

THE LAST MEAL OF THE BUDDHA

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I

WHAT WAS SŪKARA-MADDAVA?

Upwards of a dozen scholars¹ 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 metalworker Cunda at Pāva, 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. Walpola 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 his document is appended to our paper.

The first part of that compound word, *sūkara-*, is simple: “pertaining to swine,” *sū-* 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-maddava* 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 *Scleroderma*, 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*, *Sumaṅgalavilāsinī*, and the other, the *Paramatthajotikā*, the canonical Commentary on the *Udāna*. These Commentaries took their 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 *sūkara-maddava* as the *Pūtika*,³ a plant that figures conspicuously in the Brāhmaṇas 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, André Bareau, 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 Bareau has to say:

En effet, la viande de porc et plus encore les champignons sont des choses pour lesquelles les Indiens imprégnés de culture brahmanique, comme l'étaient le Buddha et une grande partie de ses disciples, éprouvent un profond, un insurmontable dégoût 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 sautevelles frites ou des chenilles grillées; cela paraîtrait 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 Bareau 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 names 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 Bráhmens, 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 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.

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Three months before the Last Meal at Pāvā and before his Mahāparinirvāṇa, the Buddha had been sojourning at Vai'sali and thereabouts. While in the vicinity of Vai'sali 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, not 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 'sudra, 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 'sudra, 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, para. 18, p. 138]

The Buddha then said to Cunda,

Whatever *sūkara-maddava* are left over to thee, those bury in a hole. [para. 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 Samaṇas and Brāhmaṇas, among gods, and men, by whom, when he has eaten it, that food can be properly assimilated, save by a *Tathāgata*. [para. 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 Parinirvāna, 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'École 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 setting³. Buddhaghosa quotes the Great Commentary (*Mahā-atthakathā*) 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 *parinibbāna* 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. 245 *infra*]

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

The *Mahā-atthakathā* (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. 246 *infra*]

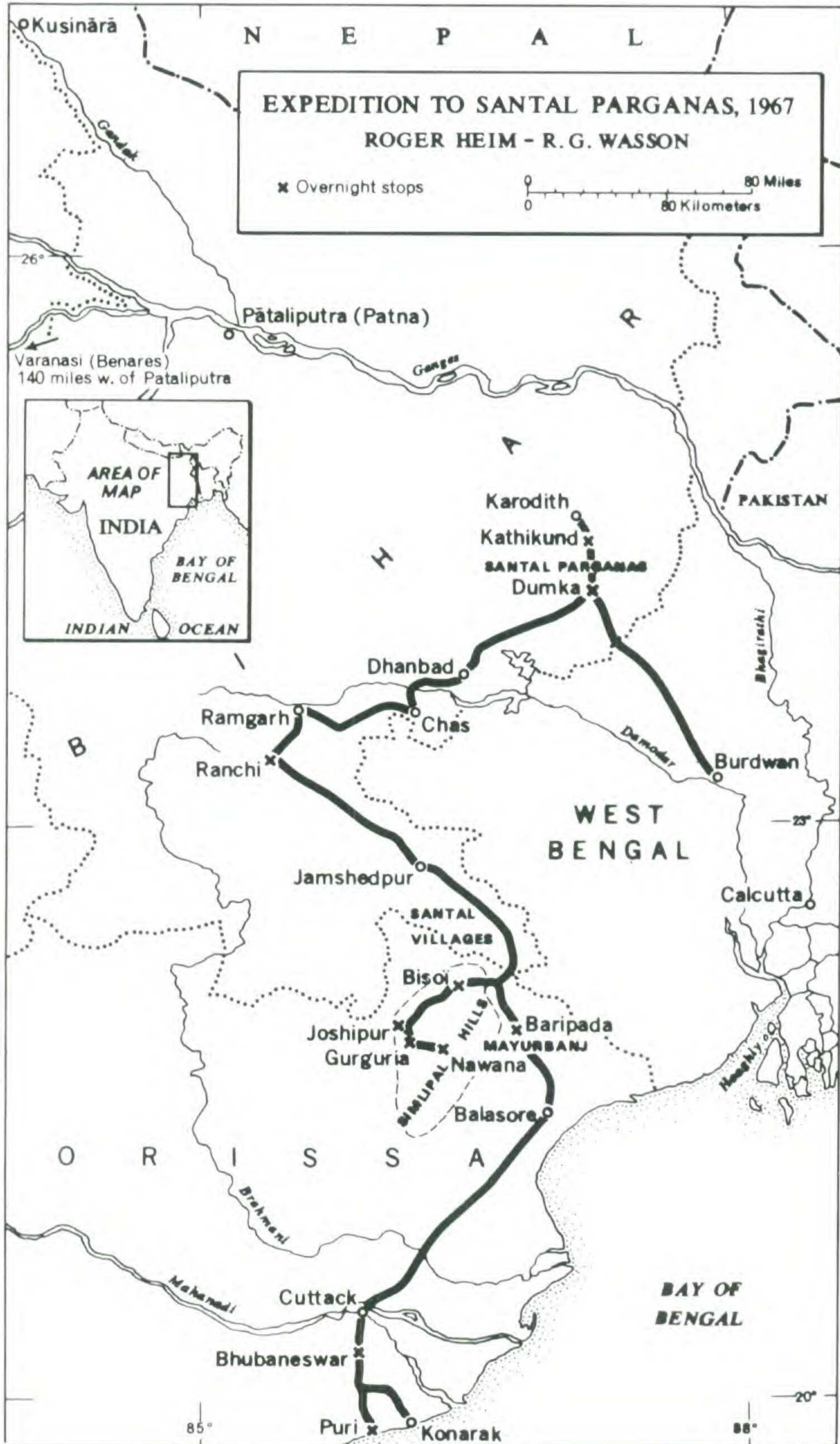
The Great Commentary cites hearsay (“They say . . .”) as the reason that Cunda served those particular mushrooms on that day. The hearsay may be right, but if indeed Cunda felt the dish of *Pūtika* would extend the life of the Buddha, he must have confused the properties of *Soma* and of the *Pūtika*. The *Pūtika* enjoyed a unique status as the exalted surrogate for *Soma*, but, whereas *Soma* was consumed, the *Pūtika*, as Kramrisch quotes the sources,³ 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 ‘sudra 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 Vaiśali) 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 *sūkaramaddava*.

II

THE SANTAL AND THE *PUTKA*

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*,⁴ though probably today by no Santal, and it figures conspicuously in the



Brahmāṇas 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.⁵ (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.)

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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 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. The languages of the subcontinent are divided into the Sanskrit family, overwhelmingly important, the Dravidian, second in importance, and the Munda, the third much smaller group of which Santali is the biggest. (I here do not mention the Sino-Tibetan languages, confined chiefly as they are to the northeastern border.)

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 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*. But in the preface to his dictionary Mr. Bodding observed a noteworthy fact:

Strangely enough, the Santals use some pure Sanskrit words, which, so far as I know, are not heard in the present day Hindi.

I visited Dumka in the Santal Parganas for the first time in January 1965. The Rev. A.E. Strønstad, Mr. 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.* Was it the *putka*? No, not at all. It was merely *ot'*, "mushroom"

*"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 "entheogenic") has the advantage that it does not carry the odor of "hallucinogen," "psychedelic," "drug," etc. of the youth of the 1960's. See *Journal of Psychedelic Drugs*, Vol. 11 (1-2), Jan-June 1979, pp. 145-6.

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 umbonate 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 paper⁶ 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 Bisoī 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 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*, #14, September 1970. Kramrisch in time saw our paper and she grasped immediately that the *putka* of the Santal was the *Pūtika* of the Brāhmaṇas, of the Pravargya sacrifice and the Mahāvīra pot.³ The *Pūtika* had been the surrogate for Soma and naturally it would possess a soul! Kramrisch deserves a rich accolade for discovering that Santali *putka* was a loan word from the Sanskrit *Pūtika*. When Soma was being abandoned, probably over a long period that ended shortly after B.C. 1000, the *Pūtika* 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 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.

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In Santal culture not only is the *putka* animate, endowed with a soul: it possesses another of Soma's attributes. The belief is apparently universal among the Santal that the *putka* is generated by (mythological) thunderbolts.⁷ 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 *putka* 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 *putka*, the *hor putka* and the *seta putka*, 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 putka* is the “man *putka*,” 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 putka*, which is rough, is the “dog *putka*,” the dog not being despised as it is in Hindu culture. A few of the Santal spoke to us of a third *putka*, the *rote putka* or “toad *putka*.” 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 putka*. In this instance the puffball was *Lycoperdon pusillum* but probably any other puffball coming in response to a thunder shower would be a *rote putka*. In short, the *rote putka*, which is not eaten by the Santal, is a false *putka*. . . . The entheogenic mushrooms of which Ludgi Marndi and Ganesh Ran Ho had told us, probably *Stropharia cubensis*, are not *putka*: they are mrely *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?

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Throughout our visits to the Santal country the people we spoke with said that pigs dug for the *putka*, thus confirming what the canonical Pāli Commentary on the *Udāna* says of *sūkara-maddava*. 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 *putka* in the forest. Here is what he replied:

Whether the pigs eat *putka* or not? In this case also I got some *putka* from the forests. I tried them on a few pigs—the old *putka* 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 *putka* usually come up several marks of upturned earth, indicating that the pigs had been digging for the *putka*. [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.

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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 Chotā Nāgpur 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 *Pūtika*. 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 *sūkara-maddava*, the Rhys Davids translation continues with an astonishing development:

para. 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 *sūkara-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 *Pūtika* 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 *Pūtika*. Did Cunda know the role of the *Pūtika* 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* (para. 20, p. 139) at this point. Buddhaghōṣa 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 [=sūkara-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 negli-

gence in choosing the mushrooms, why should the Omniscient One have exonerated him?

42. And the Exalted One addressed the venerable Ānanda, and said:— ‘Now it may happen, Ānanda, that some one should stir up remorse in Cunda the smith, by saying:— “This is evil to thee, Cunda, and loss to thee in that when the Tathāgata had eaten his last meal from thy provision, then he died.” Any such remorse, Ānanda, in Cunda the smith should be checked by saying:— “This is good to thee, Cunda, and gain to thee, in that when the Tathāgata had eaten his last meal from thy provision, then he died.” From the very mouth of the Exalted One, Cunda, have I heard, from his own mouth have I received this saying:— “These two offerings of food are of equal fruit, and of equal profit and of much greater fruit and much greater profit than any other—and which are the two? The offering of food which, when a Tathāgata has eaten, he attains to supreme and perfect insight; and the offering of food which, when a Tathāgata has eaten, he passes away by that utter passing away in which nothing whatever remains behind— these two offerings of food are of equal fruit and of equal profit, and of much greater fruit and much greater profit than any others. There has been laid up by Cunda the smith a karma redounding to length of life, redounding to good birth, redounding to good fortune, redounding to good fame, redounding to the inheritance of heaven, and of sovereign power.” ‘In this way, Ānanda, should be checked any remorse in Cunda the smith.’ (p. 147-8)

* * *

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 Buddha*, 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 Mallas, 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 Mallas, 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. (Ftnt. 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 Vai'sali.

There have been individuals in various parts of the world, and especially among the holy men of India, who have acquired by "concentration" (*samādhi*) control 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, *māhasamādhi* has sometimes been the term used when speaking 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 distance to Kusinārā. Since the time of his death, no Hindu, no Buddhist, has ever suggested that he died of mushroom poisoning. His death has not provoked discussion among Buddhists. Knowing 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 caused his death. He died of his own will power, of his own *māhasamādhi*. Or, rather than provoking his own death, did he not use yogic power, under trying circumstances, to postpone his translation to *nirvāna* 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 *Pūtika*, 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,³ 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 Sri 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 *sūkara-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 *Pūtika*, 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 obedience to the Hindu religion. When the Theras assembled at Rājagrja, 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 *Pūtika*. 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 explanations; the written record contains a number of anomalies. 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 Buddhaghoṣa presented as hearsay, to show that Cunda the 'sudra knew of the use made by the Brahmans of the *Pūtika*. 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 Cunda consternation and chagrin. Alarm was felt, and there was murmuring against Cunda and the mushrooms in the assembly, for all or almost all were twice-born men and had been indoctrinated against mushrooms. We can imagine Cunda's embarrassment but we have no information: an opaque cloud of silence falls over him.

In the *Dīgha Nikāya* the Buddha exonerates Cunda, somewhat stiltedly under the circumstances. Perhaps everyone remembered that the Buddha had spoken up for Cunda and many had heard him but none could recall what precisely he had said. Someone seems to have drafted the paragraph much later. The fitting exoneration of Cunda demonstrated the thoughtfulness and the nobility of the Buddha under most trying circumstances.

Was not "*sūkara-maddava*" introduced in place of *Pūtika* at Rājagṛha to avoid confusing people as to the Buddha's attitude toward the Old Religion? He showed an attitude toward the *Pūtika*, and he reacted to them, in a way that we today, under the circumstances, can understand for the first time.

And as for the diverse explanations in the two canonical Commentaries for *Sūkara-maddava*, they may have been introduced at Rājagṛha also, or perhaps more likely late in Ashoka's reign when the need for an explanation became increasingly felt by the Buddhist community. No theological importance was ever given, then or later, to the Pāvā episode because, after all, the Buddha was under acute stress at the time, what with his illness, his imminent extinction freely predicted since he was in

Vai'sali three months before the episode at Pāvā, and the unexpected dish of *Pūtika* that suddenly confronted him. There had been far too much talk among those present to suppress the episode, but obviously the *Pūtika* was not to be identified plainly. The *sūkara-maddava* was a way to tell the truth but still to interpose obstacles to its understanding. The word may have been a neologism invented *ad hoc*.

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 *Pūtika* 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 Morgenstierne, 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 focused 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 'sudras. 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 *pañcagavya*? And was that a contributing reason for abandoning Soma? Given the ecological conditions prevailing in the Indus Valley and Kashmir, only a few of the Aryans could know by personal experience the secrets of the Divine Herb. 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 report⁸ 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 where the ṚgVeda 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 Brāhmaṇas 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 Mochtar and Hartmut Geerken of Kabul, talked with three old codgers, ostensibly *habitués* 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 questions. 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 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:

R̥gVeda X 85.3: One thinks one drinks Soma because a plant is
crushed.
The Soma that the Brahmans 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 SŪKARAMADDAVA

SŪKARAMADDAVA

The original Canonical Pali passage from the *Mahāparinibbānasutta* of the *Dīghanikāya*, Pali Text Society edition (London 1966), Vol. II, p. 127:

Atha kho Cundo kammāraputto tassā rattigyā accayena sake nivesane pañītaṃ khādaniyaṃ bhojaniyaṃ patiyādāpetvā pahūtañ ca sūkaramaddavaṃ Bhagavato kālaṃ ārocāpesi: ‘Kālo bhante, nitthitaṃ bhattaṃ’ti.

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 *Sūkaramaddava*, announced the time to the Exalted One, saying: ‘The time, Lord, has come, the meal is ready.’

In explaining *sūkaramaddava* in this passage the Pali Commentary of the *Dīghanikāya*, *sumāṅgalavilāsini*, Pali Text Society ed. (London 1971), Vol. II, p. 568, gives three different opinions:

Sūkaramaddavan ti nātitaruṇassa nātijiṇṇassa ekajeṭṭhakasūkarassa pavattamaṃsam. Taṃ kira muduñ c'eva siniddhañ ca hoti. Taṃ paṭiyādāpetvā sādhukaṃ pacāpetvā'ti attho. (Colombo ed. of the *Sumaṅgalavilāsinī*, Part I, (1918) p. 395 adds within brackets): [Eke bhaṇanti: sūkaramaddavaṃ pana muduodanassa pañcagorasa—yūsapācanavidhānassa nāma etan'ti yathā gavapānaṃ nāma pākanāmaṃ. Keci bhaṇanti: sūkaramaddavaṃ nāma rasāyanavidhi, taṃ pana rasāyanasatthe āgacchati, taṃ Cundena Bhagavato parinibbānaṃ na bhaveyyā'ti rasāyanaṃ paṭiyattan'ti.]

Translation:

Sūkaramaddava 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: *sūkaramaddava* is the name for a culinary preparation of soft rice made into a broth with the five products of the cow¹, just as *gavapāna* is the name of a culinary preparation. Others say: *sūkaramaddava* 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 *sūkaramaddava* 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 *sūkaramaddava* gives four different opinions:

Sūkaramaddavan'ti sūkarassa mudusiniddham pavattamaṃsan'ti *Mahāatthakathāyaṃ* vuttaṃ. Keci pana sūkaramaddavan'ti na sūkaramaṃsam, sūkarehi madditavaṃsakaḷiro'ti vadanti. Aññe: sūkarehi madditappadese jātaṃ ahicchattan'ti. Apare pana sūkaramaddavaṃ nāma ekaṃ rasāyanan'ti bhaṇimsu. Tañ hi Cundo kammāraputto ajja Bhagavā parinibbāyissati'ti sutvā 'appeva nāma naṃ paribhuñjitvā cirataraṃ tiṭṭheyyā'ti Satthu cirajīvitukamyatāya adāsi'ti vadanti.

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.]

Translation:

It is said in the Great Commentary (*Mahāatthakathā*)² that *sūkaramaddava* is soft and fatty pork (flesh of pig) available (in the market). But some say: *sūkaramaddava* 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.

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 *Māhabhārata* 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,

2. The *Mahāatthakathā* (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 *Dīghanikāya* and the *Udāna* from which these two commentarial passages are taken. W.R.

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 *Pūtika* 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 valuable dimensions to our understanding of both Vedic and post-Vedic religion.

Wendy Doniger O'Flaherty

Chicago

January 15, 1982

NOTES

1. 1896 and earlier, Karl Eugen Newmann: *Die Reden Gotamo Buddho's aus des Mittleren Sammlung Majjhimanikāyo des Pāli-Kanons*, Leipzig, 1896, pp. xix-xxii. Neumann cites earlier writers: Friedrich Zimmermann, who in turn refers to an article in the *Journal of the Maha-Bodhi Society*, Vol. I, No. viii, pp. 2-3, Calcutta, 1892, wherein the editor of this *Journal* reproduces statements by "Rhys Davids, Bigandet, Rockhill, and Colonel Olcott," laying stress on the proper meaning of *sūkara-maddava*. We have seen none of these earlier discussions.

1910. T. W. and C. A. F. Rhys Davids, and later editions, *Dialogues of the Buddha: Part II*. Translated from the Pāli of the *Dīgha Nikāya* by T. W. and C. A. F. Rhys Davids. One of the series of the Sacred Books of the Buddhists. Published for the Pāli Text Society by Luzac, London. (All of our quotations from the *Dīgha Nikāya* are from the 1959 edition.)

1916. Coomaraswamy, Ananda K.: *Buddha and the Gospel of Buddhism*, p. 79., George G. Harrap, London.

1931-2. Arthur Waley, "Did Buddha die of eating pork?" *Mélanges chinois et bouddhiques*, Vol. I., pp. 343-354. Brussels.

1942. Fa Chow. "Sūkara—maddava and the Buddha's Death." *Annals of the Bhandarkar Oriental Research Institute*. Edited by R. N. Dandekar, pp. 127-133.

1948. E. Waldschmidt. *Beiträge zur Textgeschichte des Mahāparinirvānasūtrā*, pp. 63-85: "Die Letzte Mahlzeit des Buddha."

1948. E. J. Thomas. *Indian Culture*, XV, pp. 1-3: "Buddha's Last Meal."

1949. A. Foucher. *La Vie du Bouddha*. Paris, Payot, pp. 304-308: "Le Dernier repas à Pāvā."

1968. André Bareau. "La Nourriture offerte au Buddha lors de son dernier repas," *Mélanges d'Indianisme*, Paris, Editions E. de Boccard, pp. 61-71.

1970. André Bareau. *Recherches sur la biographie du Buddha*. Tome I. Notably Chapter VII 8 & 9, pp. 251-281. Paris. Ecole Française d'Extrême-Orient, Vol. LXXVII.

1970. P. Demiéville. Review of R. Gordon Wasson: *SOMA: Divine Mushroom of Immortality*. *T'oung Pao*, LVI: Livr. 4-5, pp. 298-302. E.J. Brill, Leiden.

This list does not pretend to be exhaustive.

2. See note 1, entry under 1910, p. 137 ftnt.

3. Stella Kramrisch: "The Māhavira Vessel and the Plant Pūtika," *JAOS*, 95.2, April-June 1975.

4. See Manfred Mayrhofer: *A Concise Sanskrit Etymological Dictionary*, entry under *pūtikah*, 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*.

6. *Idem*, p. 65.

7. *Idem*, p. 64 bottom of page; *SOMA: Divine Mushroom of Immortality*, pp. 39-40.

8. Watling, Roy and Norman M. Gregory: "Larger Fungi from Kashmir," *Nova Hedwigia*, Band XXXII, Brunswick, 1980, J. Cramer.

For those interested in our side of the controversy over Soma, we list the following items as essential:

1. *SOMA: Divine Mushroom of Immortality*, by R. Gordon Wasson and Wendy Doniger O'Flaherty. 1968. Harcourt Brace Jovanovich, Inc., New York.
2. "Les putka des Santals, champignons doués d'une âme," by Roger Heim and R. Gordon Wasson. September 1970. *Cahiers du Pacifique* #14, pp. 60-85. With 11 plates, 5 in color; 5 figures and one map in text.
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