# A Translation of the New Edition of the Suśrutasaṃhitā Jason Birch Dominik Wujastyk Andrey Kleban Draft of 6th Norm San Jason Birch Jason Birch Draft of 6th Norm San Jason Birch Draft of

Draft of 6th November 2021 ason Birch and Dominik Wujastol Halt of November 6, 2021 for 19 © Jason Birch and Dominik Wujastyk

© Dominik Wujastyk. I am distributing this pre-publication draft under a Creative Commons Attribution-ShareAlike 4.0 International License. For details, see http://creativecommons.org/licenses/by-sa/4.0/

### **Abstract**

The Suśruta Project is producing a new Sanskrit text edition of the Su-śrutasaṃhitā based on the early Nepalese manuscripts. As we gradually transcribe and edit the manuscripts, we are producing this new translation of the classic work.

 $<sup>\,</sup>$  1  $\,$  MS Kathmandu KL 699, MS Kathmandu NAK 1-1079, and MS Kathmandu NAK 5-333.

# **Contents**

The manuscripts and editions used in the vulgate editions by Yā-	•
davaśarman Trivikrama Ācārya	5
The sources of the 1915 edition	5
The sources of the 1931 edition	5
The sources of the 1938 edition	6
Evaluation	7
The 1939 edition	8
For the Bhānumatī	8
For the Suśrutasaṃhitā	10
Evaluation	10
Features of the manuscript transmission	12
Palaeographical features	12
Palaeographical features	12
Sūtrasthāna, adhyāya 1	13
Sūtrasthāna, adhyāya 2	20
Literature	<b>2</b> 0
Sūtrasthāna, adhyāya 28	21
Kalpasthāna, adhyāya 1	22
Literature	22
Manuscript notes	23
Translation	24
[Threats to the king]	24
Uttaratantra, adhyāya 16 (17 in the vulgate)	33
Literature	33
Translation	33
[Complications]	42
[Characteristics of the probe]	43
[Complications]	43
Uttaratantra, adhyāya 38	45

Abbreviations	47
Index of Manuscripts	49
References	50
Glossary On digital critical editions	<b>62</b> 67
4	
4	

# Kalpasthāna, adhyāya 1

The first chapter of the Kalpasthāna of the *Suśrutasaṃhitā* addresses the topic of protecting a king from those who would assassinate him using poison. The king's kitchen is presented as the site of greatest vulnerability. The staff in the kitchen must be vetted carefully and watched for signs of dissimulation. The description of the body-language that tells a poisoner (verses 18–25) are engaging and vivid. These verses are closely parallel in sense to a passage in the *Arthaśāstra* that says,

The signs of a poisoner, on the other hand, are as follows: dry and dark look on the face, stuttering speech, excessive perspiration and yawning, trembling, stumbling, looking around while speaking, agitation while working, and not remaining in his place.<sup>50</sup>

Next, the text discusses the signs of poison in toothbrushes, in food, drink, massage oil and other items that are likely to come into physical contact with the king. In passages that are again paralleled in the *Arthaśāstra* the work describes how poisoned food kills insects and crackles in a fire, flashing blue and the reactions of various birds to poison are described.<sup>51</sup>

The work then moves on to the various symptoms experienced by the king after being poisoned, and remedies appropriate to each case. Poison exhibits characteristic signs when added to milk and other drinks.<sup>52</sup> Further forms of poisoning, their symptoms and treatments are described and finally the king is advised to live amongst trusted friends and to protect his heart by drinking various ghee compounds. He should eat the meat and soup made from various animals, including peacock, mongoose, alligator, deer. The chapter ends with the description of an emetic.

### Literature

A brief survey of this chapter's contents and a detailed assessment of the existing research on it to 2002 was provided by Meulenbeld.<sup>53</sup> Translations

<sup>50</sup> *Arthaśāstra* 1.21.8 (Kangle 1969: 1, 30), translation by Olivelle (2013: 97).

<sup>51</sup> Cf. *Arthaśāstra* 1.21.6, *ibid.*, Olivelle (2013: 96).

<sup>52</sup> Cf. *Arthaśāstra* 1.21.6 again.

<sup>53</sup> HIML: IA, 289–290.

of this chapter since 2000 have appeared by Wujastyk (2003: 131–139), P. V. Sharma (1999–2001: 3, 1–15), and Srikantha Murthy (2000–2).<sup>54</sup>

More recently, a discussion of the fourth chapter of this section in the light of the Nepalese manuscripts was published by Harimoto.<sup>55</sup> After a close comparative reading of lists of poisonous snakes, Harimoto concluded that, "the Nepalese version is internally consistent while the [vulgate] editions are not." Harimoto showed how the vulgate editions, had been adjusted textually to smooth over inconsistencies, and gave insights into these editorial processes.<sup>56</sup>

## Manuscript notes

• MS Kathmandu NAK 5-333 has foliation letter numerals, for example on f. 323a, that are similar to MS Cambridge Add. 1693,<sup>57</sup> dated to 1165 ce noted in Bendall's chart of Nepalese letter-numerals Bendall 1883: Lithograph V, after p. 225

For a bibliography of translations to 2002, including Latin (1847), English (1877), Gujarati (1963) and Japanese (1971), see HIML: IB, 314–315.

<sup>55</sup> Harimoto **2011**: 101–104.

The two editions that Harimoto noted, Su 1938 and Su 1889, present identical texts.

<sup>57</sup> Scan at cudl.lib.cam.ac.uk/view/MS-ADD-01693/1.

### **Translation**

- 1–2 And now I shall explain the procedures for safeguarding food and drink, as were declared by the Venerable Dhanvantari.<sup>58</sup>
  - 3 Divodāsa, the king of the earth, was the foremost supporter of religious discipline and virtue. With unblemished instruction he taught his students, of whom Suśruta was the leader.<sup>59</sup>

# [Threats to the king]

- 4–5 Evil-hearted enemies who have plucked up their courage, may seek to harm the king, who knows nothing of it. He may be assailed with poisons by or by his own people who have been subverted, wishing to pour the poison of their anger into any vulnerability they can find.<sup>60</sup>
  - 6 Therefore, a king should always be protected from poison by a physician.
  - 7 The racehorse-like fickleness of men's minds is well known. And for this reason, a king should never trust anyone.<sup>61</sup>
  - 58 MS H adds in the margin अथ खलु वत्स सुश्रुतः "Now begins Vatsa Suśruta." This phrase has been copied here by the scribe from the beginning of the *Suśrutasaṃhitā* chapter in the *sūtrasthāna* on the rules about food and drink (1.46.3 (Su 1938: 214)). The scribe presumably felt, not unreasonably, that this section had common subject matter with the present chapter. Further, SS 1.46.3 is the only place in the Nepalese transmission of the *Suśrutasaṃhitā* that names Dhanvantari and integrates him into the narrative of the *Suśrutasaṃhitā* as the teacher of Suśruta.
    - The mention of Dhanvantari here is the only other time in the Nepalese transmission that this authority is cited as the source of Ayurvedic teaching, and the unique occurrence of this actual phrase, "as was declared by the Venerable Dhanvantari." See the discussion by Klebanov (2021a: 28–32), who concludes that the earliest recoverable recension of the *Suśrutasaṃhitā* may have had the phrase only at this point and not elsewhere in the work. See the further discussion by Birch, Wujastyk, Klebanov, Parameswaran, et al. (2021).
  - 59 This is a quite different statement from the vulgate which has Dhanvantari as the teacher, and calls him the Lord of Kāśī (kāśipati) (Su 1938: 559). Dalhaṇa followed the vulgate but explicitly noted the reading before us with small differences: दिवोदासः क्षितिपतिस्तपोधर्मश्रुताकरः "Divodāsa, the king of the earth, was a mine of traditions about discipline and virtue."
  - 60 Verses about the use of Venemous Virgins as a weapon do not appear in the Nepalese manuscripts. Cf. Wujastyk 2003: 81 f., 132. This material is present in the commentary of Gayadāsa.
  - 61 The verb  $\sqrt{\text{s}}$  vas is conjugated as a first class root in the Nepalese manuscripts.

- 8–11 He should employ a doctor in his kitchen (*mahānasa*) who is respected by experts, who belongs to a good family, is orthodox, sympathetic, not emaciated, and always busy.
- 12–13 The kitchen should be constructed at a recommended location and orientation. It should have a lot of light,<sup>62</sup> have clean utensils and be staffed by men and women who have been vetted.<sup>63</sup>
- 17–18ab The chefs, bearers (*voḍhāra*), and makers of boiled rice soups and cakes and whoever else might be there, must all be under the strict control of the doctor.<sup>64</sup>
- 18cd–19ab An expert knows people's body language (*ingita*) through abnormalities in voice, movement and facial expression. He should be able to identify a poisoner by the following signs.
  - Wanting to speak, he gets confused, when asked a question, he never arrives at an answer, and he talks a lot of confused nonsense, like a fool. He laughs for no reason, cracks his knuckles and scratches at the ground. He gets the shakes and glances nervously from one person to another. His face is drained of colour, he is grimy (*dhyāma*) and he cuts at things with his nails.<sup>65</sup> A poisoner goes the wrong way and is absent-minded.
    - I shall explain the signs to look for in toothbrush twigs, in food and drink as well as in massage oil (abhyanga) and combs (avalekhana); in dry rubs (utsādana) and showers, in decoctions (kaṣāya) and massage ointment (anulepana); in garlands (sraj), clothes, beds, armour and ornaments; in slippers and footstools, and on the backs of elephants and horses; in nasya (snuff), inhaled smoke (dhūma), eye make-up (añjana), etc., and any other things which are commonly poisoned. Then, I shall also explain the remedy.
      - 28 Flies or crows or other creatures that eat a poisonous morsel (*bali*) served from the king's portion, die on the spot.
      - 62 We read महच्छुचिः with the Nepalese manuscripts and against the vulgate's महच्छुचि. We understand शुचिस् as a neuter noun meaning "light" following Apte (1992: 1050a).
      - 63 Verses detailing the ideal staff are omitted in the Nepalese manuscripts. Cf. Su 1938: 560; Wujastyk 2003: 132.
      - 64 The word सौपोदनैकपूपिक "chefs for the boiled rice soups and cakes" is grammatically interesting. The term सूपोदन (as opposed to sūpaudana) is attested in the *Bodhāyanīya-gṛhyasūtra* 2.10.54 (Shastri 1920: 68). More pertinently, perhaps, सूपोदन is attested in the Bower Manuscript, part II, leaf 11r, line 3 (Hoernle 1893–1912: vol. 1, p. 43).
      - 65 The word ध्याम is glossed by Dalhana (in a variant reading) as someone who is the colour of dirty clothes 5.1 (Su 1938: 560).

Cf. Arthaśāstra 1.21.8.

- 29 Such food makes a fire crackle violently, and gives it an overpowering colour like a peacock's throat.
- 30–33 After a chukar partridge looks at food which has poison mingled with it, its eyes are promptly drained of colour; a peacock pheasant drops dead. A koel changes its song and the common crane rises up excitedly.<sup>66</sup> It will excite a peacock and the terrified parakeet and the hill myna screech. The swan trembles very much, and the racket-tailed drongo churrs.<sup>67</sup> The chital deer sheds tears and the monkey releases excrement.<sup>68</sup>
- Vapour rising from tainted food gives rise to a pain in the heart, it makes the eyes roll, and it gives one a headache.<sup>69</sup>
- 35, 36cd In such a case, an errhine and a collyrium that are costus, lāmajja grass (*lāmajja*), spikenard (*nalada*) and honey (*madhus*);<sup>70</sup> a paste of sandalwood on the heart may also provide relief.<sup>71</sup>
  - 66 The verb अर्च्छित "rises up" is a rare form best known from epic Sanskrit (see Oberlies 2003: 212, §7.6.1). The transmitted form क्रोञ्ज is obviously a colloquial version of Sanskrit क्रोञ्ज. Commenting on 1.7.10 (Su 1938: 31), Dalhaṇa interestingly gives the colloquial versions of several Sanskrit bird names, even singling out pronunciation in the specific location of Kāṇyakubja. For क्रोञ्ज he says that people pronounce it कुरञ्ज and कोंचि. The form कोञ्ज is found in Pāli (see Cone 2001: 731, who notes that Ardhamāgadhī has the same form). Elsewhere, Dalhaṇa calls the bird क्रोञ्जिर, क्रोञ्जि, and कैचर (1.46.105 (Su 1938: 223), 6.31.154 (Su 1938: 684) and (6.58.44 (Su 1938: 790) respectively).
  - 67 Dalhana seemed confused about the racket-tailed drongo (भृङ्गराज). He called it a generic drongo (भ्रमरक), a word that can also mean "bee," (Dave 1985: 62), and then said that it is like the black drongo (धूम्याट) (for a nice explanation of this name, see Dave 1985: 62–63) and that people call it "the king of birds."
  - 68 MS Kathmandu KL 699 reads bull (বৃषभ) for Chital deer (पृषत). The latter may perhaps be mistaken for the former in the Newa script, although the reading of MS Kathmandu KL 699 is hard to read at this point.
  - 69 "Tainted" translates उपक्षिप्त. The word's semantic field includes "to hurl, throw against," and especially "to insult verbally, insinuate, accuse." The commentator Palhaṇa glossed the term as, "spoiled food given to be eaten" (विदूषितस्यान्नस्य भोक्तुं दत्तस्य), but he noted that some people read "उखाक्षिप्त" or "thrown into a pan." Other translators have commonly translated it as "served," perhaps influenced by Palhaṇa's "given (दत्त)."
  - 70 The vulgate supplies another phrase and verb at this point that is not present in the Nepalese transmission, but that makes the text flow more easily.
  - 71 Singh and Chunekar (1972: 350) discussed the difficulties in identifying লামজ, a plant cited more often in the *Suśrutasaṃhitā* than in the *Carakasaṃhitā*; Dalhaṇa adopted the common view that it is a type of *uśīra* or vetiver grass. The grammatical

- Held in the hand, it makes the hand burn, and the nails fall out. In such a case, the ointment (pralepa) is beautyberry ( $\acute{s}y\bar{a}m\bar{a}$ ), velvet-mite (indragopa), soma and water-lily (utpala).<sup>72</sup>
- 38–39 If he eats that food, through inattention or by mistake, then his tongue will feel like a pebble  $(aṣṭh\bar{\imath}l\bar{a})$  and it will lose its sense of taste. It stings and burns, and his saliva  $(\acute{s}lesman)$  dribbles out.<sup>73</sup> In such a case, he should apply the treatment recommended above for vapour  $(b\bar{a}spa)$ , and what will be stated below under "toothbrush twigs".<sup>74</sup>
  - On reaching his stomach, it causes stupor  $(m\bar{u}rcch\bar{a})$ , vomiting, the hair stands on end, there is distension, a burning feeling and an impairment of the senses.<sup>75</sup>
  - In this case, vomiting must quickly be induced using the fruits of emetic
    - neuter form मधुस् "sweetness" of the Nepalese manuscripts is less common than neuter मधु "honey, sweetness, liquorice."
  - 72 "Beautyberry" (Callicarpa macrophylla Vahl.) is one identification of त्र्यामा, but vaidyas and commentators have different ideas about the plant's identity (see Singh and Chunekar 1972: 410; Warrier et al. 1994–6: 1: 334; Nadkarni 1954: #420).
    - On translating इन्द्रगोप as "velvet-mite," see Lienhard 1978. Dalhaṇa's remarks show that he had a reading इन्द्रागोपा before him, and he tries to explain इन्द्रा and गोपा as separate plants. But he also says that some people read इन्द्रगोप.
    - Dalhaṇa curiously parses the name सोमा (f.) out of the compound; this feminine noun is almost unknown to Ayurvedic literature. Some dictionaries and commentators consider it a synonym for गुड्ची, others for ब्राह्मी or चन्द्रतरु. Dalhaṇa also mentions that some people think the word refers to the soma creeper (सोमलता), which might explain his choice to take the word as feminine. But the compounded word is far more likely to be सोम (m.), the well-known mystery plant (see Wujastyk 2003: 76–78, 125). If this can be taken as rue (Ruta graveolens, L.), as some assert, one can point to a pleasing passage in Dioscorides where rue plays an antitoxic role: "...it is a counterpoison of serpents, the stinging of Scorpions, Bees, Hornets and Wasps; and it is reported that if a man be anointed with the juice of the Rue, these will not hurt him; and that the serpent is driven away at the smell thereof when it is burned; insomuch that when the weasel is to fight with the serpent she armeth herself by eating Rue, against the might of the serpent" (cited from Wren 1956: 262; not found in Osbaldeston and Wood 2000).
  - The word সন্ত্রীলা is normally feminine. The Nepalese manuscripts read it with a short अ- ending. Gayadāsa noticed that some manuscripts read সন্ত্রীল with a short -अ ending (MS Bikaner RORI 5157, f. 5v:7–8) and Dalhana reproduced his observation. The vulgate reading "from his mouth (चास्यात्)" is more obvious (lectio facilior), but is not attested in the Nepalese manuscripts.
  - 74 Poisoned toothbrushes are discussed in verses 48 ff. below.
  - 75 I translate मूर्च्छा in the light of the metaphors discussed by Meulenbeld (2011), that include thickening and losing consciousness.

- nut (madana), bitter gourd ( $al\bar{a}bu$ ), red gourd ( $bimb\bar{\imath}$ ), and luffa ( $kos\bar{\imath}-tak\bar{\imath}$ ), taken with milk and watered buttermilk ( $uda\acute{s}vit$ ), or alternatively with rice-water.
- Reaching the intestines ( $pakv\bar{a}\acute{s}aya$ ), it causes a burning feeling, stupor, diarrhoea, thirst, impairment of the senses, flatulence ( $\bar{a}\acute{t}opa$ ) and it makes him pallid and thin.
- In such a case, purgation with the fruit of indigo  $(n\bar{\imath}l\bar{\imath})$ , together with ghee, is best. And 'slow-acting poison antidote  $(d\bar{\imath}u\bar{\imath}\bar{\imath}vi\bar{\imath}a\bar{\imath}i)$ ' should be drunk with honey and curds (dadhi).<sup>76</sup>
- When poison is in any liquid substances such as milk, wine or water, there are various streaks, and foam and bubbles form.
- And no reflections are visible or, however, if they can be seen once more, they are distorted, fractured, or tenuous and distorted too.<sup>77</sup>
- Vegetables, soups, food and meat are soggy and tasteless. They seem to go stale suddenly, and they have no aroma.
- 47 All edibles lack aroma, colour or taste. Ripe fruits rapidly rot  $(pra\sqrt{kuth})$  and unripe ones ripen.<sup>78</sup>
- When a toothbrush twig has poison on it, the bristles are corroded and the flesh of the tongue, gums and lips swells up.<sup>79</sup>
- Then, once his swelling is lanced, one should rub (*pratisāraṇa*) it with fire-flame bush flowers (*dhātakīpuṣpa*), jambul (*jambū*), mango stones (*āmrāsthi*) and chebulic myrobalan (*harītakī*) fruit mixed with honey.<sup>80</sup>
- 50 Alternatively, the rubbing (*pratisāraṇa*) can be done with either the roots of sage-leaved alangium (*aṅkolla*), the bark of blackboard tree

76 The 'slow-acting poison' is discussed at 5.2.25 ff. (Su 1938: 565).

- Both Nepalese witnesses read distorted (*vikṛta*) twice, which is tautologous. In the first occurrence both read विकृता without proper termination. One might read the sandhi in the second occurrence as or not distorted (*vāvikṛtā*), but this gives no better sense. The scribe of MS Kathmandu NAK 5-333, apparently the original hand, added in the margin the alternate reading "double (*yamalā*)" as in the vulgate. Perhaps the scribe too was troubled by the tautology. It is also evidence that he was aware of a witness with variant readings similar to the vulgate. We emend for grammar but retain the *lectio difficilior*.
- 78 The root  $\sqrt{3}$  equivariant, putrify, rot" is apparently known only from its few uses in the Suśrutasaṃhitā.
- 79 Gayadāsa and Dalhaṇa point out that "enclosure of a tooth (दन्तवेष्ट)" and "flesh of the tooth (दन्तमांस)" have the same meaning (2.16.14–26 (Su 1938: 331–332)).
- 80 This recipe is different from the vulgate.

I'm still unhappy about this

Mention this in the introduction as an example of the scribe knowing the vulgate

fn about sadyas+

- (saptachada) or siris seeds (śirīṣamāṣaka).81
- One should give advice about a poisoned tongue-scraper or mouthwash (*kavala*) in the same way as for a toothbrush twig.
- 51cd Massage oil that has been laced with poison is slimy, thick and discoloured.
  - When the massage oil has been contaminated with poison, boils arise, pain, a discharge  $(sr\bar{a}va)$ , inflammation of the skin, and sweating. And the flesh  $(m\bar{a}msa)$  splits open.
- In such a case, sandalwood, Indian rose-bay (tagara), sostus, and vetiver grass (uśīra), bamboo leaves (veṇupatrikā), heart-leaved moonseed (somavallī) and calamine (amṛtā), white clitoria (śvetā), sacred lotus (padma), and Indian barberry (kālīyaka) should be made into an ointment (anulepana) for the patient, who has been sprinkled with cold water. That is also recommended as a drink with the juice and leaves of wood apple (kapittha). 84
  - In the case of a dry rub (*utsādana*), a shower (*parīṣeka*), an infusion, a massage ointment (*anulepana*), or in beds, clothes, or armour, the physician should understand that it is the same as for massage (*abhyaṅga*).85
- When a comb has poison in it, the hair falls out, the head aches and blood oozes from the follicles (*kha*) and lumps (*granthi*) appear on the head. In such a case, one should repeatedly apply an ointment of black earth soaked with bear's bile, <sup>86</sup> ghee, beautyberry (*śyāmā*), <sup>87</sup> black creeper (*pālindī*) and amaranth (*taṇḍulīyaka*). Good alternatives are

Bear's bile instead of deer's bile.

- 81 The spelling of the name अङ्कोल varies अङ्कोट, अङ्कोठ, अङ्कोल (Singh and Chunekar 1972: 5); Dalhaṇa notes that the form अङ्कोल is a colloquialism (1.37.12 (Su 1938: 161)). The sentence is awkward and we have emended शिरीषमाषक to be a plural, as in the vulgate, rather than the ablative singular of the Nepalese witnesses. We follow Dalhaṇa in interpreting the compound to refer to the distinctive bean-like siris seeds, rather than to mung beans (माषक) (5.1.50 (Su 1938: 562)).
- 82 The feminine स्फोटा for "boils" is unattested.
- 83 Some say तगर is Indian valerian, but there remain many historical questions about the ancient and regional identities of this plant (see, e.g., Singh and Chunekar 1972: 173-174)[334]avs.
- 84 This compound could be interpreted as "wood apple juice and cassia cinnamon (*patra*)." Note that this recipe is differs from that of the vulgate, which requires urine.
- 85 See verse 52 above.
- 86 Dalhaṇa comments here that 'bile is that fluid which goes along inside the tube attached to the liver' (कालखण्डलग्रनलिकामध्यगतजलं पित्तम्) 5.1.57 (Su 1938: 562).
- 87 See note **72**.

- either the fluid extract of cow-dung, or the juice of jasmine  $(m\bar{a}lat\bar{\iota})$ , the juice of woodrose  $(m\bar{u}sikakarn\bar{\iota})$ , or household soot.<sup>88</sup>
- If either massage oil for the head, or a helmet for the head, in a wash, turban, or garlands that are contaminated with poison, then one should treat it in the same way as a comb.
- 60–61 When face make-up is poisoned, the face becomes dark and has the symptoms found with poisoned massage oil. It is covered with spots (kaṇṭaka) that are like lotus-spots (padminīkaṇṭaka).<sup>89</sup> In this case, the drink is honey and ghee, and the ointment (pralepa) is sandalwood with ghee, curds (payasyā), honey, verbena (phañjī), scarlet mallow (bandhu-jīva) and hogweed (punarnavā).<sup>90</sup>

62–63ab Elephants and the like become ill and they dribble saliva. And the rider gets spots (*sphoṭa*) and a discharge on his scrotum, penis, and rectum. In this case, one prescribes the same therapy as for poisoned massage oil for both the rider and the mount.

When there is poison in snuff (nasya) or smoke, the symptom (linga) is blood coming out of the apertures of the head (kha), a headache, a flow of mucus (kapha) and impairment of the senses.

In such a case, ghee of cows etc., boiled up with their milk and atis roots (ativiṣā), is prescribed, with henna (madayantikā), as a cold drink

or errhine.

- 65cd–66 Flowers lose their fragrance and colour, and wilt. On smelling them, he gets a headache and his eyes fill with water. In this case, the treatment is what was proposed above for vapour  $(b\bar{a}spa)$  and that which is traditional for face make-up.
  - 88 The plant identifications in this passage follow Dalhaṇa's glosses, although he noted a difference of opinion on the identity of mouse-ear (mūṣikakarṇī). Singh and Chunekar 1972: 317; Sivarajan and Balachandran 1994: 23–25 discussed this issue well. The expression धूमो वागारमंजितः '...or the smoke termed "house" ' is commonly interpreted by translators and in Ayurvedic dictionaries as 'household soot,' and this does seem to be the meaning, in context. The term was comprehensively discussed by Meulenbeld (2008: 443).
  - 89 See the description of this condition at 2.13.40 (Su 1938: 323), where the skin on the face is characterized as having pale circular patches that are itchy and have spots.
  - 90 The common plant-name पुनर्नवा is read as पुनर्णवा in both Nepalese witnesses. This unusual form is technically-speaking legal according to Pāṇini 8.4.3, but is not attested in published texts. पुनर्णवा is found rarely in some other Nepalese manuscripts such as the *Brahmayāmala* (a.k.a. *Picumata*, 44.81, transcription thanks to Shaman Hatley), and elsewhere (e.g., in Gaṇapatiśāstrī 1920–5: 20, where it is the name of a constellation.

punarṇṇavā in the N & K MSS

śrita for śrta When it is in ear-oil, there is degeneration in the ear, and painful swelling. There is also a discharge from the ear and in such a case it needs to be irrigated (*pratipūraṇa*) promptly with ghee and honey. Extracted juice (*svarasa*) of wild asparagus (*bahuputrā*) and very cold juice of white cutch tree (*somavalka*) are also recommended as something good.<sup>91</sup>

When poison is mixed in with eye make-up (añjana), he gets tears and rheum (upadeha), with a burning feeling, pain, faulty vision (dṛṣtivi-bhrama), and possibly even blindness.<sup>92</sup>

70–71 In this case, one must immediately drink ghee and have it also in an eyewash (tarpaṇa) with long pepper (māgadha). One should have an eye ointment (añjana) of the juice of periploca of the woods (meṣaśṛṅga) and have the extract (niryāsa) of three-leaved caper (varuṇa), wood apple (kapittha) and periploca of the woods (meṣaśṛṅga) and the flower of marking-nut tree (bhallātaka).

72–73 Because of poisoned slippers there will definitely be a swelling, numbness  $(sv\bar{a}pa)$ , a discharge  $(sr\bar{a}va)$  and an outbreak of spots (sphoṭa) on the feet. One should clean  $(pra\sqrt{s\bar{a}dh})$  footstools together with slippers.

- Ornaments lose their lustre, and they do not shine as they used to. They damage their respective locations with burning, sepsis  $(p\bar{a}ka)$ , and fissuring  $(avad\bar{a}rana)$ .<sup>93</sup>
- One should apply the stated procedure for massage oil (abhyaṅga) to poisoned slippers and ornaments.
- 75cd–76 In the case of the affliction (*upasarga*) by poison which has been described above, starting from 'vapour' and ending with 'ornaments,' the physician should observe the side-effects (*upadrava*) and then prescribe the therapy called the Great Fragrance (*mahāsugandha*) antidote, which I shall describe.<sup>94</sup>
- 77–78ab He should prescribe it in drinks, liniments (*ālepana*), errhines (*nasya*),

explain more

Medical difference from Sharma.

example where the vulgate clarifies that these should be used separately; appears to be a gloss inserted into the vulgate text.

The syntax of the Nepalese version is slightly unclear, but the vulgate has smoothed out the difficulties.

<sup>92</sup> The term translated as "faulty vision" could also mean "rolling eyes."

<sup>93</sup> The reading अवदारुण in MS Kathmandu KL 699 is not attested elsewhere in Sanskrit literature. On "sepsis" for पाक, see Wujastyk 2003: xlv–xlvi.

This antidote is indeed described later, in dramatic terms, at 5.6.14–27 (Su 1938: 581). A recipe with eighty-five ingredients including cow's bile, it is praised as chief of all antidotes, one that can drag the patient back from the very jaws of death, from even the poisonous fangs of Vāsuki.

and in eye ointment ( $a\tilde{n}jana$ ). Also, he should use sharp purgatives and emetics. If bleeding is present, he should have the indicated veins pierced.

- 78cd–79ab If either purging nut  $(m\bar{u}$ ,  $sik\bar{a})$  or a fern  $(ajaruh\bar{a})$  is tied on to the King's wrist, then all food that is mixed with poison will be rendered free of poison. 95
  - 79cd–80 He should always keep his heart protected (*hṛdayāvaraṇa*) when amongst people who are not his friends. <sup>96</sup> Before eating he should drink the kinds of ghee called 'Invincible' and 'Immortal'. <sup>97</sup> He should drink ghee (*sarpiṣ*), honey, curds (*dadhi*), milk (*payas*), or cold water.
    - 81 He should consume monitor lizard, peacock, mongooses, chital deer (*pṛṣata*), and blackbuck (*hariṇa*) too, that destroy poison, and their juices.
    - 82 As discerning person should add well-crushed black creeper ( $p\bar{a}li-nd\bar{\iota}$ ), 98 liquorice (madhuka), and sugar to the meats of monitor lizard ( $godh\bar{a}$ ), mongoose and blackbuck (harina) too.
    - 83 Add sugar and atis root (ativiṣā) to peacock flesh, together with ginger (mahauṣadha) And for meat from a chital deer (pārṣata), he should add long peppers (pippalī), with ginger (mahauṣadha).
    - 84ab A cold neem broth with honey and ghee is wholesome too.
    - 84cd A discerning person should partake of hard and soft foods that counteract poison.<sup>99</sup>
      - 85 If poison might have been drunk, a person who has protected his heart should make himself vomit using long pepper, liquorice, honey, sugar,
      - 95 In early Ayurvedic literature, the plant স্তান্ধর is mentioned only here and its identity is unknown. It may be a fern of the Nephrodium family, according to Singh and Chunekar (1972:7). Dalhaṇa (5.1.78 (Su 1938: 563)) cited a description of the two plants from the little-known authority Uśanas (HIML: IA, 660 et passim) that described স্তান্ধর as a white root with spots on it that looks like collyrium when it is split; when drunk with sandalwood it causes poison to be digested.
      - 96 The Carakasaṃhitā described 'protecting the heart' as drinking several sweet, oily drinks to surround the heart and keep it safe (6.23.46 (Ca. 1941: 574)). Dalhaṇa explained it as taking a number of anti-toxic medicines, including those listed in the present passage, in order to cover or hide (সভাবন) the heart 5.1.79–81 (Su 1938: 563).
      - 97 These ghee compounds are described in later chapters: see 5.2.47–49 (Su 1938: 566) and 5.6.13 (Su 1938: 581).
      - 98 Or some say turpeth.
      - 99 On this expression, Yagi, T. 1994. A Note on bhojya- and bhakṣya-. In: A Study of the Nīlamata. Aspects of Hinduism in Ancient Kashmir. Y. Ikari (ed.).

The two uses of prāpta are hard to translate. prāptāḥ — kṣipram is an example of the vulgate banalizing the Sanskrit text to make sense of a difficult passage.

√vyadh not √vedh (also elsewhere and for the ears), causative optative.

opposite of the vulgate Same as As 1.8.89 (As 1980: 79).

Medical difference.

sugarcane juice and water.

The first chapter in the Kalpas.

# Uttaratantra, adhyāya 38

- 1 And now I shall explain the countermeasures against disorders of the female reproductive system (*yonivyāpat*).<sup>160</sup>
- 2 Since for good men, a woman is the most pleasurable thing, therefore a physician should diligently attend to the diseases located in the female reproductive system (*yoni*), because he is entirely engaged in (i.e., curing these diseases) for the sake of (people's?) happiness.<sup>161</sup>
- A corrupted female reproductive system cannot consume semen, and therefore, the woman cannot hold the fetus. She gets severe prolapses (*arśas*), abdominal lump (*gulma*) and similarly many other diseases (*roga*).
- 4 Dosas wind, etc., corrupted due to misconduct, amorous activity, fate, and also corruption of  $\bar{a}$  rtava and semen  $(b\bar{\imath} ja)$ , produce various diseases in the female reproductive system. These 20 diseases are taught here spearately and one by one along with their treatment, causes and signs.
- 5.1 Because of *vāta*, occur:
  - 1. Retaining (*udāvartā*),
  - 2. the one called Infertile (vandhyā), and
  - 3. Soaked (plutā),
  - 4. Flooded (pariplutā), and
  - 5. Flatulent (*vātalā*).
- 5.2 And because of pitta, occur:
  - 1. Bloodloss (Raktakṣayā),
  - 2. Vomiting one (vāminī), and
  - 3. Miscarrying (Sraṃsanī),
  - 4. Child-murderess (putraghnī), and also
  - 5. Bilious (pittalā).
- 6.1 And because of kapha occur:
  - 1. (atyānanda),

<sup>160</sup> On this broad understanding of the term *yoni*, see Das 2003: pp. 572–5

<sup>161</sup> As our translation indicates, the sentence construction does not allow an unambiguous identification of who or what is the referent of the pronoun *tad* in the compound form *tadadhīna* 'devoted to it.' Our current understanding is that *tad* refers to the 'most pleasurable thing' mentioned in pāda a. It could, however, also refer to 'them,' that is, the 'good men.'

- 2. (karninī), and
- 3. two (caraṇī),
- 4. ( $putraghn\bar{\imath}$ ), and also
- 5. bilious (pittalā).
- 6.2 And similarly there are other diseases involving all *doṣas*:
  - 1.  $(\acute{s}and\bar{\imath})$ ,
  - 2. (aṇḍīnī),
  - 3. two (mahatī),
  - 4. (sūcīvaktrā),
  - 5. (sarvātmikā).
  - 7 The *Udāvartā* releases foamy *ārtava* with difficulty. One should know that the *Vandhyā* does not produce *ārtava*, and the *Utplutā* is constantly painful.
  - 8 In case of the *Pariplutā*, there is extreme lust for the villagers' duty (sexual intercourse). The *Vātalā* is hard, stiff, afflicted by stabbing and pricking pain. In all four former types, there are painful sensations associated with the wind.

## **Abbreviations**

Ah 1939 Kuṃṭe, Aṇṇā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar,

Hariśāstrī (1939) (eds.), श्र्मद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्र्मद-रुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रण्1तया आयुर्वेद-रसायनाह्वया ट्राक्रया च समुल्लसितम् = The Astāngahṛidaya (6th edn., Muṃbayyām: Nirṇayasāgara Press), ark:/13960/t3tt6967d.

Anup Anup Sanskrit Library (n.d.).

AS Asiatic Society (n.d.).

As 1980 Ațhavale, Anamta Dāmodara (1980) (ed.), Aṣṭāṅgasaṅgrahaḥ.

Śrīmad Vṛddhavāgbhaṭaviracitaḥ Induvyākhyāsahitaḥ (Puṇe: Maheśa Anaṃta Āṭhavale, Śrīmad Ātreya Prakāśanam), ark:/

13960/t9773bb9z.

Bhela 1921 Mookerjee, Ashutosh and Ananta Krishna Shastri, Ved-

antabisharad (1921) (eds.), *The Bhela Samhita. Sanskrit Text* (Calcutta: University of Calcutta), ark:/13960/t3sv3157j; Based on two copies made of the Thanjavur codex unicus (MS Thanjavur TMSSML 10773, Burnell 1880:63–4, P. P. S.

Sastri 1933: #11085).

Bhela 2000 Krishnamurthy, K. H. (2000), Bhela-saṃhitā. Text with English

Translation, Commentary and Critical Notes (Haridas Ayurveda

Series, 8; Varanasi: Chaukhambha Visvabharati).

BL British Library (n.d.).

Ca. 1941 Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्व-

सुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रण्1ता, चरकदृढबलाभ्यां प्रतिसंस्कृता च-रकसंहिता, श्र्1चक्रपाणिदत्तविरचितया आयुर्वेदद्1पिकाव्याख्यया संवलिता (3rd edn., Mumbayyāṃ: Nirnaya Sagara Press), URL, accessed

01/01/2018.

HIML Meulenbeld, Gerrit Jan (1999–2002), A History of Indian

Medical Literature, 5 vols. (Groningen: E. Forsten), ISBN:

9069801248.

KL *Kaiser Library* (n.d.).

NAK National Archives of Kathmandu (n.d.).

NCC Raghavan, V. et al. (1949–), New Catalogus Catalogorum, an Alphabetical Register of Sanskrit and Allied Works and Authors, 39 vols. (Madras University Sanskrit Series; Madras: University of Madras); v.1: revised edition, 1968.

NGMCP (2014), 'Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue', Universität Hamburg and Deutsche Forschungsgemeinschaft, URL.

RORI Rajasthan Oriental Research Institute (n.d.).

Su 1889 Bhaṭṭācāryya, Jīvānanda Vidyāsāgara (1889) (ed.), सृश्रुतः. सूत्र-निदान-शार्ार-चिकित्सा-कल्पोत्तर-तन्त्र-किल्पत आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सृश्रुतनामधेयेन तच्छिष्येण विरचितः (3rd edn., Calcutta: Saratī Press), ark:/13960/t1nh6j09c; HIML: IB, 311, edition b.

Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सु-श्रुतेन विरचिता, वैद्यवरश्र्।डल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasamhita of Sushruta, the Nibandhasangraha Commentary of Shri Dalhaṇāchārya (Mumbayyāṃ: Nirṇayasāgaramudrāyantrālaye), ark:/13960/t3sv0mt50, accessed 29/07/2020; HIML: IB, 312 edition \*v.

Ācārya, Yādavaśarma Trivikrama (1931) (ed.), सुश्रुत-संहिता, वैद्यवरश्र्। डल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शार्।र-चिकित्सा-कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasaṃhitā of Sushruta with the Nibandhasangraha Commentary of Shree Dalhaṇāchārya (2nd edn., Mumbayyāṃ: Pāṇḍuraṅga Jāvajī at the Nirṇayasāgaramudrāyantrālaye), ark :/ 13960 / t9j41sg94, accessed 09/06/2020; HIML: IB, 312 edition \*v.

Acārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्र्राडल्हणाचार्यविरचितया निबन्धसंग्रहाख्य-व्याख्यया निदानस्थानस्य श्र्रागयदासाचार्यविरचितया न्यायचन्द्रिकाख्यप- ञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press), ark:/13960/t09x0sk1h; HIML: IB, 313, edition cc ('the vulgate').

Su 1938<sup>2</sup> Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता, श्र्डल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्र्-गयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition (Su 1938).

Ācārya, Yādavaśarma Trivikrama and Śarman, Nandakiśora (1939) (eds.), सुश्रुतसंहितायाः सूत्रस्थानम्. श्र्चक्रपाणिदत्तविरचितया भानुमत्व्याख्याया समेतम् = Sushrut-sañhitā (sūtra Sthān) with Bhānumatī Commentary by Chakrapāṇi Datta with Introduction by Gaṇanāth Sen (Śrīsvāmi Lakṣmīrāma Nidhi Granthamālā = Shrī Swāmī Lakshmī Rām Trust Series, 1; [Jaipur]: Śyāmasundara Śarman), ark:/13960/t54g0d12m; Printed at the Nirṇayasāgara Press, Bombay.

Su 1945 Ācārya, Yādavaśarma Trivikramācārya and Ācārya, Nārāyaṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संविलता = the Suśrutasaṃhitā of Suśruta with Various Readings, Notes and Appendix etc. (Mumbāi: Nirṇayasāgarākhyamudraṇālaye), url.

TMSSML Tanjore Maharaja Serfoji Saraswati Mahal Library (n.d.).

Viṣṇudh. Śarman, Madhusūdana and Śarman, Mādhavaprasāda (1912) (eds.), विष्णुधर्मोत्तरपुराणम् = [Viṣṇudharmottarapurāṇa] (Mumbai: Khemarāja Śrīkṛṣṇadāsa at the Śrīveṅkaṭeśvara Steam Press), ark:/13960/t6qz6fr23; Lithograph format. Edited on the basis of a manuscript belonging to the astrologer Śudhākaraśarman of the Varanasi Sanskrit Pāṭhaśālā.

# **Index of Manuscripts**

The numbers after the comma refer to pages in this document.

Bikaner RORI 5157 27 Kathmandu NAK 1-1079 2 Cambridge Add. 1693 23 Kathmandu NAK 5-333 2, 23, 28

Kathmandu KL 699 2, 26 Thanjavur TMSSML 10773 47

# References

- Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छि-ष्येणाग्निवेशेन प्रण्1ता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्र्1चक्रपाणिदत्तवि-रचितया आयुर्वेदद्1पिकाव्याख्यया संवलिता (3rd edn., Mumbayyāṃ: Nirnaya Sagara Press), URL, accessed 01/01/2018.
- Ācārya, Yādavaśarma Trivikramācārya and Ācārya, Nārāyaṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संवलिता = the Suśrutasaṃhitā of Suśruta with Various Readings, Notes and Appendix etc. (Mumbāi: Nirṇayasāgarākhyamudraṇālaye),
- Adriaensen, Rob C. R., Barkhuis, Roelf, and Ruijters, Jean-Louis (1984), 'An English Translation of Suśrutasaṃhitā, Nidānasthāna 1, 1–39, Together with Gayadāsa's Nyāyacandrikā', in Gerrit Jan Meulenbeld (ed.), *Proceedings of the International Workshop on Priorities in the Study of Indian Medicine* (Groningen: Forsten), 277–310.
- Apte, Vaman Shivaram (1992), *The Practical Sanskrit-English Dictionary* (Kyoto: Rinsen Book Company), ISBN: 4-653-00038-7; Reprinted from **gode-apte**.
- Baber, Zaheer (1996), *The Science of Empire: Scientific Knowledge, Civilization, and Colonial Rule in India* (Albany: State University of New York Press).
- Bausi, Alessandro et al. (2015), *Comparative Oriental Manuscript Studies. An Introduction* (Hamburg: Tredition). DOI: 10.5281/ZENODO.46784.
- Bendall, Cecil (1883), Catalogue of the Buddhist Sanskrit, Manuscripts in The, University Library, Cambridge: With Introductory Notices and Illustrations of the Palaeography and Chronology of Nepal and Bengal (Cambridge: University Press), ark:/13960/t03x8vz7b.
- Bhaṭṭācārya, Candrakānta (1910–7) (ed.), सुश्रुतसंहिता प्रथमखण्डम् सूत्रस्थानात्मकम्...हाराणचन्द्रचक्रवर्तिकविराजविरचितसुश्रुतार्थसन्द्1पनभाष्य-समेतम्...चन्द्रकान्त भट्टाचार्य-प्रमुखैः संशोधितम् = [The Suśrutasaṃhitā with the Commentary Suśrutārthasandīpanabhāṣya by Hārāṇacandra Cakravarti] (Kalikātā: Satya Press); Edition "t" in HIML: IB, 312.
- Bhattarai, Bidur (2020), Dividing Texts. Conventions of Visual Text-Organisation in Nepalese and North Indian Manuscripts (Studies in Manuscript Cultures; Berlin/Boston: de Gruyter), 388.

- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Parameswaran, Madhu K., et al. (2021), 'Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the Suśrutasaṃhitā', *Academia Letters*. Doi: 10.20935/AL2992.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Rimal, Madhusudan, et al. (2021), 'Dalhana and the Early 'Nepalese' Version of the Suśrutasamhitā'. Doi: 10.20935/al3733.
- Breton, P. (1826), 'On the Native Mode of Couching', *Transactions of the Medical and Physical Society of Calcutta*, 2: 341–82, ark:/13960/t3dz8nn5t, URL, accessed 02/06/2021.
- Bronkhorst, Johannes (2021), 'Patañjali's Āryāvarta = Śuṅga realm?', *Academia Letters*. DOI: 10.20935/al291; Article 291.
- Bronner, Yigal (2021) (ed.), 'The Pandit Project' (30 Sept.), URL.
- Burghart, Marjorie (2016), 'The TEI Critical Apparatus Toolbox: Empowering Textual Scholars through Display, Control, and Comparison Features', *Journal of the Text Encoding Initiative*, 10/Issue 10. DOI: 10.4000/jtei.1520, URL, accessed 12/12/2017.
- —— (2017), 'Textual Variants', in Marjorie Burghart, James Cummings, and Elena Pierazzo (eds.), *Digital Editing of Medieval Texts: A Textbook* (DEMM), URL, accessed 04/07/2021.
- Burnell, Arthur Coke (1880), *A Classified Index to the Sanskrit Mss. in the Palace at Tanjore* (London: Trübner), ark:/13960/t4xh86j61; Bhelasamhitā described on pp. 67 ff.
- Carpue, J. C. (1816), An Account of Two Successful Operations for Restoring a Lost Nose from the Integuements of the Forehead...Including Descriptions of the Indian and Italian Methods (London: Longman et al.), ark:/13960/t2q57fn42, accessed 20/03/2019.
- Cone, Margaret (2001), *A Dictionary of Pāli* (Oxford: The Pali Text Society), ISBN: 0 86013 394 x.
- Cordier, P. (1903), 'Récentes découvertes de mss. médicaux sanscrits dans l'Inde (1898–1902)', *Muséon, Nouvelle Série*, 4: 321–52, ark:/13960/t26b2j457, accessed 02/01/2020; Reprinted in Roşu 1989: 539–70.
- Coult, Ro. (1731), 'An Account of the Diseases of Bengall', in *Indian Science* and *Technology in the Eighteenth Century* (Impex India), 141 f., 276.

- Crawford, D. G. (1930), *Roll of the Indian Medical Service*, 1615–1930 (London, Calcutta, Simla: Thacker).
- Das, Rahul Peter (2003), The Origin of the Life of a Human Being. Conception and the Female According to Ancient Indian Medical and Sexological Literature (Indian Medical Tradition; Delhi: Motilal Banarsidas), ISBN: 81-208-1998-5.
- Dave, K. N. (1985), *Birds in Sanskrit Literature* (Delhi: Motilal Banarsidass), ISBN: 0-89581-676-8, ark:/13960/t2c94cv80.
- Deshpande, Vijaya (1999), 'Indian Influences on Early Chinese Ophthal-mology: Glaucoma As a Case Study', *Bulletin of the School of Oriental and African Studies*, 62: 306–22. DOI: 10.1017/S0041977X00016724.
- —— (2000), 'Ophthalmic Surgery: A Chapter in the History of Sino-indian Medical Contacts', *Bulletin of the School of Oriental and African Studies*, 63/3: 370–88, ISSN: 0041-977X. DOI: 10.1017/s0041977x00008454.
- Elliot, Robert Henry (1918), *The Indian Operation of Couching for Cataract: Incorporating the Hunterian Lectures Delivered before the Royal College of Surgeons of England on February 19 and 21, 1917* (London: H. K. Lewis).
- Emeneau, M. B. (1969), 'Sanskrit Syntactic Particles "kila, khalu, nūnam", *Indo-Iranian Journal*, 11/4: 241–68.
- Falk, Harry (1991), 'Silver, Lead and Zinc in Early Indian Literature', *South Asian Studies*, 7/1: 111–7. DOI: 10.1080/02666030.1991.9628430.
- Fan, Ka Wai (2005), 'Couching for Cataract and Sino-indian Medical Exchange Fromthe Sixth to the Twelfth Century Ad', *Clinical and Experimental Ophthalmology*: 188–90. DOI: 10.1111/j.1442-9071.2005.00978.x; Unaware of Deshpande 1999; 2000.
- Gaṇapatiśāstrī, T. (1920–5), Āryamañjuśrīmūlakalpaḥ (Trivandrum Sanskrit Series, 70; Anantaśayane: Rājakīyamudraṇayantrālaye), ark:/13960/t4pk5sj0j.
- Gombrich, Richard (1979), "He cooks softly: dverbs in Sanskrit grammar,"

  Bulletin of the School of Oriental and African Studies, 42/2 (June): 244–56.

  DOI: 10.1017/s0041977x0014580x.

- Gupta, Sri Madhusudana (1835–6) (ed.), Ayur-veda-prakāśa [also Called Suśruta-saṃhitā] by Suśruta. the Suśruta, or System of Medicine, Taught by Dhanwantari, and Composed by His Disciple Suśruta, 2 vols. (Calcutta: Education Press and Baptist Mission Press), ark:/13960/t6841qw6x.
- Harimoto, Kengo (2011), 'In Search of the Oldest Nepalese Manuscript', *Rivista degli Studi Orientali*, 84/1–4: 85–106, ISSN: 0392-4866, URL, accessed 08/09/2019.
- —— (2014), 'Nepalese Manuscripts of the Suśrutasaṃhitā', Journal of Indian and Buddhist Studies (Indogaku Bukkyogaku Kenkyu), 62/3: 23–29 (1087-1093). DOI: 10.4259/ibk.62.3\_1087, URL, accessed 08/09/2019.
- —— (pre-published), '[Preliminary Edition of the Nepalese MSS of the Su-śrutasaṃhitā, adhyāyas 1.1–3, 6.4]'; Unpublished document dated 2010.
- Hayashi, Takao (2017), 'The Units of Time in Ancient and Medieval India', *History of Science in South Asia*, 5/1: 1–116. DOI: 10.18732/h2ht0h.
- Hemarāja Śarman (1938) (ed.), काश्यपसंहिता (वृद्धज्ञवक्रायं तन्त्रं वा) महर्षिणा मार्1चकश्यपेनोपदिष्टा ... हेमराजशर्मणा लिखितेन विस्तृतेन उपोद्धातेन सहिता ... स-त्यपाल भिषगा कृतया विद्योतिन्1 हिन्द्1व्याख्यया ... समुल्लसिता (1st edn., Mumba: Nirṇayasāgara Press), URL, accessed 02/02/2018.
- Hendley, T. Holbein (1895), A Medico-topographical Account of Jeypore, Based on the Experience of Twenty Years' Service As a Residency Surgeon and Thirteen As Superintendent of Dispensaries at Jeypore, Rajputana (Calcutta: Calcutta Central Press Company).
- Hessler, Franciscus (1844–55), Suśrutas Ayurvédas: Id Est Medicinae Systema a Venerabili D'hanvantare Demonstratum a Susruta Discipulo Compositum; Nunc Primum Ex Sanskrita in Latinum Sermonem Vertit, Introductionem, Annotationes Et Rerum Indice Franciscus Hessler (Erlangen: Ferdinandum Enke), URL, accessed 04/11/2017.
- Hoernle, A. F. Rudolf (1893–1912) (ed.), *The Bower Manuscript: Facsimile Leaves, Nagari Transcript, Romanised Transliteration and English Translation with Notes* (New Imperial Series, 22; Calcutta: Government of India and under the patronage of the Bengali Government, Archaeological Survey of India), ark:/13960/t05z1bg4q.
- —— (1907), Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body (Oxford: Clarendon Press).

- Hofer, Theresia (2007), 'Swami Laxmi Ram's Ayurvedic Pharmacy in Jaipur, India', *Wellcome History*, 34: 2–3, URL, accessed 01/07/2021.
- Holwell, J. Z. (1767), An Account of the Manner of Inoculating for the Small Pox in the East Indies With...Observations on The...Mode of Treating That Disease in Those Parts (London: T. Becket & P. A. de Hondt), ark:/13960/t3ws9h63c.
- Jack, David Morton (1884), 'A Thesis on Cataract in India: Its Pathology and Treatment', Wellcome Library, London, MS.3007, URL, accessed 02/06/2021.
- Jośī, Veṇīmādhavaśāstrī and Jośī, Nārāyaṇa Harī (1968), Āyurvedīya Mahākośaḥ arthāt Āyurvedīya Śabdakośaḥ Saṃskṛta—Saṃskṛta (Muṃbaī: Mahārāṣṭra Rājya Sāhityta āṇi Saṃskṛti Maṃḍaḷa), url.
- Kangle, R. P. (1969), *The Kauṭilīya* Arthaśāstra (2nd edn., Delhi: Motilal Banarsidass), ISBN: 81-208-0042-7, ark:/13960/t3gz6qh1s, accessed 23/09/2021.
- Keith, Arthur Berriedale (1908), review of A. F. Rudolf Hoernle (1907), Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body (Oxford: Clarendon Press), in Zeitschrift Der Deutschen Morgenländischen Gesellschaft, 1/62: 134–9, URL, accessed 17/04/2021.
- Klebanov, Andrey (2021*a*), 'On the Textual History of the Suśrutasaṃhitā (1): A Study of Three Nepalese Manuscripts', to be published in *eJIM: Electronic Journal of Indian Medicine*, URL, accessed 09/09/2019.
- —— (2021*b*), 'On the Textual History of the Suśrutasaṃhitā, (2): An Anonymous Commentary and its Identified Citations', in Toke Lindegaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), *Body and Cosmos: Studies in Early Indian Medical and Astral Sciences in Honor of Kenneth G. Zysk* (Leiden, Boston: Brill), 110–39.
- Kuist, James M. (1982), *The Nichols File of The Gentleman's Magazine* (Madison: University of Wisconsin Press), ISBN: 0-299-08480-9, ark:/13960/t53g2ct2z.
- Leffler, Christopher T. et al. (2020), 'The History of Cataract Surgery: From Couching to Phacoemulsification', *Annals of Translational Medicine*, 8/22: 1551–97, ISSN: 2305-5847. DOI: 10.21037/atm-2019-rcs-04, URL, accessed 02/11/2020.

- Lienhard, Siegfried (1978), 'On the Meaning and Use of the Word Indragopa', *Indologica taurinensia*, 6: 177–88, URL, accessed 06/02/2021; The indragopa is a 'red velvet mite'.
- Longmate, Barak (1794), 'A Curious Chirurgical Operation', *The Gentle-man's Magazine and Historical Chronicle*, 64.4 (Oct.): 883, 891, 892; I am grateful to the late John Symons of the Wellcome Library who identified the author 'B. L.' as the journalist Barak Longmate. See also Kuist 1982: 87.
- Majno, Guido (1975), *The Healing Hand. Man and Wound in the Ancient World* (Cambridge, MA: Harvard University Press), URL, accessed 26/08/2021.
- Malamoud, Charles (1996), 'Paths of the Knife: Carving up the Victim in Vedic Sacrifice', in *Cooking the World: Ritual and Thought in Ancient India. Translated from the French by David White* (Delhi, Bombay, etc.: Oxford University Press), 169–80.
- Manucci, Niccolò (1907–8), Storia Do Mogor or, Mogul India, 1653–1708 by Niccolao Manucci, Venetian; Translated with Introduction and Notes, by William Irvine (The Indian Texts Series; London: J. Murray), URL, accessed 04/10/2021.
- Masai, François (1950), 'Principes et conventions de l'édition diplomatique', *Scriptorium*, 4: 177–93. DOI: 10.3406/scrip.1950.2294.
- Meulenbeld, Gerrit Jan (1974), *The Mādhavanidāna and Its Chief Commentary: Chapters* 1–10. *Introduction, Translation, and Notes* (Leiden: Brill), ISBN: 978-90-04-03892-9; Meulenbeld provided a supplement to his 1974 listing of plant identities as an appendix in Das 2003.
- —— (1984), 'The Surveying of Sanskrit Medical Literature', in id. (ed.), *Proceedings of the International Workshop on Priorities in the Study of Indian Medicine* (Groningen: Forsten), 37–56.
- Meulenbeld, Gerrit Jan (1992), 'The Characteristics of a Doṣa', *Journal of the European Āyurvedic Society*, 2/1: 1–5, URL, accessed 31/08/2021.
- Meulenbeld, Gerrit Jan (2008), *The Mādhavanidāna with "Madhukośa," the Commentary by Vijayarakṣita and Śrīkaṇṭhadatta (Ch. 1-10). Introduction, Translation, and Notes* (Delhi: Motilal Banarsidass); Meulenbeld provided a supplement to his 1974 listing of plant identities as an appendix in Das 2003.

- Meulenbeld, Gerrit Jan (2011), 'The Relationships between Doṣas and Dūṣyas: A Study on the Meaning(s) of the Root Murch-/mūrch', eJournal of Indian Medicine, 4/2: 35–135, URL, accessed 13/10/2017.
- Miles, M. (1999), 'Personal Communication', Mar.; Letter of 4 March.
- Moureau, Sébastien. (2015), 'The Apparatus Criticus', in Alessandro Bausi et al. (eds.), Comparative Oriental Manuscript Studies: An Introduction (Hamburg: Tredition), 348–52, ISBN: 978-3-7323-1768-4, URL, accessed 04/07/2021.
- Mukhopādhyāya, Girindranāth (1913), The Surgical Instruments of the Hindus, with a Comparative Study of the Surgical Instruments of the Greek, Roman, Arab, and the Modern Eouropean (sic) Surgeons (Calcutta: Calcutta University), ark: 13960/t1zd2pq29, accessed 29/01/2018; Vol.2: ark:/13960/t9r25qd8m. Reprinted as a single volume, New Delhi, 1987.
- Nadkarni, K. M. (1954), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes, ed. A. K. Nadkarni, 2 vols. (3 ed., revised by A. K. Nadkarni, Bombay: Popular Prakashan), ark:/13960/t6rz4h160.
- —— (1982), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, URL.
- Narayana, Ala and Thrigulla, Saketh Ram (2011), 'Tangible Evidences of Surgical Practice in Ancient India', *Journal of Indian Medical Heritage*, 16: 1–18, URL, accessed 02/06/2021.
- NGMCP (2014), 'Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue', Universität Hamburg and Deutsche Forschungsgemeinschaft, URL.
- Oberlies, Thomas (2003), *A Grammar of Epic Sanskrit* (Indian Philology and South Asian Studies, 5; Berlin: De Gruyter), ISBN: 9783110144482. DOI: 10.1515/9783110899344.

- Olivelle, Patrick (2013), King, Governance, and Law in Ancient India: Kauṭilya's Arthaśāstra. a New Annotated Translation (New York: Oxford University Press), ISBN: 9780199891825. DOI: 10.1093/acprof:osobl/9780199891825.003.0001.
- Osbaldeston, Tess Anne and Wood, R. P. A. (2000), Dioscorides. De Materia Medica. Being an Herbal with Many Other Medicinal Materials Written in Greek in the First Century of the Common Era. a New Indexed Version in Modern English [Introductory Notes by R. P. Wood] (Johannesburg: IBIDIS Press), ISBN: 0-620-23435-0, URL.
- Pandey, Anshuman (2012), 'Proposal to Encode the Newar Script in ISO/IEC 10646', URL.
- Pārśvanātha Śāstrī, Vardhamāna (1940) (ed.), उग्रादित्याचार्यकृत कल्याणकारक (राष्ट्रभाषानुवादसिहत) = The Kalyāṇa-kārakam of Ugrādityacharya, Edited with Introduction, Translation, Notes, Indexes and Dictionary (Sakhārāma Nemacaṃda Graṃthamālā, 129; Solāpura: Seṭha Goviṃdajī Rāvajī Dośī), ark:/13960/t2q617g4d.
- Pass, Gregory (2003), Descriptive Cataloging of Ancient, Medieval, Renaissance, and Early Modern Manuscripts (Chicago: American Library Association), ISBN: 0-8389-8218-2, URL.
- Preisendanz, Karin (2007), 'The Initiation of the Medical Student in Early Classical Āyurveda: Caraka's Treatment in Context', in Birgit Kellner et al. (eds.), Pramāṇakīrtiḥ. Papers Dedicated to Ernst Steinkellner on the Occasion of His 70th Birthday. Part 2, ii, 2 vols. (Wiener Studien zur Tibetologie und Buddhismuskunde, 70.2; Wien: Arbeitskreis für Tibetische Und Buddhistische Studien Universität Wien), 629–68, ISBN: 9783902501097, URL.
- Price, Kenneth M. (2013), 'Electronic Scholarly Editions', in Ray Siemens and Susan Schreibman (eds.), *A Companion to Digital Literary Studies* (Chichester, UK: John Wiley & Sons, Ltd), 434–50. DOI: 10 . 1002/9781405177504.ch24, URL, accessed 04/07/2021.
- Rai, Saurav Kumar (2019), 'Invoking 'Hindu' Ayurveda: Communalisation of the Late Colonial Ayurvedic Discourse', *The Indian Economic & Social History Review*, 56/4: 411–26. DOI: 10.1177/0019464619873820; Online first.

- Rama Rao, B. et al. (2005), Sanskrit Medical Manuscripts in India (New Delhi: Central Council for Research in Ayurveda & Siddha), ark:/13960/t88h7763b.
- Rhys Davids, Thomas William and Stede, William (1921–5), *The Pali Text Society's Pali-English Dictionary* (London: The Pali Text Society), URL.
- Roşu, Arion (1989), *Un demi-siècle de recherches āyurvédiques. Gustave Liétard et Palmyr Cordier: Travaux sur l'histoire de la médecine indienne* (Paris: Institut de Civilisation Indienne).
- Sastri, Hrishikesh and Gui, Siva Chandra (1895–1917), *A Descriptive Catalogue of Sanskrit Manuscripts in the Library of Calcutta Sanskrit College* (Calcutta: Baptist Mission Press).
- Sastri, P. P. S. (1933), A Descriptive Catalogue of the Sanskrit Manuscripts in the Tanjore Maharaja Serfoji's Sarasvati Mahal Library Tanjore: Natya, Sangita, Kamasastra, Vaidya & Jyotisa, nos. 10650 11737 (Srirangam: Sri Vani Vilas Press), ark:/13960/t3nw8bc12.
- Scott, H. (1817), 'Some Remarks on the Arts of India, with Miscellaneous Observations on Various Subjects', *Journal of Science and the Arts*, 2: 67–72, ill. after 133, ark:/13960/t9870jt4g; Breton 1826: 358–363 cites Scott's description of cataract couching.
- Sena, Gaṅgāprasād et al. (1886–93) (eds.), सुश्रुतसंहिता...दल्लनाचार्य्य-कृत-निवन्ध-संग्रह, चक्रपाणिदत्त-कृत-भानुमत्।-ट्राका...वङ्गानुवाद...इरेजि प्रतिशब्द (Calcutta: Maṇirāma Press); Edition "g" in HIML: IB, 311.
- Sharma, Har Dutt (1939), Descriptive Catalogue of the Government Collections of Manuscripts Deposited at the Bhandarkar Oriental Research Institute, Vol. XVI, Part I, Vaidyaka (Descriptive Catalogue of Manuscripts in the Government Manuscripts Library; Pune: Bhandarkar Oriental Research Institute), ark:/13960/t0ms6rc70, accessed 23/10/2019.
- Sharma, Priya Vrat (1972), *Indian Medicine in the Classical Age* (Varanasi: Chowkhamba Sanskrit Series Office).
- —— (1982), Þalhaṇa and his Comments on Drugs (Delhi: Munshiram Manoharlal).
- —— (1999–2001), Suśruta-Saṃhitā, with English Translation of Text and Ḥal-haṇa's Commentary Alongwith (sic) Critical Notes, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhambha Visvabharati).

- Shastri, R. Shama (1920) (ed.), बोधायनगृह्यसूत्रम् *The Bodhāyana Grihyasutra* (Mysore: University of Mysore), ark:/13960/t2t492622.
- Singh, Thakur Balwant and Chunekar, K. C. (1972), Glossary of Vegetable Drugs in Brhattrayī (Varanasi: Chowkhamba Sanskrit Series Office).
- Sircar, Dinesh Chandra (1987), '6. Rākshaskhāli (Sundarban) Plate; Śaka 1118', *Epigraphia Indica* (1953–54), 30: 42–3.
- Sivarajan, V. V. and Balachandran, Indira (1994), *Ayurvedic Drugs and Their Plant Sources* (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
- Sleeman, W. H. (1893), Rambles and Recollections of an Indian Official (London: Constable), ark:/13960/t22c4bx7w, accessed 14/03/2018; V. 2 at http://n2t.net/ark:/13960/t2s52bq7w.
- Smith, Brian K. (1994), Classifying the Universe: The Ancient Indian Varṇa System and the Origins of Caste (New York, Oxford: Oxford University Press), ISBN: 0-19-508498-5.
- Spink, M. S. and Lewis, G. L. (1973) (eds.), *Albucasis on Surgery and Instruments: A Definitive Edition of the Arabic Text with English Translation and Commentary* (London: Wellcome Institute of the History of Medicine).
- Srikantha Murthy, K. R. (2000–2), *Illustrated Suśruta Saṃhitā: Text, English Translation, Notes, Appendices and Index* (Jaikrishnadas Ayurveda Series, 102; 1st edn., Varanasi: Chaukhambha Orientalia).
- Suvedī, K. S. and Tīvārī, N. (2000) (eds.), Sauśrutanighaṇṭuḥ: granthādau vistṛtena granthavaiśiṣṭyaprakāśakenopodghātena avasāne ca dravyāṇām anekabhāṣānām āvalī- paryāyasaṅgrahābhyāṃ samalaṅkrtaḥ Suśrutas-aṃhitāyāṃ prayuktānām auṣadhadravyāṇāṃ paryāya-guṇakarmavarṇātmako pūrvagranthaḥ (Belajhuṇḍī, Dāṅ: Mahendrasaṃskrutaviśvavidyālayaḥ).
- Tavernier, Jean-Baptiste (1684), *Collections of Travels through Turky* (sic), *into Persia, and the East-Indies* (London: M. Pitt).
- The Unicode Consortium (1991–2020), 'The Unicode Standard 13.0, NewaRange: 11400–1147F', URL, accessed 20/07/2021.
- Thorburn, S. S. (1876), *Bannu; or Our Afghan Frontier* (London: Trübner & Co.), URL, accessed 10/09/2019; Reprinted Lahore: Niaz Ahmad, 1978.
- Unschuld, Paul Ulrich (1984), *Medicine in China: A History of Ideas* (Berkeley: University of California Press), ISBN: 0520050231.

- Velankar, H. D (1925–30), Descriptive Catalogue of the Sanskṛta and Prākṛta Manuscripts in the Library of the Bombay Branch of the Royal Asiatic Society (Bombay: Royal Asiatic Society, Bombay), ark:/13960/t53g00h0n; Biswas #0115.
- Warrier, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–6) (eds.), *Indian Medicinal Plants: A Compendium of 500 Species. Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal* (Madras: Orient Longman).
- Watt, George (1889–96), A Dictionary of the Economic Products of India (Calcutta: Dept. Revenue and Agriculture, Government of India), URL, accessed 28/04/2021.
- —— (1908), The Commercial Products of India, Being an Abridgement of "the Dictionary of the Economic Products of India" (London: John Murray), ark:/13960/t9t14xh3x.
- Whitney, William Dwight (1885), *The Roots, Verb-forms, and Primary De*rivatives of the Sanskrit Language. A Supplement to his Sanskrit Grammar (Leipzig: Breitkopf and Härtel), ark:/13960/t3qv3p906.
- Wilson, H. H. (1823), 'On the Medical and Surgical Sciences of the Hindus', *The Oriental Magazine and Calcutta Review*, 1: 207–12, 349–56, URL.
- Wren, R. C. (1956), *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, ed. R. W. Wren (Rustington, Sussex: Health Science Press), ark:/13960/t14n65c9g.
- Wujastyk, Dagmar (2012), Well-mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda (New York: Oxford University Press). DOI: 10.1093/acprof:0so/9780199856268.001.0001.
- (2019), 'Iron Tonics: Tracing the Development from Classical to Iatrochemical Formulations in Ayurveda', *HIMALAYA*, the Journal of the Association for Nepal and Himalayan Studies, 39/1, ISSN: 2471-3716, URL, accessed 23/07/2019.
- Wujastyk, Dominik (1993), 'Indian Medicine', in W. F. Bynum and Roy Porter (eds.), *Companion Encyclopedia of the History of Medicine*, i (London: Routledge), chap. 33, 755–78, ISBN: 0-415-04771-4, URL.
- —— (2003), The Roots of Ayurveda: Selections from Sanskrit Medical Writings (Penguin Classics; 3rd edn., London, New York, etc.: Penguin Group), ISBN: 0-140-44824-1.

- Wujastyk, Dominik (2004), 'Agni and Soma: A Universal Classification', *Studia Asiatica: International Journal for Asian Studies*, IV–V, ed. Eugen Ciurtin: 347–70, ISSN: 1582–9111, URL.
- —— (2013), 'New Manuscript Evidence for the Textual and Cultural History of Early Classical Indian Medicine', in *Medical Texts and Manuscripts in Indian Cultural History*, ed. Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz (New Delhi: Manohar), 141–57, URL.
- —— (2021), 'MS London BL H. T. Colebrooke 908', URL.
- Zimmermann, F. (1983), 'Suśrutasamhita. Essay review.', *Bulletin of the History of Medicine*, 57/2: 291–3, ISSN: 00075140, URL.
- Zimmermann, Francis (1999), *The Jungle and the Aroma of Meats* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 8120816188.
- Zysk, Kenneth G. (1984), 'An Annotated Bibliography of Translations into Western Languages of Principle Sanskrit Medical Treatises', *Clio Medica*, 19/3–4: 281–91.
- (1985), Religious Healing in the Veda: With Translations and Annotations of Medical Hymns from the Rgveda and the Atharvaveda and Renderings from the Corresponding Ritual Texts (Transactions of the American Philosophical Society; Philadelphia: American Philosophical Society), ISBN: 0871697572.
- —— (1986), 'The Evolution of Anatomical Knowledge in Ancient India with Special Reference to Cross-cultural Influences', *Journal of the American Oriental Society*, 106: 687–705. DOI: 10.2307/603532.
- —— (2000), Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery (Indian Medical Tradition; 2nd edn., Delhi: Motilal Banarsidass); First published 1991. Reprint of 1998 edition.

# Glossary

•		•
aṇḍīnī 46	ointment 29	bīja
atyānanda 45	apertures of the head	semen 45
caraṇī 46	kha 30	bilious
karṇinī 46	arśas	pittalā 46
mahatī 46	prolapses 45	bilious
putraghnī 46	aṣṭhīlā	pittalā 45
śaṇḍī 46	pebble 27	bimbī
sarvātmikā 46	atis root	red gourd 28
sūcīvaktrā 46	ativiṣā 32	bitter gourd
1.1 . 11	atis roots	alābu 28
abdominal lump	ativiṣā 30	black creeper
gulma 45	ativiṣā	pālindī 29, 32
abhyaṅga	atis root 32	black drongo
massage 29	atis roots 30	dhūmyāṭa 26
massage oil 25, 31	āṭopa	blackboard tree
affliction	flatulence 28	saptachada 29
upasarga 31	atyānanda	blackbuck
ajaruhā	@ 45	hariṇa <mark>32</mark>
fern 32	avadāraṇa 💮 📉	bloodloss
ajeya	fissuring 31	Raktakṣayā 45
invincible 32	avalekhana	body language
alābu	combs 25	iṅgita 25
bitter gourd 28		bull
ālepana	bahuputrā	vṛṣabha <mark>26</mark>
liniments 31	wild asparagus 31	
amaranth	bali	calamine
taṇḍulīyaka 29	morsel 25	amṛtā 29
āmrāsthi	bamboo leaves	caraṇī
mango stones 28	veņupatrikā 29	@ 46
amṛtā	bandhujīva	cassia cinnamon
calamine 29	scarlet mallow 30	patra 29
amṛta	bāṣpa	cāsyāt
immortal 32	vapour <b>2</b> 6f, <b>3</b> 0	from his mouth 27
ลทุฝฺิเทเ	bearers	chebulic myrobalan
@ 46	voḍhāra 25	harītakī 28
añjana	beautyberry	child-murderess
eye make-up <b>25</b> , <b>31</b>	śyāmā <b>27, 2</b> 9	putraghnī 45
eye ointment 31f	bhallātaka	chital deer
aṅkolla	marking-nut tree 31	pṛṣata 26
sage-leaved	bhramaraka	chital deer
alangium 28	drongo 26	pṛṣata <mark>32</mark>
anulepana	bhṛṅgarāja	clean
massage ointment	racket-tailed	pra√sādh <mark>31</mark>
25, 29	drongo 26	combs
	~	

avalekhana 25	slow-acting poison	garlands
curds	antidote 28	sraj 25
dadhi 28, 32		ghee
payasyā <mark>30</mark>	emetic nut	sarpiș <mark>32</mark>
	madana 28	ginger
dadhi	enclosure of a tooth	mahauṣadha 32 🤍
curds <b>2</b> 8, 32	dantaveșța <mark>28</mark>	given
dantamāṃsa	errhines	datta 26
flesh of the tooth 28	nasya 31	godhā
dantaveșța	extract	monitor lizard 32
enclosure of a tooth	niryāsa 31	granthi
28	extracted juice	lumps 29
datta	svarasa 31	great fragrance
given 26	eye make-up	mahāsugandha 31
decoctions	añjana 25, 31	grimy
kaṣāya 25	eye ointment	dhyāma 25
dhātakīpuṣpa	añjana 31f	gulma
fire-flame bush	eyewash	abdominal lump 45
flowers 28	tarpaṇa 31	
dhūma	1 . 3	hariṇa
inhaled smoke 25	faulty vision	blackbuck 32
dhūmyāṭa	dṛṣtivibhrama 31	harītakī
black drongo 26	female reproductive	chebulic
dhyāma	system	myrobalan 28
grimy 25	yoni 45	heart protected
discharge	fern 45	hṛdayāvaraṇa 32
srāva 29, 31	ajaruhā 32	heart-leaved moonseed
diseases	fire-flame bush flowers	somavallī 29
roga 45	dhātakīpuṣpa 28	henna
disorders of the female	fissuring	madayantikā 30
reproductive system	avadāraņa 31	hogweed
yonivyāpat 45	flatulence	punarnavā 30
distorted		honey
	āṭopa 28 flatulent	madhus 26
vikṛta 28 double		hṛdayāvaraṇa
	<i>vātalā</i> 45 flesh	heart protected 32
yamalā 28		1
drongo	māṃsa 29	immortal
bhramaraka 26	flesh of the tooth	amṛta 32
dṛṣtivibhrama	dantamāṃsa 28	indian barberry
faulty vision 31	flooded	kālīyaka 29
dry rub	pariplutā 45	indian rose-bay
utsādana 29	follicles	tagara 29
dry rubs	kha 29	indigo
utsādana 25	from his mouth	nīlī 28
dījeīzieāri	cācuāt an	indragona

velvet-mite 27	lāmajja grass	āmrāsthi <mark>28</mark>
infertile	lāmajja 26	marking-nut tree
vandhyā 45	lāmajja <sup>°°</sup>	bhallātaka 31
iṅgita	lāmajja grass 26	māṣaka
body language 25	liṅga "	mung beans 29
inhaled smoke	symptom 30	massage
dhūma 25	liniments	abhyaṅga 29
intestines	ālepana 31	massage oil
pakvāśaya 28	liquorice	abhyaṅga <b>25</b> , 31
invincible	madhuka 32	massage ointment
ajeya 32	long pepper	anulepana 25, 29
irrigated	māgadha 31	meat from a chital dee
pratipūraņa 31	long peppers	pārṣata 32
<i>pp</i>	pippalī 32	meṣaśṛṅga
jambū	lord of kāśī	periploca of the
jambul 28	kāśipati 24	woods 31
jambul	lotus-spots	milk
jambū 28	padminīkaṇṭaka 30	payas 32
jasmine 28	luffa	miscarrying
	koṣītakī 28	Sraṃsanī 45
mālatī 30	lumps	monitor lizard
1-=1=1	granthi 29	godhā 32
kālīyaka		morsel
indian barberry 29	madana	bali 25
kaṇṭaka	emetic nut 28	mouse-ear
spots 30	madayantikā	тūṣikakarṇī 30
kapha	henna 30	mouthwash
mucus 30	madhuka	kavala 29
kapittha	liquorice 32	mucus
wood apple 29, 31	madhus	kapha 30
karṇinī	honey 26	mung beans
@ 46	māgadha	māṣaka 29
kaṣāya	long pepper 31	mūrcchā
decoctions 25	mahānasa	stupor 27
kāśipati	kitchen 25	mūṣikā •
lord of kāśī 24	mahāsugandha	purging nut 32
kavala	great fragrance 31	mūṣikakarṇī
mouthwash 29	mahatī	mouse-ear 30
kha	@ 46	woodrose 30
apertures of the	mahauṣadha	
head 30	ginger 32	nalada
follicles 29	mālatī	spikenard 26
kitchen	jasmine 30	nasya
mahānasa 25	māṃsa	errhines 31
koṣītakī	flesh 29	snuff 30
luffa al	mango etonos	nacva

bilious 46	sacred lotus
	padma 29
plutā	sage-leaved alangium
soaked 45	aṅkolla 28
	saliva
rot 28	śleșman 27
pra√sādh	śaṇḍī
•	···@ 46
pralepa	saptachada
ointment 27, 30	blackboard tree 29
pratipūraṇa	sarpis
irrigated 31	ghee 32
_	sarvātmikā
rub 28	@ 46
rubbing 28	scarlet mallow
	bandhujīva 30
	semen
	bīja 45
	sepsis
	pāka 31
·	shower
	parīṣeka 29
	side-effects
	upadrava 31
	siris seeds
•	śirīṣamāṣaka 29
crina-maracress 45	śirīṣamāṣaka
racket-tailed drongo	siris seeds 29
	śleșman
	saliva 27
	slow-acting poison
	antidote
	dūṣīviṣāri 28
	snuff
•	nasya 30
	snuff
	nasya 25
	soaked
-	plutā 45
	soma creeper
	somalatā 27
	somalatā
	soma creeper 27
•	somavalka
nratisārana 28	white cutch tree 21
	soaked 45  pra√kuth rot 28  pra√sādh clean 31  pralepa ointment 27, 30  pratipūraṇa irrigated 31  pratisāraṇa rub 28 rubbing 28  prolapses arśas 45  pṛṣata chital deer 32 chital deer 26  punarnavā hogweed 30  purging nut mūṣikā 32  putraghnī @ 46 child-murderess 45  racket-tailed drongo bhṛṅgarāja 26  Raktakṣayā bloodloss 45  red gourd bimbī 28  retaining udāvartā 45  rheum upadeha 31  roga diseases 45  rot pra√kuth 28  rub pratisāraṇa 28  rubbing

heart-leaved		
maanaad aa	• • •	phañjī 30
moonseed 29	udaśvit	vetiver grass
sphoṭa	watered buttermilk	uśīra 29
spots 30f	28	vikṛta
spikenard	udāvartā	distorted 28
nalada 26	retaining 45	voḍhāra
spots	upadeha	bearers 25
kaṇṭaka 30	rheum 31	vomiting one
sphoṭa 30f	upadrava	vāminī 45
sraj	side-effects 31	vṛṣabha
garlands 25	upasarga	bull 26
Sraṃsan <del>ī</del>	affliction 31	
miscarrying 45	uśīra	water-lily
srāva	vetiver grass 29	utpala 27
discharge 29, 31	utpala	watered buttermilk
stupor	water-lily 27	udaśvit 28
mūrcchā 27	utsādana	white clitoria
sūcīvaktrā	dry rub 29	śvetā 29
@ 46	dry rubs 25	white cutch tree
svāpa		somavalka 31
numbness 31	งลิฑเทเิ	wild asparagus
svarasa	vomiting one 45	bahuputrā 31
extracted juice 31	vandhyā	wood apple
śvetā	infertile 45	kapittha 29, 31
white clitoria 29	vapour	woodrose
śyāmā	bāṣpa <b>2</b> 6f, 30	тūṣikakarṇī 30
beautyberry 27, 29	varuṇa	
symptom	three-leaved caper	yamalā
linga 30	31	double 28
8 30	vātalā	yoni
tagara	flatulent 45	female
indian rose-bay 29	vāvikṛtā	reproductive system
taṇḍulīyaka	or not distorted 28	45
amaranth 29	velvet-mite	yonivyāpat
tarpaṇa	indragopa <mark>27</mark>	disorders of the
eyewash 31	veņupatrikā	female reproductive
three-leaved caper	bamboo leaves 29	system 45

# **Todo list**

Cf. Arthaśāstra 1.21.8	25
I'm still unhappy about this verse	28
Mention this in the introduction as an example of the scribe know-	
ing the vulgate	28
fn about sadyas+	28
Bear's bile instead of deer's bile	29
punarṇṇavā in the N & K MSS	30
śrita for śṛta	30
explain more	31
Medical difference from Sharma	31
example where the vulgate clarifies that these should be used sep-	
arately; appears to be a gloss inserted into the vulgate text	31
The two uses of prāpta are hard to translate. prāptā $\dot{h} \rightarrow k$ ṣipraṃ is	
an example of the vulgate banalizing the Sanskrit text to make	
sense of a difficult passage	32
$\sqrt{\text{vyadh not }\sqrt{\text{vedh (also elsewhere and for the ears)}}$ , causative	
optative	32
opposite of the vulgate Same as As 1.8.89 (As 1980: 79)	32
Medical difference	32
where is cutting with a knife related to removing bile or phlegm	33
maṣī burned charcoal. Find refs	33
find ref	39
Check out these refs	40
or a dual?	44

Traft of November 6, 2021 for Drivate study only