# Jason Birch and Dominik Wujastyk Draft of 3rd October 2021 © Jason Birch and Dominik Wujastyk October 3021 Octo

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### **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.

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### Kalpasthāna, adhyāya 1

### 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>50</sup> Translations 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>51</sup>

More recently, a discussion of the fourth chapter of this section in the light of the Nepalese manuscripts was published by Harimoto.<sup>52</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>53</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>54</sup> dated to 1165 ce noted in Bendall's chart of Nepalese letter-numerals Bendall 1883: Lithograph V, after p. 225

<sup>50</sup> HIML: IA, 289–290.

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

<sup>52</sup> Harimoto 2011: 101–104.

<sup>53</sup> The two editions that Harimoto noted, Su 1938 and Su 1889, present identical texts.

<sup>54</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. 55
  - 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>56</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>57</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>58</sup>
- 8–11 He should employ a doctor in his kitchen (*mahānasa*) who is respected
  - 55 MS H adds in the margin अथ खलु वत्स सुश्वतः "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 et al. (2021).
  - 56 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."
  - 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.
  - 58 The verb \sqrt{s}vas is conjugated as a first class root in the Nepalese manuscripts.

- 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>59</sup> have clean utensils and be staffed by men and women who have been vetted.<sup>60</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>61</sup>
- 18cd–19ab An expert knows people's body language (*iṅgita*) 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>62</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 (abhyaṅga) 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.

Cf. Arthaśāstra

<sup>59</sup> 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).

<sup>60</sup> Verses detailing the ideal staff are omitted in the Nepalese manuscripts. Cf. Su 1938: 560; Wujastyk 2003: 132.

<sup>61</sup> 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).

<sup>62</sup> 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).

- 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>63</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>64</sup> The chital deer sheds tears and the monkey releases excrement.<sup>65</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>66</sup>
- 35, 36cd In such a case, an errhine and a collyrium that are costus, lāmajja grass (*lāmajja*), spikenard (*nalada*) and honey (*madhus*);<sup>67</sup> a paste of sandalwood on the heart may also provide relief.<sup>68</sup>
  - 63 The verb अर्च्छित "rises up" is a rare form best known from epic Sanskrit (see Oberlies 2003: 212, §7.6.1). The transmitted form क्रोञ्च is obviously a colloquial version of Sanskrit क्रोञ्च. 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 क्रोञ्च he says that people pronounce it कुरञ्ज and कोंचि. The form कोञ्च is found in Pāli (see Cone 2001: 731, who notes that Ardhamāgadhī has the same form). Elsewhere, Dalhaṇa calls the bird क्रोञ्चिर, क्रोञ्च, and कैचर (1.46.105 (Su 1938: 223), 6.31.154 (Su 1938: 684) and (6.58.44 (Su 1938: 790) respectively).
  - 64 Dalhaṇa 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."
  - 65 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.
  - 66 "Tainted" translates उपक्षिप्त. The word's semantic field includes "to hurl, throw against," and especially "to insult verbally, insinuate, accuse." The commentator Dalhaṇa 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 Dalhaṇa's "given (दत्त)."
  - 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.
  - 68 Singh and Chunekar (1972: 350) discussed the difficulties in identifying लामज्ज, 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

- 37 Held in the hand, it makes the hand burn, and the nails fall out. In such a case, the ointment (*pralepa*) is beautyberry (*śyāmā*), velvet-mite (*indragopa*), soma and water-lily (*utpala*).<sup>69</sup>
- 38–39 If he eats that food, through inattention or by mistake, then his tongue will feel like a pebble (asthīla) and it will lose its sense of taste. It stings and burns, and his saliva (slesman) dribbles out. To In such a case, he should apply the treatment prescribed above for vapour, and what will be stated below under "toothbrush twigs". To
  - 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>72</sup>
  - 41 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."
  - 69 "Beautyberry" (Callicarpa macrophylla Vahl.) is one identification of श्यामा, 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 गुडूची, 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).
  - 70 The word সন্থীলা is normally feminine. The Nepalese manuscripts read it with a short अ- ending. Gayadāsa noticed that some manuscripts read সন্থীল 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.
  - 71 Poisoned toothbrushes are discussed in verses 48 ff. below.
  - 72 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  $(d\bar{\imath}s\bar{\imath}vis\bar{\imath}ari)$ ' should be drunk with honey and curds (dadhi).<sup>73</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>74</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>75</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>76</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>77</sup>
- 50 Alternatively, the rubbing (*pratisāraṇa*) can be done with either the roots of sage-leaved alangium (*aṅkolla*), the bark of blackboard tree

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

- 74 Both Nepalese witnesses read distorted (vikṛta) twice, which is tautologous. In the first occurrence both read বিকৃরা 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.
- 75 The root  $\sqrt{3}$  eq "stink, putrify, rot" is apparently known only from its few uses in the Suśrutasaṃhitā.
- 76 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)).
- 77 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).<sup>78</sup>
- 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.<sup>79</sup> And the flesh  $(m\bar{a}msa)$  splits open.
- In such a case, sandalwood, Indian rose-bay (tagara), so costus, 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). so
  - 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*).<sup>82</sup>
- 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, ghee, beautyberry (*śyāmā*), black creeper (*pālindī*) and amaranth (*taṇḍulīyaka*). Good alternatives are

Bear's bile instead of deer's bile.

- 78 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)).
- 79 The feminine स्फोटा for "boils" is unattested.
- 80 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.
- 81 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.
- 82 See verse 52 above.
- 83 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).
- 84 See note 69.

- 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>85</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). In this case, the drink is honey and ghee, and the ointment (pralepa) is sandalwood with ghee, curds (payasyā), honey, verbena (phañjī) and scarlet mallow (bandhujīva) and hogweed (punarnavā).

<sup>85</sup> The plant identifications in this passage follow Dalhaṇa's glosses, although he note a difference of opinion on the identity of mouse-ear (mūṣikakarṇī). Singh and Chunekar 1972: 317; Sivarajan and Balachandran 1994: 23–25 discuss this issue well. The expression धूमो आगारसंज्ञित: 'the smoke termed "house" ' is commonly interpreted by translators and in Ayurvedic dictionaries as 'household soot.' The term is comprehensively discussed by Meulenbeld (2008: 443).

<sup>86</sup> See the description of this condition 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.

### **Abbreviations**

Ah 1902 Kumte, Ananta Moreśvara and Navare, Kṛṣṇaśāstrī

Rāmacandra (1902) (eds.), श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, सूत्र-शारीर-निदान-चिकित्सा-कल्प-उत्तरस्थानविभक्तम् श्रीमदरुणदत्तप्रणी-तया सर्वांगसुंदर्याख्यया व्याख्यया समलंकृतम् (Kṛṣṇadāsa Āyurveda Sīrīja, 3; Muṃbayyām: Nirṇayasāgara Press).

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.).

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: Univer-

sity 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.), सुश्रुतः. सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-कल्पित आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सुश्रुतनामधेयेन तच्छिष्येण विरचितः (3rd edn., Calcutta: Saratī Press), ark:/13960/t1nh6j09c; HIML:IB, 311, edition b.

Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सु-श्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुष्ठसिता, 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, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुष्लसिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शारीर-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.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्य-व्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया 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, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्री-गयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition (Su 1938).

Su 1939 Ācārya, Yādavaśarma Trivikrama and Śarman, Nandakiśora (1939) (eds.), सुश्रुतसंहितायाः सूत्रस्थानम्. श्रीचक्रपाणिदत्तविरचितया भानुमतीव्याख्याया 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.

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### References

- 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), URL.
- 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 and Karve 1957–9.
- 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...हाराणचन्द्रचक्रवर्तिकविराजविरचितसुश्रुतार्थसन्दीपनभाष्य- समेतम्...चन्द्रकान्त भट्टाचार्य-प्रमुखैः संशोधितम् = [The Suśrutasaṃhitā with the Commentary Suśrutārthasandīpanabhāṣya by Hārāṇacandra Cakravarti] (Kalikātā: Satya Press); Edition "t" in HIML: IB, 312.
- Birch, Jason et al. (2021), 'Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the Suśrutasaṃhitā', *Academia Letters*. DOI: 10.20935/AL2992, URL, accessed 03/10/2021.
- 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.
- 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.
- 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 Ophthalmology: 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.
- Gode, P. K. and Karve, C. G. (1957–9) (eds.), Revised and Enlarged Edition of Prin. V. S. Apte's the Practical Sanskrit-English Dictionary (repr. Poona: Prasad Prakashan), ark:/13960/t3gx47212.
- 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 (वृद्धजीवकीयं तन्त्रं वा) महर्षिणा मा-रीचकश्यपेनोपदिष्टा ... हेमराजशर्मणा लिखितेन विस्तृतेन उपोद्धातेन सहिता ... सत्यपाल भिषगा कृतया विद्योतिनी हिन्दीव्याख्यया ... 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.
- 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.
- 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.
- ——(2021b), '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.

- 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'.
- 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.
- Masai, François (1950), 'Principes et conventions de l'édition diplomatique', *Scriptorium*, 4: 177–93. DOI: 10.3406/scrip.1950.2294.
- Meulenbeld, Gerrit Jan (1992), 'The Characteristics of a Doṣa', *Journal of the European Āyurvedic Society*, 2/1: 1–5, URL, accessed 31/08/2021.
- —— (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.
- —— (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.
- 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.
- 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.
- Parshwanath Shastri, Vardhaman (1940) (ed.), *The Kalyāṇa-kārakam of Ugrādityacharya*, *Edited with Introduction*, *Translation*, *Notes*, *Indexes and Dictionary* (Sakharam Nemchand Granthamala; Sholapur).
- 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-भानुमती-टीका...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 (1982), *Dalhaṇa 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).
- Sivarajan, V. V. and Balachandran, Indira (1994), *Ayurvedic Drugs and Their Plant Sources* (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
- 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.
- 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, Þāṅ: Mahendrasaṃskrutaviśvavidyālayaḥ).
- The Unicode Consortium (1991–2020), 'The Unicode Standard 13.0, NewaRange: 11400–1147F', URL, accessed 20/07/2021.

- 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 (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.
- —— (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.

- Wujastyk, Dominik (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

abhyaṅga	bitter gourd	- fire-flame bush
- massage: 28	- alābu: 27	flowers: 27
- massage oil: 24	black creeper	dhūma
alābu	- pālindī: 28	-inhaled smoke: 24
- bitter gourd: 27	black drongo	dhūmyāṭa
amaranth	- dhūmyāṭa: 25	-black drongo: 25
- taṇḍulīyaka: 28	blackboard tree	dhyāma
āmrāsthi	- saptachada: 28	- grimy: 24
- mango stones: 27	body language	discharge
amṛtā	- iṅgita: 24	- srāva: 28
- calamine: 28	bull	distorted
añjana	- vṛṣabha: 25	
- eye make-up: 24	- vṛṣuvīu. 25	- vikṛta: 27 double
aṅkolla	1 .	
- sage-leaved	calamine	- yamalā: 27
alangium: 27	- amṛtā: 28	drongo
anulepana	cassia cinnamon	- bhramaraka: 25
- massage	- patra: 28	dry rub
ointment: 24, 28	cāsyāt	- utsādana: 28
- ointment: 28	- from his mouth:	dry rubs
aṣṭhīlā	26	- utsādana: 24
- pebble: 26	chebulic myrobalan	dūṣīviṣāri -
āṭopa	- harītakī: 27	- slow-acting
- flatulence: 27	chital deer	poison antidote: 27
avalekhana	- pṛṣata: 25	
	combs	emetic nut
- combs: 24	- avalekhana: 24	- madana: <b>27</b>
bali	curds	enclosure of a tooth
- morsel: 24	- dadhi: 27	- dantaveșța: 27
bamboo leaves	- payasyā: <b>2</b> 9	eye make-up
- veņupatrikā: 28		- añjana: 24
bandhujīva	dadhi	
- scarlet mallow: 29	- curds: 27	fire-flame bush flowers
bearers	dantamāṃsa	- dhātakīpuṣpa: 27
- voḍhāra: 24	- flesh of the tooth:	flatulence
beautyberry	27	-āṭopa: <b>2</b> 7
- śyāmā: 26, 28	dantaveșța	flesh
bhramaraka	- enclosure of a	- māṃsa: <b>28</b>
- drongo: 25	tooth: 27	flesh of the tooth
bhṛṅgarāja	datta	- dantamāṃsa: 27
- racket-tailed	- given: 25	follicles
drongo: 25	decoctions	- kha: 28
bimbī	- kaṣāya: 24	from his mouth
- red gourd: 27	dhātakīpuṣpa	- cāsyāt: 26
200 80 010. 2/		g 20

garlands	-spots: 29	-abhyanga: 24
- sraj: 24	kapittha	massage ointment
given	- wood apple: 28	- anulepana: 24, 28
- datta: 25	kaṣāya	morsel
granthi	- decoctions: 24	-bali: 24
-lumps: 28	kāśipati	mouse-ear
grimy	-lord of kāśī: 23	-mūṣikakarṇī: 29
- dhyāma: <b>24</b>	kavala	mouthwash
3	- mouthwash: 28	- kavala: <b>28</b>
harītakī	kha	mung beans
- chebulic	-follicles: 28	- māṣaka: 28
myrobalan: 27	kitchen	mūrcchā .
heart-leaved moonseed	- mahānasa: <b>2</b> 3	-stupor: 26
- somavallī: 28	koṣītakī	mūṣikakarṇī
hogweed	- luffa: 27	- mouse-ear: 29
- punarnavā: 29	·	- woodrose: 29
honey	lāmajja grass	
- madhus: 25	- lāmajja: <b>2</b> 5	nalada
	lāmajja	-spikenard: 25
indian barberry	- lāmajja grass: 25	nasya
- kālīyaka: 28	lord of kāśī	-snuff: <b>24</b>
indian rose-bay	- kāśipati: 23	ทเิโเ
- tagara: <b>2</b> 8	lotus-spots	- indigo: 27
indigo	- padminīkaṇṭaka: 29	
- nīlī: 27	luffa	ointment
indragopa	- koṣītakī: 27	-anulepana: 28
- velvet-mite: 26	lumps	- pralepa: 26, 29
iṅgita	-granthi: 28	or not distorted
-body language:		- vāvikṛtā: 27
24	madana	nadma
inhaled smoke	- emetic nut: 27	padma - sacred lotus: 28
- dhūma: 24	madhus	
intestines	- honey: 25 mahānasa	padminīkaṇṭaka
- pakvāśaya: 27		- lotus-spots: 29
iambā	- kitchen: 23	pakvāśaya
jambū	mālatī	- intestines: 27
-jambul: 27	- jasmine: 29	pālindī -black creeper: 28
jambul	māṃsa - flesh: 28	*
- jambū: 27		parīṣeka - shower: 28
jasmine	mango stones -āmrāsthi: 27	
-mālatī: 29	and the second of the second o	patra
kālīyaka	māṣaka	- cassia cinnamon:
v	- mung beans: 28	28
- indian barberry: 28	massage	payasyā
	- abhyanga: 28	- curds: 29
kaṇṭaka	massage oil	pebble
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	- aṣṭhīlā: 26	śirīṣamāṣaka	uśīra	
phañ		- siris seeds: 28	- vetiver grass: 28	
	- verbena: 29	śleșman	utpala	
$pra_{}$		- saliva: 26	- water-lily: 26	
	-rot: 27	slow-acting poison	utsādana	
prale	•	antidote	- dry rub: 28	
	- ointment: 26, 29	- dūṣīviṣāri: <b>27</b>	-dry rubs: 24	
	sāraņa rub. 27	snuff		
	-rub: 27	- nasya: 24	vāvikṛtā	
	-rubbing: 27	soma creeper - somalatā: 26	- or not distorted:	
pṛṣat		somalatā	27	
	- chital deer: 25		velvet-mite	
•	rnavā -hogweed: 29	- soma creeper: 26 somavallī	- indragopa: 26	
	-110gweed. 29	- heart-leaved	veṇupatrikā	
rack	et-tailed drongo	moonseed: 28	- bamboo leaves: 28	
	- bhṛṅgarāja: 25	spikenard	verbena	
	gourd	- nalada: 25	-phañjī: 29	
	- bimbī: <b>27</b>	spots	vetiver grass	
rot	•	- kaṇṭaka: <b>29</b>	- uśīra: 28	
	<i>- pra√kuth</i> : <b>27</b>	sraj	vikṛta	
rub		- garlands: 24	- distorted: 27	
	- pratisāraņa: 27	srāva	voḍhāra	
rubb	ping	- discharge: 28	-bearers: 24	
	- pratisāraņa: 27	stupor	vṛṣabha	
	11 (	- mūrcchā: <b>26</b>	-bull: 25	
	ed lotus	śvetā		
	- padma: 28	- white clitoria: 28	water-lily	
	-leaved alangium	śyāmā	- utpala: 26	
	- aṅkolla: 27	- beautyberry: 26,	watered buttermilk	
saliv		28	- udaśvit: 27	
	-śleșman: 26		white clitoria	
	achada - blackboard tree:	tagara	- śvetā: <b>2</b> 8	
	.8	- indian rose-bay:	wood apple	
	et mallow	28	- kapittha: 28	
	- bandhujīva: 29	taṇḍulīyaka	woodrose	
shov		-amaranth: 28	- mūṣikakarṇī: 29	
	- parīṣeka: 28	udaśvit	,	
	seeds	- watered	yamalā	
	- śirīṣamāṣaka: 28	buttermilk: 27	- double: 27	
		batteriiiii. 2)	dodole. 2/	
		57		

# **Todo list**

Cf. Arthaśāstra 1.21.8	24
I'm still unhappy about this verse	27
Mention this in the introduction as an example of the scribe know-	
 ing the vulgate	27
fn about sadyas+	27
Bear's bile instead of deer's bile	
where is cutting with a knife related to removing bile or phlegm	30
maṣī burned charcoal. Find refs	30
find ref	36
Check out these refs	37
or a dual?	41

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