

Cannabis in Traditional Indian Herbal Medicine (pre-publication draft)

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Final paper published in: *Āyurveda at the crossroads of care and cure. Proceedings of the Indo-European Seminar on Ayurveda held at Arrábida, Portugal, in November 2001* edited by Ana Salema (Lisbon: Universidade Nova de Lisboa, 2002), pp. 45–73.

Introduction

To discuss cannabis is to step into an arena of fierce and lively contest. The narcotic properties of cannabis, as well as the legal controls over it which are in place in most first-world countries, and in the parts of the developing world influenced by these countries through various contemporary and historical hegemonies, place cannabis at the crossroads of debates about sin, corruption, medicine, health, pain, insanity, spiritual transcendence, the generation gap, and, naturally, money.

As I began reading material about the historical role of cannabis in South Asia, I rapidly became aware that few pieces of writing on this topic were produced without an underlying agenda of one sort or another. Writings on cannabis appeared throughout the last century, and reached a new intensity in the sixties and seventies, as an integral component of the western cultural revolution. President Clinton became famous for holding his breath at Oxford, of course. The flood of cannabis publications has not abated, and the debate about the proper place of cannabis in western societies is only growing more tumultuous. There is a cannabis article in the national press almost every day at present, commonly reporting on one or other politician who has called for decriminalization of the plant. And at least in the UK, the law itself is having to find appropriate responses to the sea-changes that are taking place in public opinion. Only last September, Lezley Gibson, a multiple-sclerosis sufferer, was accused of possessing eight

grams of cannabis. The jury took only an hour to acquit her, in spite of the fact that Mrs Gibson explained to the court that for the last twelve years she had been smoking up to five joints of cannabis daily for the relief of her MS symptoms. And in November, Rasta Brown, charged with possessing cannabis with intent to supply, applied to have his case reconsidered under article 9 of the Human Rights Act, the right to freedom of thought, conscience and religion. Mr Brown's lawyer argued that in the Rastafarian religion, cannabis was considered not only an aid to worship, and a medicine, but crucially, also as a source of income. In January, Rasta Brown was sentenced to 150 hours of community service for possession of herbal cannabis with intent to supply, after a judge expressed "respect for the sincerity of his beliefs". Judge Charles Gibson admitted that he was passing a lenient sentence. Both of these cases share many critical features with the landmark Robert Randall case which took place in Washington D.C. in 1978. Following prosecution for growing marijuana plants, the legal settlement guaranteed Randall legal, medically-supervised access to medicinal quality marijuana, which is supplied by the government (Randall 1997).

A fascination with *Cannabis* is by no means new. In the Paris of the mid-nineteenth century, a fashion for cannabis flourished around Jacques-Joseph Moreau de Tours who conducted serious medical studies, as well as leading a more experimental and practically oriented "Club des Haschischins" (Moreau de Tours 1845). Both Charles Baudelaire (1860) and Théophile Gautier (1846) wrote on the cannabis experience, perhaps influenced by Humphrey Davey's 1839 account of the inhalation of nitrous oxide, all of them early exemplars of a literary tradition of writing about the drug experience that includes Jean Cocteau's (1889–1963) striking account of opium use, as well as the notable accounts of Aldous Huxley and Robert Charles Zaehner.

America too experienced a nineteenth-century cultural awakening concerning cannabis. The American poet Bayard Taylor wrote on the hashish experience at about the same time as Baudelaire. And Fitz Hugh Ludlow took the literary world by storm with his *The Hasheesh eater: being passages from the life of a Pythagorean* (1857) (Ott 1993: 387 f.). And with the birth of blues and jazz and the development of the American music industry, cannabis gained a new circle of users amongst the hard-pressed, often poor, hungry, and overworked musicians, who were called upon to produce flights of creative and energetic music night after night. Both Louis Armstrong and Fats Waller were pursued at different times for cannabis possession. In 1930, Satchmo was even arrested for pot possession, and commented famously on the toughening drug laws that, "At first you was a misdemeanour. But as the years rolled by you lost your 'misd' and got

meaner and meaner” (Sherman *et al.* 1999: 63).

Earlier history

The general contour of the received history of cannabis is that the plant in its medicinal or narcotic use played almost no role in European or American culture before about 1800, its medicinal and recreational uses being better known in other parts of the world (Aldrich 1997). This may well be because the psycho-active constituents of the plant were not naturally present in the variants grown outside the tropics. Recent histories of cannabis firmly enlist pre-modern India as a shining example of a culture in which medicinal and psycho-active uses of cannabis were widespread and fully integrated not only into recreational and sexual life, but also into religious practice.

The nineteenth century saw Europe and America waking up to the medical and social possibilities of cannabis, and its growing role as a stimulant and narcotic alongside coffee and tobacco. But the twentieth century marked a sharp and to some extent irrational reaction to cannabis, with its demonization being completed after the Second World War.

While it may be the case that there are few European voices before 1800 saying anything important about cannabis, one such voice also happens to be one of the loudest and coarsest voices on any topic. In *Gargantua and Pantagruel*, François Rabelais (1490–1553) gave a characteristically rambling and florid account of the herb, which he nicknamed Pantagruelion (Rabelais 1955: iii.49–52). He ended book three of *Gargantua and Pantagruel* with the following poem,

Arabians, Indians, and Sabaeans,
Cease your praise, sing no more paeans,
To incense, myrrh, or ebony.
Come here, a nobler plant to see,
We'll give you seed to take away;
And if it grow with you, then say
A million prayers of thanks to heaven;
And swear the realm of France, that's given,
The sacred Pantagruelion's
The happiest beneath the sun. — Rabelais (1955: 432)

It is characteristically mischievous of Rabelais to hold up hemp as a possible French gift to Asia. Rabelais knows some medicinal properties of Pantagruelion, for example that it “softens hard sinews, contracted joints, sclerotic gout, and gouty swellings. If you want quickly to heal a scald or burn, apply

some Pantagruelion raw. . .” (Rabelais 1955:427). But, in typically bombastic and over-extravagant form, it is chiefly as the source of rope that he praises the plant, claiming for it a leading role in business, trade, transport, and all aspects of private and public life. As was noted, the cannabis plant grown outside Asia did not have strong narcotic qualities, and surely of all people, Rabelais would have celebrated these properties had he known of them.

Garcia da Orta

In fact, the narcotic properties of cannabis were first brought clearly to the attention of European physicians a few years after Rabelais’s death (1553) through Garcia da Orta’s 1563 publication of the landmark work, *Colloquies on the simples and drugs of India* (da Orta 1563, 1987).

Da Orta was descended from a family of Spanish Jews, which was expelled to Portugal in 1492. His father was forcibly baptized five years later. Garcia himself was teaching at the University of Lisbon by the 1530s. In 1534 he sailed to India, fleeing the impending Inquisition. He established a successful practice in Goa, on the west coast of India, south of Bombay, an island of which he owned the lease. Da Orta became a personal friend as well as physician of the Sultan Burhān Nizām Shāh of Ahmednagar. In 1560, the Inquisition reached Goa, but Da Orta was not persecuted. However, after his death the church authorities became aware of his family’s Jewish heritage, and his remains were exhumed and burnt in an *auto da fé* in December 1580.

Da Orta’s work was written in Portuguese, and was most often read through the Latin adaptation made by Clusius (1526–1609) not long after the publication of the original (Clusius 1567). Clusius’s book went through five editions in his own lifetime. The publication of the *Colloquies* marked a turning point in the history of the European understanding of the natural world for several reasons. Most obviously, it opened the eyes of sixteenth-century European readers to a whole world of natural products and medical traditions which was completely new to them. Equally important was the fact that da Orta had sufficient intellectual courage, coupled with respect for first-hand observation, to contradict the great classical authorities on herbal medicine (Boxer 1963: 14). “Do not try to frighten me with Dioscorides or Galen,” says da Orta, “because I merely speak the truth and say what I know” (da Orta 1987: 60). European readers thrilled to the colourfulness and independent thinking of da Orta’s writing, and his work was

hugely influential, being, for example, a major source for both Bontius and Linnaeus (Boxer 1963: 28).

Da Orta's eighth colloquy is dedicated to "Bangué", his spelling of the Sanskrit word *bhaṅgā*. He begins with an enquiry about the difference between cannabis and opium. Da Orta's colloquies are written, often with humour, as working dialogues between da Orta himself and a stupid sidekick called Ruano. In the chapter on cannabis, he begins by having his stooge ask da Orta what he means when he curses his servants, shouting "bangué" or "opium" at them. Does da Orta really mean there is a distinction between these two drugs, and if so, what is it? Da Orta tells Ruano that *bangué* is different from opium, and describes how Indians use the seeds or pounded leaves "to quiet the women" (da Orta 1987: 54). (At least Da Orta is even-handed in his sexism; later he describes how Indian women use opium to make their lovers perform more slowly and satisfyingly (da Orta 1987: 331–32).) Da Orta goes on to explain how spicy drinks are made with cannabis as an ingredient, and he notes the effects as follows (da Orta 1987: 55–6):

The profit from its use is for the man to be beside himself, and to be raised above all cares and anxieties, and it makes some break into a foolish laugh. I hear that many women take it when they want to dally and flirt with men. . . . The great Sultan Bahadur said to Martin Affonso de Souza, to whom he wished every good thing and to whom he told his secrets, that when at night he wanted to go to Portugal, Brazil, Turkey, Arabia, or Persia, he only had to take a little Bhangue. This was made up into an electuary with sugar and spices and was called Maju.

. . . Those of my servants who took it, unknown to me, said that it made them so as not to feel work, to be very happy, and to have a craving for food. I believe it is so generally used by such a number of people that there is no mystery about it. . . . I have not tried it. . . . [But] many Portuguese have told me that they have taken it and that they experienced the same symptoms, more especially the female partakers. However, it is not one of our medicines and we had better not waste any more time over it.

In the middle of the seventeenth century, then, on the west coast of India, cannabis was "generally used" for recreational and aphrodisiac purposes and was not thought extraordinary by local people.

If Garcia da Orta stands at the cusp of a major transition in the European understanding of Asian herbal medicine, so does another figure, William

O'Shaughnessy (1809–1902), who was even more important as a pivotal figure in the understanding specifically of cannabis.

William O'Shaughnessy (1809–1902)

By any measure, Sir William O'Shaughnessy was an extraordinary man. Born in Limerick in 1809, he graduated M.D. from the Edinburgh medical school in 1829. Shortly after graduation, at the age of 22, O'Shaughnessy invented the technique of intravenous fluid and electrolyte replacement therapy for critically dehydrated cholera patients. In the early 1830s, O'Shaughnessy lectured on forensic medicine and published important works on chemistry, toxicology, and the pathology of cholera in Britain, and also on the use of iodine for the treatment of scrofulous diseases. In 1833 he joined the East India Company's service as an assistant surgeon and departed for Calcutta. In this, he was joining the early nineteenth-century "brain drain" to India of highly able people who were unable to find in Britain the professional preferment they felt they deserved. Within two years, O'Shaughnessy's abilities were recognized by his appointment as professor of chemistry at the Medical College of Calcutta. His deep interest in materia medica, including the traditional remedies of India, led him to publish the influential *Bengal dispensatory and pharmacopoeia* in 1841 (O'Shaughnessy 1841). This work was the progenitor of all subsequent volumes of the *Pharmacopoeia Indica*, and both directly and indirectly O'Shaughnessy's *Dispensatory* exerted a defining influence over the British practice of medicine and drug prescription in India for almost a century. In 1843, O'Shaughnessy was elected Fellow of the Royal Society.

Later, O'Shaughnessy changed professions, and in 1855, as Director of Telegraphs for India, he brought telegraphic communications to India, a service for which he was knighted in 1856 by Queen Victoria. He returned to England in 1860, and retired from imperial service in 1861, at the age of fifty-two. In the same year, he inexplicably changed his name to William O'Shaughnessy Brooke. He was married three times, and died in 1889, at the grand age of eighty-one (Bridge 1998, Ghose 1994, Gorman 1984–1985, Mikuriya 1973; for further biographical references, see Gorman 1983: 115, n. 4.).

In 1839, at the height of his work on materia medica in India and holding the position of professor of chemistry and natural philosophy at the Medical College of Calcutta, O'Shaughnessy published a book entitled *On the preparations of the Indian hemp, or gunjah (Cannabis Indica), their effects on the animal system in health, and their utility in the treatment of tetanus*

and other convulsive disorders. O’Shaughnessy’s research was to stimulate an explosion of interest in Britain and elsewhere in the medical use of cannabis.

O’Shaughnessy began his study with a competent and wide-ranging survey of the previous information available on cannabis in Europe and Asia. He noted that western Europe was almost completely ignorant of the medical uses of cannabis, and only faintly aware of its stimulant properties.¹ In contrast, cannabis was known to Sanskrit, Persian and Arabic writers from much earlier periods.

O’Shaughnessy’s account is full of lively anecdote and observation. Allow your imagination, for a moment, to follow O’Shaughnessy’s description of the collection of cannabis resin during the hot season in central India and Nepal (1839a: 6)k:

Men clad in leathern dresses run through the hemp-fields, brushing through the plant with all possible violence; the soft resin adheres to the leather, is subsequently scraped off, and kneaded into balls, which sell from five to six rupees the seer [ca. 2lbs]. . . . In Nipal, Dr. McKinnon informs me, the leathern attire is dispensed with, and the resin is gathered on the skins of naked coolies.

What a startling spectacle this might have presented to an unsuspecting hill-walker!

O’Shaughnessy describes many popular cannabis-based preparations, including *majoon* (Ar. *ma’-jūn* ‘kneaded’, or ‘electuary’), the same drink that da Orta’s friend Sultan Bahadur had used in the sixteenth century, to induce fantasies of world travel by night. O’Shaughnessy tells us that *majoon* is, “. . . a compound of sugar, butter, flour, milk, and *sidhee* or *bang*” (O’Shaughnessy 1839a: 7). These ingredients are prepared in an elaborate fashion to produce a kind of cannabis fudge or halwa which is divided into small lozenge-shaped pieces and sold at four rupees a seer [about 2lbs]. O’Shaughnessy notes that there are seven or eight *majoon* makers in Calcutta, and that

. . . all classes of persons, including the lower Portuguese, or ‘Kala Feringhees,’ and especially their females, consume the drug; that it is a most fascinating in its effects, producing extatic happiness, a persuasion of high rank, a sensation of flying, voracious appetite, and intense aphrodisiac desire.

¹O’Shaughnessy’s informant Kamalakantha Vidyalkanka is mistaken in finding reference to *gañjā* in the *Manusmṛti*. The references in Manu 5.5 and 5.19 are to *grñjana* ‘scallions’, not to *gunjara* or *gunjah* (O’Shaughnessy 1839a: 9–10).

The recipe for another popular hemp drink is given by O'Shaughnessy as follows (O'Shaughnessy 1839a: 7):

About three tola [80 tolas to a seer] weight, 540 troy grains, [of resinous dried cannabis] are well washed with cold water, then rubbed to powder, mixed with black pepper, cucumber, and melon seeds, sugar, half a pint of milk, and an equal quantity of water.

O'Shaughnessy's historical and descriptive information is fascinating and valuable for our present purpose, which is to clarify the uses of cannabis in pre-modern Indian herbal medicine. But from the medical and scientific point of view, the greatest contribution of O'Shaughnessy's little book was his record of a series of carefully observed clinical experiments with cannabis. He began by testing cannabis on animals, to establish its non-toxicity (O'Shaughnessy 1839a: 16):

Ten grains of Nipalese churrus, dissolved in spirit, were given to a middling-sized dog. In half an hour he became stupid and sleepy, dozing at intervals, starting up, wagging his tail, as if extremely contented; he ate some food greedily; on being called to, he staggered to and fro, and his face assumed a look of utter and helpless drunkenness. . . . in six hour he was perfectly well and lively.

O'Shaughnessy tested cannabis on other dogs, and on fish, cats, pigs, vultures, crows, adjutants (storks, presumably), horses, deer, monkeys, goats, sheep, and cows. These tests taught him that controlled doses of cannabis did not lead to convulsions or other serious toxic effects.

O'Shaughnessy then started to work with human patients, giving hemp to several sufferers of acute rheumatism. The effects were either negligible, or entirely beneficial. His next description is of a sad case of rabies. The patient ultimately died, but through the application of hemp, O'Shaughnessy was able to alleviate the patient's dreadful suffering over several days:

. . . the awful malady was stripped of its horrors; if not less fatal than before, it was reduced to less than the scale of suffering which precedes death from most ordinary diseases (O'Shaughnessy 1839a: 21).

O'Shaughnessy went on to describe his use of hemp to treat cholera, tetanus, and infant convulsions. In almost all cases the effects are reported as beneficial, offering pain relief and calming the patients. He also reports

the successful trials of the same type by other Calcutta physicians, including Mr. O'Brian, Dr. Bain, and his cousin, Richard O'Shaughnessy. Regarding tetanus, he concluded (O'Shaughnessy 1839a: 26–7),

The facts are such at least as justify the hope that the virtues of the drug may be widely and severely tested in the multitudes of these appalling cases which present themselves in all Indian hospitals.

For O'Shaughnessy, cannabis was showing serious promise as an anaesthetic and relaxant.

It is, perhaps, worth taking a moment to place O'Shaughnessy's work in a historical relationship to the search for surgical and dental anaesthesia. Many of O'Shaughnessy's experiments were aimed at controlling pain, even in the case of terminally ill patients. Seven years after O'Shaughnessy's work on cannabis, James Esdaile began exploring the use of mesmeric anaesthesia in his Calcutta clinic (Ernst 1995). In fact, O'Shaughnessy was one of the official visitors to Esdaile's clinic, and contributed to the official report on the work, albeit critically. At about the same time, in 1846, Crawford Long, Horace Wells, and William Morton demonstrated the use of ether in Boston (Cole 1965), and in 1847, in Edinburgh, Simpson presented his discoveries relating to chloroform (Simpson 1848). The search for methods of alleviating pain was topical at this period, and O'Shaughnessy's work seems to fit well into the pattern of early experiments in this area, although to my knowledge it has never been included in the received history of anaesthesia.

Indigenous evidence

Da Orta and O'Shaughnessy provide important early European voices on Indian cannabis, and through their reports we are already able to discern some features of the traditional uses and attitudes to the plant. But what of the indigenous voices on the same subject? ²

As we have seen, today's authors tend to idealize ancient India's relationship with cannabis, arguing that there was a golden age in India when cannabis was wholly and successfully integrated into daily life. But when making such claims, modern books all seem to quote each other and a small number of articles on this topic by non-professionals (i.e., non-Sanskritists). To what extent, then, is this claim true, if at all?

²For a bibliography of studies on cannabis in Indian medicine and culture, see Meulenbeld 1999–2000: Iib.232, note 1106.

A careful examination of the references to cannabis in pre-modern India turns up some surprises, the first of which is that reliable references to cannabis do not date from before about AD 1000.

Absence of early references

It is common for even learned authors to cite references to cannabis in the earliest Indo-European literature of Asia, including the Vedas, which are datable to the second millennium BC. For example, the word *bhaṅga* occurs in the *Atharvaveda*:

15. The five kingdoms of plants, having Soma as their chief (*creṣṭha*), we address; the *darbhá*, hemp, barley, *sáha* — let them free us from distress.³

This is cited as evidence that cannabis was known and used at an early period (Macdonell and Keith 1982: ii.93).

But the painstaking re-examination of this and similar passages by Meulenbeld (1989), building on the nineteenth-century study by Grierson (1894), reveals that we cannot be certain that these references are in fact to cannabis. In each case, they can be explained in other ways. Furthermore, the earliest references turn out to be to *bhaṅga*, not *bhaṅgā*. This is the difference between a masculine or neuter Sanskrit noun, and a feminine one. Cannabis is always feminine in Sanskrit, and a difference in grammatical gender cannot be ignored when interpreting ancient passages. The masculine word *bhaṅga* is a perfectly common word meaning a 'break, rupture, fracture', although it is true that in the AV passage mentioned, it is one item in a list of grasses. Similar arguments have been applied to other early occurrences of the various synonyms for cannabis. The word *vijayā*, for example, meaning 'conqueror' is also the name of another widely-used plant, *harītakī* or *Terminalia chebula* Retz. (Meulenbeld 1989: 62 n. 4).

To be absolutely certain that a reference to cannabis is intended in a pre-modern text, therefore, we need to find a description of the plant's morphology, a reference to its effects, or some other indication that is unambiguous. The mere isolated occurrence of one of the later synonyms for the plant is not sufficient evidence.

³AV 11.6.15 (Whitney and Lanman 1993: ii.642). Other vedic passages include RV 9.61.13 (*bhaṅgā*= *soma*), AV 8.8.3 (*bhaṅgā*); see also Pāṇini 5.2.4 (an agrarian crop), and Kātyāyana's *vārttika* on P. 5.2.29.

Earliest clear references

Vaṅgasena

On this basis, the earliest incontestible reference to cannabis so far identified comes from the “Compendium of the essence of medicine” (*Cikitsāsārasaṅgraha*) by the Bengali author Vaṅgasena who flourished in the period 1050–1100 (Meulenbeld 1999–2000: IIa.228–29). In a chapter on appetisers and digestives, Vaṅgasena mentions cannabis under the name *bhaṅgā*, calling it “a drug like opium whose mode of action is to pervade the whole body before being absorbed and digested” (Meulenbeld 1989: 64; Meulenbeld 1999–2000: IIa.226).⁴ Vaṅgasena also prescribes cannabis under the names *indrāśana* and *tribhavanavijaya* in two recipes for promoting long and healthy life.⁵ The contexts, synonyms, and purposes of Vaṅgasena’s uses of the words confirm clearly that he knew cannabis. However, his reference to opium is confused: he knows the name, but thinks it is the foam (*phena*, perhaps venom?) of a snake (*ahi*), a confusion we see also in some later authors (see Wujastyk 2001: 307, n. 3 for discussion). It has long been known that opium is a fairly late arrival in India and, since it is mentioned in confused terms by an early author in the same verse as cannabis, perhaps we can conjecture that the two substances were introduced to India together, or at least at a similar time.

Cakrapāṇi

According to the great nineteenth-century scholar Grierson (1894), the next testimony for cannabis comes from Cakrapāṇi Datta, who was also from Bengal. Cakrapāṇi flourished at the same time as Vaṅgasena, probably composing his works between 1075 and 1100. His father Nārāyaṇa was a minister and superintendent of kitchens at the court of the Pāla dynasty of Bengal. These kings were famous patrons of the arts, and a beautifully illustrated manuscript exists in the Wellcome Library in London was created during Cakrapāṇi’s lifetime by King Vighrahapāla III.⁶ Descendants of Cakrapāṇi’s family are still extant, living in Shillong in Meghālaya state (Meulenbeld 1999–2000: IIa.92–93). Cakrapāṇi Datta was a great scholar

⁴*pūrvam vyāpyākḥilaṃ kāyaṃ tataḥ pākañ ca gacchati/
vyavāyi tad yathā bhaṅgā phenam cāhisamudbhavam// 19//
Dīpanapācanadravyalakṣanādhikāra*, verse 19 (Rāya and Rāya 1983: 878).

⁵*Rasāyana* 143 and 407 (Rāya and Rāya 1983: 740, 760).

⁶The *Aṣṭasāhasrikāprajñāpāramitā*, shelved at Wellcome Indic €1.

of medicine, and wrote numerous learned commentaries and treatises, attaining a position of scholarship and authority in classical Indian medicine arguably unequalled after his time.

However, research published only this year by Meulenbeld (1999–2000: IIa.444) now sadly invalidates Grierson’s claim to have found cannabis in Cakrapāṇi’s writings. The particular work in which Grierson found the references is a Sanskrit and Bengali dictionary of herbal terminology, the “Moonlight of Words” (*Śabdacandrikā*). The references are certainly there, and the work is certainly by someone called Cakrapāṇi Datta. But it now transpires that there are two medical authors called Cakrapāṇi Datta, or else that a work by the original Cakrapāṇi was heavily revised and reworked by a later hand. In any case, the dictionary refers to fruits which were introduced into India from South America, so parts of the work at least must be post-1500, i.e., after the arrival of the Portuguese in Goa.

Dhanvantarīyanighaṇṭu

India has an old tradition of compiling dictionaries and word indexes for various purposes. This tradition was extended to medicine at an early time, and there exists a large number of medical lexicons of different types. One of the more prominent of these works is the *Lexicon of Dhanvantari* (*Dhanvantarīyanighaṇṭu*), Dhanvantari being the Indian equivalent of, perhaps, Aesclepius. In its present form, this lexicon is datable to the eleventh century (Meulenbeld 1999–2000: IIa.173). We know little about its author, but some manuscripts ascribe the work to Mahendrabhogika, a resident of the town today called Thanesar, in Haryana, near Delhi. This work refers to cannabis (*vijayā*) in verses which describe it unmistakably: a characteristic synonym cluster occurs; the narcotic effect is explicitly mentioned.⁷

Classical Indian medicine developed at an early period a well-defined set of categories for classifying plants and their medicinal properties. A medicinal substance may have up to four principle ingredients: flavouring (*rasa*), potency (*vīrya*), post-digestive flavouring (*vipāka*), and inherent

⁷ *vijayā rañjikā bhaṅgī tandrākṛdbahuvādinī/
mādinī mādikā māduḥ proktā gañjākinis tathā // 130//
guṇāḥ –
bhaṅgī kaphaharī tiktā grāhiṇī pācanī laghuḥ/
tikṣṇoṣṇā pittalā mohamandavāgvahnivardhinī // 131 //
Dhanvantarīyanighaṇṭu 1.130–131 (Purandare 1986: 31).*

efficacy (*prabhāva*). Each of these ingredients may have a set number of values.⁸

Using these classical categories, Dhanvantari's *Lexicon* lists the medical properties of cannabis: it removes humoral phlegm, it is sharp, it aids digestion, and it is light. Being sharp and 'heating', it increases humoral bile, and it stimulates delusions, slows speech, and raises the heat of the digestive fire. This is the earliest Indian work so far identified which lists the effects of cannabis in any detail.

Cannabis is also listed in similar terms in later medical dictionaries such as the still early and important work written by the Gujarati scholar Soḍhala in the early 1200s.⁹ Using the name *bhṛṅgī*, alongside other synonyms, Soḍhala adds to the list of cannabis's qualities that it is aphrodisiac, and sleep-inducing. He also calls it "swindler's bride", though for what reason is unclear.

Yogaratnamālā

The next definitive citation of cannabis is in a work on Tantric magic, which includes medical materials, called "The Garland of Jewels of Yoga" (*Yogaratnamālā*), by Nāgārjuna (Meulenbeld 1999–2000: IIa.193–5). Amongst procedures and mantras for various extraordinary magical and sexual operations, the text recommends the use of the smoke of cannabis (*mātulānī*) as a drug which makes one's enemies feel that they are possessed by evil spirits (Meulenbeld 1989: 64). This work, datable to the twelfth or early thirteenth century, may come from Gujarat.

"The Garland of Jewels of Yoga" is of interest not only as an early testimony to cannabis, but because of the association of cannabis with magical acts, and in particular with the tantric subculture. Cannabis has historically had perhaps its greatest use as a narcotic amongst the *sādhus*, renouncer monks of India. These are the people we saw recently on our televisions, jumping into the river in their millions at Allahabad, on the occasion of the Kumbha Mela.

⁸See, e.g., Meulenbeld (1987), Rao and Sudarshan (1985–1987: ii.142 ff, et passim), and Wujastyk (2001: 245 et passim) for further details.

⁹Meulenbeld 1989: 64; Meulenbeld 1999–2000: IIa.216. *Soḍhalanighaṅṭu* I.77 (*nidrākaram*), I.663 (*dhūrtavadhūḥ*) II.58, II.569 (*kāmadā*); *Gadanigraha* (Sharma 1978: 7, 75, 95, 140)

Śārṅgadhara

The author Śārṅgadhara wrote a medical compendium in the fourteenth century which, for reasons which I have outlined elsewhere (Wujastyk 2001: 305ff.), became one of the best loved and most widely used works on medicine in India in the last half millennium. Manuscript copies are to be found in abundance in libraries all over the sub-continent. This work includes a small number of medical recipes which definitely contain cannabis. Śārṅgadhara repeats Vaṅgasena's statement that cannabis acts quickly by first spreading throughout the body, and only later being metabolized. He also knows it as an intoxicant (*mada*). In his chapter on medical compounds, he lists cannabis amongst the ingredients for a remedy for cough, wheezing, loss of appetite, and wasting, and in another tonic to be taken with honey for various problems including diarrhoea, anaemia, and weight loss.¹⁰

Śārṅgadhara's *Compendium* is widely used today as a source of recipes by the Indian āyurvedic pharmaceutical industry, and it would be interesting to see whether these particular recipes containing cannabis are amongst those being manufactured for sale today, as a sort of modern incarnation of Collis Brown's Chlorodyne.¹¹

From the time of Śārṅgadhara onwards, cannabis becomes relatively commonplace in medical literature, and we do not need to trace its every occurrence. However, there is a non-medical text which brings us back to the use of cannabis amongst the sādhus, or wandering religious renunciates.

Dhūrtasamāgama

The "Conference of Rogues" (*Dhūrtasamāgama*) is a fourteenth-century comic drama composed in 1324 by Jyotirīśvara Kaviśekhara.¹² The first part of the play relates a wrangle between the religious mendicant Every City (Viśvanagara) and his pupil Bad Conduct (Durācāra) over a beautiful courtesan from the bazaar. The dispute comes to the court, and is tried by Judge Lower Class (Asajjāti). The judge decides to impound the lady for himself. While he is distracted, a clown arrives and tries to get the girl. A

¹⁰Śārṅgadharaśaṃhitā 1.4.19cd–20ab, 1.7.203, 2.6.72 'Jātīphalādicūrṇa', 2.12.256 'Grahaṇī Vajrakapāṭa' (Srikantha Murthy 1984: 19, 48, 92, 181).

¹¹J. Collis Brown's Chlorodyne, commonly used from the mid-nineteenth century to the 1940s and even later, contained morphine, ether, cannabis and treacle.

¹²Keith (1970: 261) argues for a date nearer to the reign of Narasiṃha of Vijayanagara (1487–1507); Raghavan *et al.* (1949–: 9.303) cite Winternitz for 1324.

barber called Root Ripper (*mūlanāśana*) arrives and claims repayment of a debt from the woman; she refers the barber to the judge, who pays the debt from his student's wallet, and then demands a haircut from the barber. The barber ties the judge up and absconds, leaving the clown to rescue the judge. In the middle of this Brian Rix farce, there is a cannabis moment. When the mendicants are before the judge, the latter demands payment of a deposit before he will give an opinion. One of the mendicants says

“Here is my *gañjā* bag; let it be accepted as a deposit.”

The judge (taking it pompously, and then smelling it greedily) says:

“Ah! [What good luck! I have managed to get hold of] some *gañjā* which is soporific and corrects derangements of the humours, which produces a healthy appetite, sharpens the wits, and acts as an aphrodisiac” (Grierson 1894: 261).

For all his lusts and corruptions, Judge Low Class has managed to list all the main properties of cannabis which were known in the learned medical literature of the day.

Ānandakanda

Continuing with the theme of cannabis use amongst renunciate mendicants and alchemists, we come to the *Root of Bliss* (*Ānandakanda*).¹³ This is a gigantic work, consisting of about 6900 verses on tantric alchemy and yoga, datable from internal evidence to the twelfth or thirteenth century (Meulenbeld 1999–2000: IIa.592). It has been called “the most encyclopedic work of the entire Hindu alchemical canon” (White 1996: 167), and although much of the work is derivative of earlier authors, one innovation is a long and detailed chapter on cannabis (*vijayākalpa*: i.15.313–499).

The *Ānandakanda* describes the mythological origin of cannabis in terms which are standard in Indian legend: at the time of the creation of the world, the gods and demons churned the primal ocean, and certain substances, including cannabis, coagulated out of the mix. Cannabis is said to have different colours in the different ages of the world: from white in the original golden age, it becomes red, yellow, and in today's degenerate age it is green. In another fairly standard classificatory manoeuvre, cannabis is said to be of four different castes, *brāhmaṇa* (white), *ṣatriya* (red), *vaiśya* (green), and *sūdra* (black). With these categories in hand, the

¹³White 1996: 167–9 et passim; Meulenbeld 1999–2000: IIa.583–92; Dash 1999: ch. 31. The following account is based chiefly on the last cited work.

bazaar cannabis seller would have had ample combinatorial possibilities with which to beguile his customers.

The morphology of the cannabis plant is described in terms of being similar to the trident which is the symbol of Śiva. There are said to be eight types of cannabis plant, depending on whether the leaves of the plant have one, three, five, six, nine, ten, eleven, or thirteen leaflets. Particularly striking is the *Ānandakanda*'s knowledge of the gender of the plant, and that the female plants have the particularly narcotic properties and cause fainting when used in excess. It is also stated that the female plant has a synergistic action that enhances the effect of other medicines when added to them. The cannabis obtained from the male plant and the female plant after pollination is called *bhaṅgā*; the product of the unpollinated female plant is called *gañjā*.

The cultivation of the plant is described in some detail, with attention to the best times of year to grow the plant, and several religious rites and prayers which are to accompany planting and harvesting. Some unexpected features include watering the plants with mixtures such as water and butter, seawater, even alcohol and meat. Another odd procedure clearly underlines the alchemical milieu from which this text emanated: a small hole is made in the tips of the plants and a drop of mercury is poured into the hole.

Ten types of cannabis user are listed: saints (*siddha*), sages (*muni*), women, people of the four castes, yogis, children, old people, medical patients, people suffering from impotence, and people with many wives. This fascinating list spans the whole socio-religious spectrum of cannabis use in pre-modern India, and highlights the fact that the plant had prominent religious as well as medical and social functions.

The *Ānandakanda* lists several types of cannabis medicines (*cūrṇa*, *modaka*, *vaṭikā*, *leha*, *pāka*, *dugdhapāka*, *kvātha*), as well as more recreational preparations such as sherbet (*śarbat*), barfee, laddu, *majūn*, betel. Cannabis can also be smoked in a chilum pipe.

The *Ānandakanda* is aware of the toxic potential of cannabis, and gives a detailed list of nine stages of toxic symptoms.¹⁴

Finally, the *Ānandakanda* describes rejuvenation treatment based on

¹⁴1. red eyes, dry tongue, lips, palate, and nose; hot breath. 2. closed eyes, rigid body. 3. burning feeling in feet, hands, eyes; choking voice. 4. hunger and thirst, sleepy eyes, rolling eyes. 5. choking voice, forgetfulness of recent events. 6. complete amnesia. 7. weakness in upper limbs and body; prostration. 8. disorientation, raised eyebrows, weeping. 9. shouting, fainting, coma, eructation, groaning, rolling on the ground, difficulty speaking, incoherence, disclosure of secret feelings, misery, collapse (Dash 1999: 254).

cannabis. This involves treatment over a long period in a specially constructed hut (*kuṭi*). This procedure is strongly reminiscent of a similar rejuvenation procedure described in the earliest Sanskrit medical literature, one that requires not cannabis but the unknown plant Soma. And that procedure itself echoes a rite of ritual rebirth that dates from the mid-first millennium BC.¹⁵

There are many other points made about cannabis in the *Ānandakanda*, which gives us the fullest account of cannabis at present known in Sanskrit literature.

Rājavallabhanighaṇṭu

A medical lexicon by Rājavallabha, now available only in the eighteenth-century revision of Nārāyaṇadāsa Kavirāja, provides a verse which is perhaps the most widely cited description of cannabis of all, one frequently repeated by commentators in the nineteenth century:

Cannabis is the food of the god Śiva. It is sharp, hot, and intoxicating. It counteracts bleaching skin diseases (*kuṣṭha*). It gives strength, mental acuity, and digestive power, and it removes the phlegmy humour. It leads to long life (*rasāyanam*).

The text continues with a legend pertaining to the origin of cannabis:

Once upon a time, Cannabis (*vijayā*) was born from the churning of mount Mandara in the ocean of milk. It is a favourite of the god Śiva, and it is called ‘Conquest’ (*vijayā*) because it gives victory over the three worlds. It was received by men here on earth for the good of humankind. It is aphrodisiac, it destroys all worries, and it is exciting.¹⁶

Thus, Rājavallabha presents cannabis as a divine gift to mankind, and he lists its medical and other properties in clear terms.

¹⁵Meulenbeld 1999–2000: 589; White 1996: 169; Dash 1999: 246; Wujastyk 2001: 121.

¹⁶*śakrāśanam tu tīkṣṇoṣṇam mohakṛt kuṣṭhanāśanam/
balamedhāgnikṛc chleṣmadoṣahāri rasāyanam//48//
jātā mandaramanṭhanāj jalaṇidhau pīyūṣarūpā purā
trailokye vijayapradeti vijayā śrīdevarājapriyā/
lokānām hitakāmyayā kṣititale prāptā naraiḥ kāmādā
sarvātāṅkavināśaharsajanāni yaiḥ sevītā sarvadā*

Pariccheda 6, verse 48 (Śāligrāmavaiśya Māthuravaṃśīya 1895: 189). The second part of the verse *jātā... sarvadā* is not present in the editions available to me, but is cited and ascribed to this text, or a similar one called *Paryāyaratnamālā*, by both Grierson (1894) and Dutt (1877: 237). Cf. Meulenbeld 1999–2000: IIa.342 f.

Conclusion

It is clear that cannabis has played an important role in Indian medicine, alchemy and tantra. The latter point is taken up by Agehananda Bharati, a participant-observer of the Hindu ascetic tradition who describes typical cannabis-related tantric rites in some detail (Bharati 1975: 250, 253, 287, 301). Bharati develops a theory that cannabis was used by tantric adepts to overcome the resistance they may have felt to performing required religious procedures which deliberately crossed social taboos. The anthropologist Joe Alter observed cannabis in use amongst the ascetic wrestling groups whom he studied in the early 1990s (Alter 1997: 155):

At some akharas mashing almonds is done in tandem with the preparation of *bhang* (hashish). Almonds and bhang are often prepared in the same way insofar as bhang has to be smashed and ground into a paste. . . . The two pastes are occasionally drunk together when diluted and mixed into a potion called *thandai*. (*Thandai* can also refer to any cool drink made of mixed substances, usually milk, nuts, and fruits.)

And we have seen that medical texts include cannabis in the *materia medica* from the eleventh century onwards.

We started this paper by noting the contestation to which cannabis is currently subject. In earlier times in India, and in many circles even today, cannabis has had an accepted role in religious practice, in medicine, and as a social and recreational intoxicant. In fact, the consumption of drinks, sherbets, and sweets containing cannabis was, and in some circles still is, considered a rather higher-class foible than drinking alcoholic drinks.

I shall close with the charming account given by the learned botanist and historian Uday Chandra Dutt, who wrote in Calcutta at the end of the nineteenth century:

On the last day of Durga pooja. . . , it is customary for the Hindus to see their friends and relatives and embrace them. After this ceremony is over it is incumbent on the owner of the house to offer his visitors a cup of *bhang* and sweet-meats for tiffin.

An intoxicating agent with such recommendations cannot but be popular, and so we find it in general use amongst all classes especially in the North-West provinces and Behar. In Bengal it has latterly become the fashion to substitute brandy, but I well remember having seen in the days of my boyhood the free use of *bhang* among the better classes of people who would have

shunned as a pariah any one of their society addicted to the use of the forbidden spirituous liquor. At the doors of many rich baboos, Hindustani durwans could be seen rubbing the *bhang* in a stone mortar with a long wooden pestle, and the paste so prepared was not solely intended for the use of the servants. I do not mean to say that all classes of Hindoos without exception are or were addicted to the use of *bhang*. Some castes among the up-country men and some classes of people amongst Bengalis are as a rule very temperate in their habits and do not use any narcotic at all; but the ordinary run of orthodox Hindus, accustomed to have their little excitements, use *bhang* for the purpose without incurring any opprobrium such as would result from the use of spirituous liquors.¹⁷

At the end of the nineteenth century, then, cannabis was still considered by many to be a high-class recreation, an indulgent foible, perhaps, but nevertheless one which was favourably contrasted with the despised liquor.

¹⁷Dutt 1877: 236.

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