto tassā rattiya vassa nivesane pañṭham khādāniyam bhujāniyam patīyādāpetvā paṁta mā ca sūkāramaddavam Bhagavato kālam urocāpesi: 'Kālo bhante, niṭṭhitam bhattachāni tā.} \]

Translation:

Then at the end of that night, Cunda, the smith, having made ready in his house hard and soft delicious food, and also a big quantity of sūkāramaddava, announced the time to the Exalted One, saying: ‘The time, Lord, has come, the meal is ready.’


Sūkāramaddava means meat available (in the market) of an excellent (first-rate) pig neither too young nor too old. This is soft and fatty. ‘Having made it ready’: having cooked it well is the sense. (Some say: sūkāramaddava is the name for a culinary preparation of soft rice made into a broth with the five products of the cow, just as gavapāna is the name of a culinary preparation. Others say: sūkāramaddava is a chemical preparation [elixir]. It is found in the science of chemistry. That chemical preparation [elixir] was made by Cunda thinking that the parinibbāna of the Exalted One might not take place.)

The story of Cunda offering sūkāramaddava to the Buddha occurs exactly in the same way in another canonical Pali text, Udāna. The Paramatthajotikā, Commentary on the Udāna (Colombo, 1920), p. 279, in explaining sūkāramaddava gives four different opinions:


Translation:

It is said in the Great Commentary (Mahāāṭhakathāḥ) that sūkāramaddava is soft and fatty pork (flesh of pig) available (in the market). But some say: sūkāramaddava does not mean pork (flesh of pig), but
bamboo shoot (bamboo sprout) trodden by pigs; others say that it is mushroom grown on a spot trodden by pigs; still others have maintained that sūkaramaddava is a certain elixir. They say that Cunda, the smith, having heard that the Exalted One would attain parinibbāna that day (lit., today) thought that it would be good if He could live longer after eating this (preparation), and offered it wishing the Master’s longevity.

1 Five products of the cow: 1) milk, 2) curd, 3) buttermilk, 4) fresh butter, 5) clarified butter (ghee). W. R. [Walpola Rāhula is a Buddhist monk of our day and he renders in English the Sanskrit word pañcagavya as befits our times. In the past, for millennia pañcagavya represented: 1) milk, 2) coagulated or sour milk, 3) butter, 4) urine, and 5) dung. R. G. W.]

2 The Mahāāthakūṭa (Great Commentary) is the most important of the ancient original Sinhala commentaries dating back at least to the 3rd century B.C., on which are based the present available Pāli commentaries of the 5th century A.D., including the Commentaries on the Dīghanikāya and the Udāna from which these two commentarial passages are taken. W. R.

EPILOGUE

When I began working with Gordon Wasson on Soma, almost twenty years ago, we had, at first, no suspicion that Soma might have been a mushroom: we just wished to collect the texts relating to Soma and look at them with a botanical as well as an Indological eye. It was only when I casually mentioned to RGW the urine-drinking, Soma-drinking episode in the Mahābhārata that he thought of Amanita muscaria as a possible identity for Soma, but from that moment on he became increasingly convinced that this was the case. I was certain that the evidence proved Soma was an entheogen (we called it an hallucinogen then), and that it was not a form of alcohol (as had been theretofore widely believed) but was a drug provoking an ecstasy of a very special kind. Here is a truth of great importance in the study of later Indian religion and this was the major contribution that RGW had made to Vedic studies.

I was, however, not yet convinced that Soma was a mushroom. I felt that the arguments rested primarily on the interpretation of adjectives, many of them words for colors, and mythological traits, many of which applied to other gods as well, permitting other interpretations as well as the interpretation that identified Soma with the fly-agaric. As an Indologist, rather than a botanist, I still feel that the broader hypothesis—that Soma was an entheogen—is more significant than the narrower one—that it was a mushroom. Over the years, however, the new evidence that RGW has brought to light, particularly the evidence linking the Buddha’s last meal to Soma through the double links of the Vedic Pāṭika and the Santal putka, does in fact make it seem likely that Soma was a mushroom, as RGW believed from the first moment, and, when we recall the religious role of urine mentioned above, specifically the fly-agaric. But each of the three levels of the hypothesis—that Soma was an entheogen, a mushroom, and the fly-agaric—adds a valuable dimension to our understanding of both Vedic and post-Vedic religion.

WENDY DONIGER O’FLAHERTY

Chicago
January 15, 1982