## PARISRUT THE EARLIEST DISTILLED LIQUOR OF VEDIC TIMES OR OF ABOUT 1500 B. C.

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We can easily select three beverages of Vedic times each representing a class by itself. As fresh herbal extract or juice comes soma, the produce of ephedra. Next is surā, beer made from millet grain. Third would be parisrut, a distilled liquor for which the most easily available source can only be mahuwā flowers, or those of Bassia latifolia. These are rich in fermentable sugars and tribes living in hills still practise illicit distillation of alcohol employing mahuwā flowers as they used to do in ancient times. This has been explained before. Aryans, before they entered India, knew soma and surā while parisrut was purely an Indian product, probably what they learnt from the earlier inhabitants of India.

Zimmer<sup>3</sup> devotes a chapter to the beverages used by the Aryans. There he has a paragraph on parisrut. According to him parisrut is first recorded in Rgveda: 9, 1, 6, but only as "an epithet of soma and in other places as adjective. In Atharvaveda however it is a definite fermented beverage, neither soma nor surā". On account of this vague reference of parisrut in Rgveda, Macdonell and Keith<sup>3</sup> inform, "Parisrut was a drink mentioned first in Atharvaveda, distinct from both soma and surā, but intoxicating. It was made from flowers, (puṣpa), and Hillebrandt opines that it was very much the same as surā". Since surā was beer or an alcoholic drink parisrut could legitimately be compared with it.

So far we are informed that parisrut is an alcoholic beverage prepared from some flowers. In India there is no flower other than that of Mahuwā rich enough in fermentable sugars to produce alcohol. We however also expect that Atharvaveda would refer not only to parisrut, the product, but also to mahuwā flowers, its initial material. Now one authority who has made a careful study of all "Vedic Plants" has been Dr. G. P. Majumdar<sup>4</sup>. On p. 654 of his book as item 67, he mentions "Madhuga, honey-plant (recorded in) Atharvaveda, 1, 34, 4; VI 122, 3 and occurs as Madhu-dugha in Rgveda, VI; 70, 1.5." Then as item 68 he has "Madhuka, Bassia latifolia, A.V., 1, 34, 5 a love spell, with this plant intoxicating drink is made from its flowers". Vol. 16 No. 2

Being sweet like honey, primitive folks could look upon it as an offering in love. That the names, though allied in sound, as Madhuga and madhuka, have nevertheless persisted as distinct to this day, is confirmed by Nadkarni<sup>5</sup>. On p. 582 of his book he gives "Glycerrhiza glabra, in Sanskrit, Jasti-madhu, madhuka". And on p. 279 he records "Bassia latitolia in Sanskrit madhuka". Thus in Vedic literature two plants are mentioned as madhuga and madhuka and these names have continued to remain upto the present. And of the two only madhuka or mahuwa bears flowers which are sweet enough to become loveoffering. And once there are flowers rich in sugars they can be fermented. When grapes are fermented they produce wine, and barley and millet, likwise fermented, produce beer, and both wine and beer can be consumed as such. But when mahuwa flowers are fermented what can be looked upon as mahuwa wine extracts from the flowers a toxic principle which causes diarrhoea. The pre-Arvan inhabitants of India discovered this fact and used to distil the fermented mash when the distillate became an alcoholic beverage free from the flower-toxins. Thus arose distillation to exploit mahuwā flowers. We can be sure of such a source of distillation for no other flowers are known in India which come any where near those of mahuwā in their sugar content. In fact to say that flowers were fermented to produce alcohol can only mean mahuwa flowers.

Now if soma is separate from both sura and parisrut, each of these being intoxicant, it follows that the former was not an alcoholic drink. But no less an authority than Max Muller<sup>6</sup> calls "soma, the intoxicating beverage". And this misconception arose in an attempt to explain soma by its main property. Rgveda makes it explicit that soma was euphoriant and the only euphoriant the interpreters of soma knew was alcohol. What they actually did was to compare two drinks together, soma and alcohol. On the contrary what was required was to compare two plants together, soma and any other. This could not be done at the time for the plant soma itself remained a mystery, while they had no knowledge of any herb being an energizer-cumeuphoriant. Such a comparison was undertaken for the first time by the present author<sup>7</sup> when there appeared two other plants. One was Erythroxylon coca, the coca plant of the Incas Red Indians, and the other, Catha edulis, the khat of Yemeni Arabs. Each was looked upon as a blessing upon its users and the result has been that the Cocain plant was deified by the Red Indians while khat was extolled as the Flower of Paradise by the Yemenis who, as Muslims, could not have deified the plant. And it is well known that ephedra became god soma. In the light of these two herbs soma, as ephedra, could easily represent the third, each as an energizer-cum-euphoriant,

We have now to consider soma, sura and parisrut as spread over time or in a chronological order. As nomads the Aryans had to depend upon the cheapest energizer. Now ephedra has merely to be collected as it grows wild on hilly areas. Much later the population of the Aryans increased and in gatherings a drink had to be provided. Soma as ephedra had to be crushed with stones and the juice collected on cow hides. While it could be procured for domestic or individual use it could not be had as mass production to be offered in gatherings. Meanwhile the Aryans had learnt to make beer and surā then was served in an assembly. Being intoxicant it gave rise to broils and its use was condemned but nevertheless continued. When the Arvans settled in the plains of India they could not obtain ephedra. Thus arose the need for a substitute of soma. Sura or millet-beer could be made but now a much cheaper source was available for an alcoholic drink as mahuwā flowers. These were handed over to the Aryans by the earlier inhabitants of India. From them they learnt the use of distillation and the distilled liquor was called parisrut.

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We now turn to etymology to realize what the names soma, surā and parisrut signify, whence we can finally confirm what they actually denote. Soma is taken to the root Su, to press. Ma, the last syllable of soma means nothing; it is a particle as in "Brahma." Soma then means "what has ben pressed out," or the extract, the juice. Such is the sense recognized by most authorities among whom Allchins comes as the latest. He writes that "from the root su, with a basic meaning of press or extract (we get) a whole series of words, soma, suta and others." Thus su gives the derivative soma, signifying the extract. It then means that the juice was recognized before the plant, itself. This is possible but we shall see presently that the plant, as the container of the juice, was known earlier, which is more natural.

Above all when su can give one derivative as suta the other could have easily been suma, rather than So-ma. Altogether the etymology of soma seems most arbitrary and no less an authority than Bailey<sup>9</sup> has openly dissented from accepting it. Quite a different picture is offered when soma is taken to Chinese as discussed before<sup>10</sup>. Turning to  $sur\bar{a}$ , naturally its first syllable would be the same su, to press, but what  $r\bar{a}$  stands for has never been explained. This again becomes fully connotative when taken to Chinese and has been done before (ref. 10).

In discussing words signifying substances we have to focuss attention on the use they represent. Nothing imparts a sense of reality more than utility and we want to know first to whom soma, as ephedra, proved to be indispensable. As early as 4000 B.C. the Chinese had rudimentary agriculture but nevertheless due to shortage of food the aged was felt as burden and exiled as ascetic. Wandering all over he found the hemp plant produced seeds which were edible and its fibre could be used to protect the body. The Chinese word for hemp is ma. Moreover hemp fibres are yellow so that the full name for hemp became, huo-ma, fire-vellow hemp, when huo=fire. Briefly Hemp= huo-ma=Fire-yellow hemp. Then searching for food-stuffs the ascetic could observe growth of a shrub on hill tops bearing red berries. them he found they were edible which he could eat 10 his heart's content. After such a meal he felt very much energized so that his exhaustion had disappeared and more he experienced a feeling of well being. further assume that he slept fairly late that night. With such experience of ephedra-berries he turned to the plant for a regular supply. But when the season did not produce the fruit he must have tried to chew tender stalks and found them equally effective. Thus ephedra became the proper source of a drug which was an energizer-cum-euphoriant. All wild plants are not named and at that early stage ephedra bore no name either. The Chinese species, Ephedra flavaus, is yellow coloured, and as ephedra it has thin stalks, like hemp fibres. Thus in colour and in form ephedra could be compared with hemp fibres. Accordingly at an early stage ephedra also came to be called huo-ma. Now the Avesta name of ephedra is hao-ma, implying that it was directly taken from the Chinese, huo-ma, which was then Sanskritized as so-ma, and this would be admitted. That ephedra was originally called huo-ma, fire-yellow hemp, can be easily supported. When later ephedra had to be specified it was merely called ma-huang, meaning "yellow hemp" huang =yellow and ma=hemp. Then ma-huang, yellow hemp, as the final and present name of ephedra, easily becomes a mere synonym of huo-ma, fire-yellow hemp or hemp proper. We can now conclude that at the time when ephedra was not yet designated ma-huang, but instead huo-ma, this name passed into the language of the Aryans. As nomads they must have met Chinese ascetics and from them learnt to know how ephedra was an energizer-cumeuphoriant. As nomads they were mainly hunters requiring the output of great physical energy subjecting them to exhaustion. Then to put strength into the system and to relieve exhaustion ephedra came as the required remedy. Thus the Aryans would consume soma thrice daily when no hunter could dream of drinking an intoxicant with such short intervals. The Aryan nomad had a real demand for such a drug and ephedra came as the supply.

Later when the Aryans also took to agriculture they grew millet, by preference, as this is easily cultivated, not requiring plouging as the pre-

requisite. But the Chinese were much advanced and had even fermented millet into beer. The Chinese word su means "fermented grain" and la means "sharp" in taste, as distinct from, say water, which would be called sweet. Then the term su-la, meaning fermented grain with a sharp taste, would signify beer. Su-la mutated into su-ra and denoted beer, an intoxicating drink. We are now left with parisrut. It was prepared from flowers found in India so that the word was coined on Indian soil. Bhide<sup>11</sup> correctly translates, parisrut=arden spirit. Its root is srut=boiled. A fermented mash had to be boiled in order to recover a distillate; hence the main operation involved in preparing parisrut was boiling. Thus parisrut can be legitimately taken to the root, srut, boiled. Etymology as offered here clearly differentiates the words, soma, surā and parisrut among themselves and supports what each of these drinks has actually been.

In this connection we have to remember that Rgveda was finally composed in India while part of it had already been completed before. On the contrary Atharvaveda was entirely composed in India. This explains how soma and  $sur\bar{a}$  are recorded in Rgveda while parisrut practically appears first in Atharvaveda. We can further assume that if the word soma entered Sanskrit about 4000 B.C. the last hymn of Rgveda was composed about 2000 B.C. in India, and Atharvaveda can be dated as 1500 B.C. Then parisrut was coined about 1500 B.C. which would also represent the time when distillation was first practised by the Aryans.

The Aryans continued to retain their habits of nomadic life for a long time. Thus very little is referred to pottery, while cups, in which liquids were consumed, were made of udumbara (Ficus glomerata) wood, being sufficiently soft and easily carved out. But while mahuwa flowers can be fermented in a big leather bag, the same which a water-carrier in India uses even today, distillation would require an assembly of pottery units. The simplest imaginable assembly would constitute of three main pots of different sizes, with a fourth kept below the topmost and within the second pot to receive the distillate. Such an assembly is still in use among the hill-tribes of Bihar and has been illustrated in an article by the present author12 before. Sanyal13 gives a sketch of a similar assembly and identifies it as trivandaka yantram. The name implies three units as the visible ones when the fourth is within the second pot below the topmost. Next advanced development in distillation clearly shows four units. This again is simple enough to be constructed with pottery units as used in household with the addition of a hollow tube as The present author has also illustrated such an assembly actually used by illicit distillers in Pabna, Bangladesh. Sanyal also gives a corresponding sketch naming such an arrangement Baka yantram, (fig. 43 on

p. 94 of his book). I have shown that a special bood or coul, which corresponds to the topmost unit in a distillation assembly, called baka yantram, can only to be interpreted as an item specially used in alcohol distillation. Such a coul or hood was found in Mysore dated 300 B.C. This obviously refers to what pre-Arvan Indians have been using and in Mysore Bassia latifolia would be quite a common tree. Another unit which is placed over the lowest and allows alcohol vapours to pass upwards has been especially constructed with holes at its bottom. This was discovered by the archaeology department of India but left uninterpreted. It has been explained by the present author (ref. 12) that it belongs to alcohol distillation assembly which is also dated 300 B.C. Thus from north to south there has been archaeological evidence of distillation of alcohol having been carried out at about 300 B.c. Transcending archaeological evidence comes literary evidence when parisrut appears as a distilled liquor in Atharvaveda to be dated about 1500 B.C. This date has been assigned to Atharvaveda on the ground that the word for rice is absent in Rayeda and occurs first in Atharvaveda, as explained vide ref. 14. When we consider that mahuwā flowers were exploited to produce an alcoholic beverage there was no escape from resorting to distillation. This necessity does not occur with wine or beer which are best consumed as such. In fact we can maintain that distillation of alcohol was not practised either in Egypt or in Mesopotamia where beer and wine were known and where no toxic material like mahuwā flowers had to be exploited. Thus we can conclude that distillation was practised first in India and earlier than 1500 B.C.

## SUMMARY

The three earliest Vedic drinks would be first soma, the juice of ephedra, next surā, millet beer, third parisrut, a distilled liquor. Their etymology confirms their respective natures. Soma is coloured yellow and has stalks thin like hemp fibres. Hemp was called huo-ma, fire yellow-hemp. Chinese ephedra was first called huo-ma and this name was taken up by Aryans. In Avesta it is hao-ma which was Sanskritised as so-ma. Soma becomes the name of a plant later transferred to its juice also as soma. It is an energizercum-euphoriant indispensable to nomads subject to great physical exertion Later Aryans took to agriculture and with millet grain and exhaustion. prepared beer having learnt the technique from the Chinese. The Chinese word su means fermented grain and la something sharp in taste as alcohol would be. Su-la signified sharp tasting fermented grain and thereby beer. Su-la mutated into surd so that surd was an alcoholic beverage. In India mahuwa flowers is a forest product and the cheapest source of fermentable sugars. But it is toxic producing diarrhoea. Then the fermented mash had to produce a distilled liquor: parisrut is rendered as Ardent Spirit but its

root is *srut*, boiled. In distillation the main operation is boiling so that *parisrut* connotes the resultant of boiling, a distilled product. Thus etymology confirms that *soma* was a herbal juice, *surā* beer, and *parisrut* a distilled liquor.

## REFERENCES

- Mahdihassan, S. The earliest distillation units of pottery in Indo-Pakistan, Pakistan Archaeology, No. 8, 1972, pp. 159-168.
- <sup>2</sup> Zimmer, H. Altindisches Leben, Berlin, 1879, p. 281.
- 3 Macdonell, A. A. and Keith, A. B. Vedic Index, Vol. I 1912, p. 498.
- 4 Majumdar, G. P. Vedic Plants. B. C. Law Commemoration Volume. I, 1945, p. 654.
- <sup>5</sup> Nadkarni, A. K. Indian Materia Medica, 1954, p. 279 and p. 582.
- 6 Max Muller, F, Physical Religion, 1891, p. 101.
- Mahdihassan, S. Indian Alchemy 1977, pp. 12-14. Inst. Hist. Med. New Delhi.
- 8 Allchin, F. R. Early distillation at Shaikhan Dheri. South Asian Archaeology Inst. Univ. of Naples. Edited by Prof. M. Taddei, 1979.
- Bailey, Sir. H. W. A half-century of Irano-Indian studies. J. R. A. S. London. No. 2, 1972. p. 102.
- Mahdihassan, S. The Vedic words Soma and Sura traced to China, Hamdard-Medicus, Karachi. 21, 1978, 75-79.
- Bhide, V. V. Concise Sanskrit-English Dictionary. Poona. 1926, Parisrut on p. 669, Srut on p. 1063.
- 12 Mahdihassan, S. (1968-1979),
  - (a) Stages in the development of practical alchemy. J. Asiatic Soc. Pak, Dacca. 13, 1968, 356, Fig. 5.
  - (b) The earliest distillation units of pottery in Indo-Pakistan. Pak. Archaelogy, 1972, 159.
  - (c) Distillation assembly of pottery in ancient India with a single item of special construction. V. Indological Journal Hoshiarpur, 17, 1979, 264-266. 3 figs.
- 13 Sanyal P. K. Medicine and Pharmacy in India. Calcutta, 1964, 96 (fig. 45).
- 14 Mahdihassan, S. The Chinese origin of the word Rice. M. M. Potdar commemoration Vol. Poona, 1950, 50-58.