A Translation of the New Edition of the Suśrutasamhitā

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> Draft of 27th October 2022 © Jason Birch and Dominik Wujastyk

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Kalpasthāna, adhyāya 3

Introduction

Translation

And now we shall explain the rule (*kalpa*) that is the required knowledge about mobile poisons.¹

2

The full explanation about the sixteen carriers (*adhiṣṭhāna*) of the mobile poisons, that have been mentioned by me in brief, will be stated.

to the issue of "kalpa".

Look up passages in the Kośa.

- 4 In that context, they are:
 - sight and breath,
 - teeth and nails,
 - mouth,
 - urine and faeces,
 - menstrual blood,
 - semen,
 - penis,
 - saliva,
 - lethal points,
 - nipping with the mouth (*mukhasaṃdaṃśā*),
 - fart (avaśardhita),³
 - anus,⁴
 - bones,
 - bile,
 - bristles (śūka), and
 - corpses.
- 5 TBA
- 6 The enemies of the king pollute the waters, roads and foodstuffs in enemy
- In contrast to stationary, plant poisons. No reference is made to Dhanvantari (see Birch, Wujastyk, Klebanov, Parameswaran, et al. 2021).
- "Carrier" for base, foundation (*adhiṣṭhāna*) tries to capture the idea that the author will describe the creatures in which poisons inhere.
- 3 This interpretation comes from Dalhana on 5.3.4 (Su 1938: 567), but he reads विशिष्ति.
- 4 Dalhana on 5.3.4 (Su 1938: 567) noted this reading.

- territory. The experienced physician, who has learned how to purify things, should clean up those polluted things.
- 7 Polluted water is slimy and smells of tears.⁵ It is covered with froth and covered with streaks. The frogs and fish die, the birds are crazed and, along with the wetland creatures, they wander about aimlessly.
- 8 Men, horses and elephants who swim in it experience vomiting, delusion, fever, swelling and sharp pains.⁶ He should try to purify that polluted water, after curing their ailments.
- And so, he should burn axlewood and garjan oil tree, as well as corky coral tree, with crimson trumpet-flower tree and small-flowered crape myrtle and weaver's beam tree, and with golden shower tree and white cutch tree. Then he should sprinkle that ash, cold, on the waters.
- 10–11 And in the same way, putting a handful of the ash in a pot, one may also purify water that one wants.
 - If any one of the limbs of cows, horses, elephants, men or women, touch a place on the ground that enemies have spoiled with poison, or a ford or rock or a flat surface, then it swells up and burns and its hair and nails fall out on that place.⁷
 - In that situation, he should grind up country sarsaparilla together with all the aromatic items, with alcoholic drinks. And then he should sprinkle the paths that need to be used with waters mixed with mud.⁸ And if there exists another path, he should go by that.⁹
 - When grasses and foods are polluted, people collapse, fall unconscious. And others vomit. They get loose stool (*viḍbheda*) or they die. One should apply to them the therapy as described.
- 14–15 Alternatively, one should wipe various musical instruments with antidotes that remove poison and then play them. What is called the most excellent paste for a musical instrument is certain minerals¹⁰ together with gold and

⁵ अस्र normally means "tears," but rarely means "blood."

On the polysemy of elephant/snake ($n\bar{a}ga$), see Semeka-Pankratov 1979.

^{7 &}quot;Swells up" translates an unclear reading that was probably श्यति, which may be an irregular form of √शू, श्वा, श्वि (see Whitney 1885: 175−176).

⁸ Our "alcoholic drinks" translates सुरा. For a discussion of this term at our period see McHugh 2021: 37–39 et passim.

Dalhana on 5.3.12 (Su 1938: 568) cited a similar reading for the fourth pada, but with a negative particle, "and if there is no other way, one should go by that."

[&]quot;Certain minerals" translates বার্যাবিনার, the unanimous reading of the Nepalese witnesses. But the meaning of this expression is not clear and may even refer to plants, like the other ingredients. The vulgate reads বার: सुतार:, which is also not very clear. However, Dalhana

sarsaparilla, and a portion of of nutgrass equal to that, together with the bile called "brown cow". 11 By the sound of the musical instrument, even terrible poisons that may be present at that place are destroyed.

- 16 If there is smoke or wind that is affected by poison then birds are dazed and fall to the ground. People get coughs, colds, and head illnesses, and acute eye diseases.¹²
- 17 The smoke and air can be purified by putting lac, turmeric, Himalayan monkshood, and myrobalan, with Himalayan mayapple, costus, cardamom, and peas, and beautyberry into the air.

write footnote: don't repeat ativiṣā; vulgate similar to H.

on 5.3.14 (Su 1938: 568) identified these as "silver" and "mercury." This is highly unlikely to be a correct understanding of the *Suśrutasaṃhitā* passage. Historically, mercury is not naturally present in the South Asian peninsula (Watt 1889–96: vol. 5, 233), and the word पारद that Dalhaṇa used is probably a loan-word from Persian (sub *paranda*, *parranda* Steingass 1930: 244b). Mercurial compounds are not reliably attested in South Asia until two or three centuries after the composition of the *Suśrutasaṃhitā*. The currently available "śāstric" recension of the *Arthaśāstra* that is datable to 175–300 CE (Olivelle 2013: 29–31) does not mention mercury (*ibid*, 534). See further the study by Wujastyk (2013*a*: 17, *et passim*).

¹¹ सुरेन्द्रगोप and कुरुविन्द are both uncertain, see index. Dalhana's opinion has been followed here, but it seems fair to say that all commentators were guessing.

¹² The syntax of this verse is somewhat loose; the vulgate has regularized it, smoothing out the difficulties.

Editions and Abbreviations

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

Hariśāstrī (1939) (eds.), श्रीमद्वाग्भटिवरचितम् अष्टाङ्गहृद्यम्, श्रीमद्रुग्णदत्तिवरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदर-सायनाह्वया टीकया च समुस्रसितम् = The Astāngahridaya (6th edn., Muṃbayyām: Nirṇayasāgara Press), ark:/13960/t3tt6967d.

Anup Sanskrit Library (n.d.).
Anup Sanskrit Library (n.d.).

Apte 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.

AS Asiatic Society (n.d.).

As 1980 Āṭhavale, 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, Vedantabis-

harad (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-samhitā. 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 पुनर्वसुनोप-

दिष्टा, तिच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचकपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संविलता (3rd edn., Mumbayyām: 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.

IOLR Eggeling, Julius et al. (1887-1935), Catalogue of the Sanskrit

Manuscripts in the Library of the India Office (London: Secretary

of State for India).

KL Kaiser Library (n.d.).

MN Ācārya, Yādavaśarma Trivikrama (1932) (ed.), महामतिश्रीमाधवक-

रप्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्थदत्ताभ्यां विरचितया मधुकोशा-ख्यव्याख्यया, श्रीवाचस्पतिवैद्यविरचितया आतङ्कदर्पणव्याख्याया विशिष्टांशेन च समुल्लस्तिम् = Mādhavanidāna by Mādhavakara with the Two Commentaries, Madhukosha by Vijayarakshita & Shrīkanthadatta and Ātankadarpaṇa by Vāchaspati Vaidya (3rd edn., Bombay: Nirnaya Sagara Press), ark:/13960/t66452x0h; Reprin-

ted Varanasi: Chowkhambha, 1986.

MW Monier-Williams, Monier, Leumann, E., Cappeller, C., et al.

(1899), A Sanskrit–English Dictionary Etymologically and Philologically Arranged, New Edition (Oxford: Clarendon Press);

1970 reprint.

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 Pro-

ject. Online Title List and Descriptive Catalogue," Universität

Hamburg and Deutsche Forschungsgemeinschaft, URL.

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

Su 1889 Bhatṭācāryya, Jīvānanda Vidyāsāgara (1889) (ed.), सুখুন:.

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

b.

Su 1915

Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लिसता, आचार्योपाह्वेन त्रिविकमात्मजेन 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.

Su 1931

Ācārya, Yādavaśarma Trivikrama (1931) (ed.), सुश्रुतसंहिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुष्ठासिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शारीर-चिकित्सा-कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाह्वेन त्रिविकमात्मजेन याद्वशर्मणा 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.

Su 1938

Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचिन्द्रकाख्यपञ्जिकाव्याख्यया च सम्प्रहासिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press), ark:/13960/t09x0sk1h; HIML: IB, 313, edition cc ('the vulgate').

Su 1938²

Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता, श्रीडल्हणाचा-र्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्य-विरचितया 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. श्रीचक्रपाणिद्त्तविरचितया 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:

Nirņayasāgarākhyamudraņālaye), 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 colon refer to pages in this document.

Thanjavur TMSSML 10773, 6

References

Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्नि-वेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचकपाणिदत्तविरचितया आयुर्वे-द्दीपिकाव्याख्यया संविलता (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 संविलता = the Suśrutasaṃhitā of Suśruta with Various Readings, Notes and Appendix etc. (Mumbāi: Nirnayasāgarākhyamudranālaye), URL.

Adriaensen, Rob, 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.

- 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.
- Agrawala, V. S. (1963), *India As Known to Pāṇini: A Study of the Cultural Material in the Aṣṭādhyāyī* (2nd edn., Varanasi: Prthvi Prakashan); First published in 1953.
- Angermeier, Vitus (2020), Regenzeiten, Feuchtgebiete, Körpersäfte. Das Wasser in der klassischen indischen Medizin (Wien: Österreichische Akademie der Wissenschaften).
- Baber, Zaheer (1996), *The Science of Empire: Scientific Knowledge, Civilization, and Colonial Rule in India* (Albany: State University of New York Press).
- Bakker, Hans T. (2019), "Some Methodological Considerations with Respect to the Critical Edition of Puranic Literature," in *Holy Ground: Where Art and Text Meet* (Leiden: Brill), 175–84. DOI: 10.1163/9789004412071 010.
- Barceloux, Donald G. (2008), Medical Toxicology of Natural Substances. Foods, Fungi, Medicinal Herbs, Plants, and Venomous Animals (Hoboken, NJ, etc.: John Wiley & Sons), 1196 pp., ISBN: 047172761X, URL.
- Bausi, Alessandro et al. (2015), Comparative Oriental Manuscript Studies. An Introduction (Hamburg: Tredition). DOI: 10.5281/ZENOD0.46784.
- 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 सूत्रस्थानात्म-कम् हाराणचन्द्रचक्रवर्तिकविराजविरचितसुश्रुतार्थसन्दीपनभाष्य-समेतम्...चन्द्रकान्त भट्टाचार्य्य-प्रमुखेः 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 Suśrutasamhitā," *Academia Letters*. DOI: 10.20935/AL2992.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Rimal, Madhusudan, et al. (2021), "Dalhaṇa and the Early 'Nepalese' Version of the Suśrutasaṃhitā." DOI: 10.20935/a13733.
- Bollée, Willem (2010), "Remarks on the Cultural History of the Ear in India," in Nalini Balbir (ed.), *Svasti: Essays in Honour of Professor Hampa Nagarajaiah for His 75th Birthday* (Bangalore: K. S. Mudappa Smaraka Trust), 141–67, URL, accessed 23/01/2022.
- 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 (2016), How the Brahmins Won: From Alexander to the Guptas (Leiden: Brill). DOI: 10.1163/9789004315518.
- (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 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.
- Dimitrov, Dragomir and Tamot, Kashinath (2007), "Kaiser Shamsher, His Library and His Manuscript Collection," *Kaiser Shamsher, His Library and His Manuscript Collection*, 3 (Jan.): 26–36, URL.
- Edgerton, Franklin (1939), "The Epic Trisṭubh and Its Hypermetric Varieties," *Journal of the American Oriental Society*, 59/2: 159–74. DOI: 10.2307/594060.
- —— (1953), Buddhist Hybrid Sanskrit Grammar and Dictionary. Vol. 2: Dictionary (William Dwight Whitney Linguistic Series; New Haven: Yale University Press).
- Eggeling, Julius et al. (1887–1935), Catalogue of the Sanskrit Manuscripts in the Library of the India Office (London: Secretary of State for India).
- 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 From the 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.
- Fitzgerald, James L. (2009), "A Preliminary Study of the 681 Triṣṭubh Passages of the Mahābhārata," in Robert P. Goldman and Muneo Tokunaga (eds.), *Epic Undertakings* (Papers of the 12th World Sanskrit Conference; Delhi: Motilal Banarsidass Publishe), 95–117.
- Gaṇapatiśāstrī, T. (1920–5), Āryamañjuśrīmūlakalpaḥ (Trivandrum Sanskrit Series, 70; Anantaśayane: Rājakīyamudraṇayantrālaye), ark:/13960/t4pk5sj0j.
- 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 (Poona: Prasad Prakashan), ark:/13960/t3gx47212, accessed 20/10/2017.
- 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.), *Āyur-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 Suśruta-saṃhitā, 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.), काञ्च्यपसंहिता (वृद्धजीवकीयं तन्त्रं वा) महर्षिणा मारीचक-ञ्च्यपेनोपदिष्टा ... हेमराजञ्चर्मणा 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.
- (1897), Suśrutasaṃhitā = The Suçruta-Saṃhitā or the Hindū System of Medicine According to Suçruta Translated from the Original Sanskrit (Bibliotheca Indica, 911; Calcutta: Asiatic Society), ark:/13960/t8pd1kw9r, accessed 03/01/2018; No more published; Hoernle does not state which edition he is translating, but it includes the "Dhanvantari phrase".
- (1906a), "Studies in Ancient Indian Medicine I: The Commentaries on Su-śruta," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 283–302, URL, accessed 26/06/2019.
- —— (1906*b*), "Studies in Ancient Indian Medicine II: On Some Obscure Anatomical Terms," *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 4: 915–41, URL, accessed 25/06/2019.
- —— (1907*a*), "Studies in Ancient Indian Medicine II: On Some Obscure Anatomical Terms (Continued from the the Journal, 1906, p. 941)," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 1–18, URL, accessed 25/06/2019.
- (1907b), Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body (Oxford: Clarendon Press), ark:/13960/t1pg9cq8b.

- 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 Ancient Indian Medicine II: On Some Obscure Anatomical Terms (Continued from the the Journal, 1906, p. 941)," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 1–18, URL, accessed 25/06/2019, in *Zeitschrift Der Deutschen Morgenländischen Gesellschaft*, 1/62: 134–9, URL, accessed 17/04/2021.
- Klebanov, Andrey (2010), "The *Nepalese Version of the Suśrutasaṃhitā and Its Interrelation with Buddhism and the Buddhists," MA thesis (Hamburg: Hamburg University, Sept.), URL, accessed 08/09/2019.
- —— (2021*a*), "On the Textual History of the Suśrutasaṃhitā (1): A Study of Three Nepalese Manuscripts," *eJIM: Electronic Journal of Indian Medicine*, 12/1: 1–64. DOI: 10.21827/ejim.12.1.37385.
- —— (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.
- 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.
- Lariviere, Richard W. (2003), *The Nāradasmṛti. Critically Edited with an Introduction, annotated Translation, and Appendices* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 8120818040; First edition: Philadelphia, 1989.

- 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 Gentleman'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.
- Mayrhofer, Manfred (1953–72), Kurzgefaßtes etymologisches Wörterbuch des Altindoarischen; a Concise Etymological Sanskrit Dictionary (Heidelberg: Carl Winter, Universitätsverlag).
- (1986–2001), *Etymologisches Wörterbuch des Altindoarischen* (Heidelberg: Carl Winter, Universitätsverlag), ISBN: 3-533-03826-2.
- McHugh, James (2021), *An Unholy Brew: Alcohol in Indian History and Religions* (New York: Oxford University Press), 416 pp., ISBN: 9780199375936, URL.
- 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.

- Meulenbeld, Gerrit Jan (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.
- —— (1989), "The Search for Clues to the Chronology of Sanskrit Medical Texts As Illustrated by the History of Bhaṅgā (cannabis Sativa Linn.)," *Studien zur Indologie und Iranistik*, 15: 59–70.
- —— (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.
- 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.
- —— (1982a), Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unanitibbi, 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 (2005), Manu's Code of Law: A Critical Edition and Translation of the Manava-dharmasastra, With the editorial assistance of Suman Olivelle (South Asia research; New York: Oxford University Press), ISBN: 0195171462.
- —— (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.
- Pass, Gregory (2003), Descriptive Cataloging of Ancient, Medieval, Renaissance, and Early Modern Manuscripts (Chicago: American Library Association), ISBN: 0-8389-8218-2, URL.
- Pillay, V. V. (2013), *Modern Medical Toxicology* (New Delhi: Jaypee Brothers Pvt. Ltd), ISBN: 9789350259658.
- Pillay, Vijay V. and Sasidharan, Anu (2019), "Oleander and Datura Poisoning: An Update," *Indian Journal of Critical Care Medicine*, 23/Supplement 4: 5250–5. DOI: 10.5005/jp-journals-10071-23302.

- 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.
- Rây, Priyadaranjan, Gupta, Hirendra Nath, and Roy, Mira (1980), *Suśruta Samhita* (a Scientific Synopsis) (New Delhi: Indian National Science Academy), ark:/13960/t64511t6v, accessed 13/09/2019.
- Rhys Davids, Thomas William and Stede, William (1921–5), *The Pali Text Society's Pali-English Dictionary* (London: The Pali Text Society), URL.
- Rimal, Madhusudana and Wujastyk, Dominik (2022), "MS Kathmandu NAK 1/1146," Pandit Project (18 May), 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).
- Saha, Mridula (2015), *The History of Indian Medicine Based on the Vedic Literature Satapatha Brahmana* (Kolkata: The Asiatic Society), ISBN: 978-9381574294.
- 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.

- Śāstrī, Vardhamāna Pārśvanātha (1940) (ed.), उम्रादित्याचार्यकृत कल्याणकारक (राष्ट्रभा-षानुवादसिंहत) = 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.
- 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.
- Semeka-Pankratov, Elena (1979), "A Semiotic Approach to the Polysemy of the Symbol *nāga* in Indian Mythology," in Irene Portis Winner and Jean Umiker-Sebeok (eds.), *Semiotics of Culture* (Approaches to Semiotics, 53; The Hague, Paris, NY: Mouton), 237–90. DOI: 10.1515/9783110823134–009; The contents of this volume were published simultaneously in *Semiotica* (1/3) 1979 (seme-1979b).
- Sena, Gangāprasād et al. (1886–93) (eds.), सुश्रुतसंहिता...द्रष्ठनाचार्य्य-कृत-निवन्ध-संग्रह, चकपाणिदत्त-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, XVI.I; 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).
- —— (1975), *Āyurved Kā Vaijñānik Itihās* (Jayakṛṣṇadāsa Āyurveda Granthamālā; Vārāṇasī: Caukhambā Orientalia).
- —— (1982), *Dalhaṇa and his Comments on Drugs* (Delhi: Munshiram Manoharlal).
- (1999–2001a), Suśruta-Saṃhitā, with English Translation of Text and Dalhaṇa's Commentary Alongwith (sic) Critical Notes, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhambha Visvabharati).
- (1999–2001*b*), Suśruta-Saṃhitā, with English Translation of Text and Dalhaṇa's Commentary Alongwith (sic) Critical Notes, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhambha Visvabharati).

- Shastri, R. Shama (1920) (ed.), बोधायनगृद्धसूत्रम् *The Bodhāyana Grihyasutra* (Mysore: University of Mysore), ark:/13960/t2t492622.
- Singhal, G. D. et al. (1972–82), *Diagnostic [and Other] Considerations in Ancient Indian Surgery* (Varanasi: Singhal Publications); A translation of the *Suśruta-saṃhitā* in 10v.
- Sircar, Dinesh Chandra (1987), "6. Rākshaskhāli (Sundarban) Plate; Śaka 1118," *Epigraphia Indica (1953–54)*, 30: 42–3.
- 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 Varna 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).
- Steingass, F. (1930), A Comprehensive Persian-English Dictionary Including the Arabic Words and Phrases to Be Met with in Persian Literature (London: Kegan Paul, Trench, Trubner), ark:/13960/s25bwz0337d; Reprint, Delhi: Oriental Reprint, 1973.
- Strauss, Bettina (1934), "Das Giftbuch des Śānāq: eine Literaturgeschichtliche Untersuchung," *Quellen und Studien zur Geschichte der Naturwissenschaften und der Medizin*, 4/2: [89]–[152] followed by Arabic text.
- Suvedī, K. S. and Tīvārī, N. (2000) (eds.), Sauśrutanighaṇṭuḥ: granthādau vistṛtena granthavaiśiṣṭyaprakāśakenopodghātena avasāne ca dravyāṇām anekabhāṣānām āvalī- paryāyasaṅgrahābhyāṃ samalaṅkrtaḥ Suśrutasaṃhitāyāṃ prayuktānām auṣadhadravyāṇāṃ paryāya-guṇakarmavarṇātmako pūrvagranthaḥ (Belajhuṇḍī, Dāṅ: Mahendrasaṃskṛtaviśvavidyālayaḥ).
- 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.
- UNESCO (2013), "International Memory of the World Register Susruta Samhita (Nepal)," UNESCO, URL, accessed 11/09/2019.
- Unschuld, Paul Ulrich (1984), *Medicine in China: A History of Ideas* (Berkeley: University of California Press), ISBN: 0520050231.
- Valiathan, M. S. (2007), *The Legacy of Suśruta* (Hyderabad, Chennai, etc.: Orient Longman).
- 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.
- 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/t8cg7dm79.
- Whitney, William Dwight (1885), *The Roots, Verb-forms, and Primary Derivatives 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:0s0/9780199856268.001.0001.
- —— (2013*a*), "Perfect Medicine. Mercury in Sanskrit Medical Literature," *Asian Medicine: Tradition & Modernity*, 8/1 (Sept.): 15–40, ISSN: 1573-4218. DOI: 10.1163/15734218-12341278.

- Wujastyk, Dagmar (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.
- (2002), "Cannabis in Traditional Indian Herbal Medicine," in Ana Salema (ed.), *Āyurveda at the Crossroads of Care and Cure. Proceedings of the Indo-European Seminar on Ayurveda held at Arrábida, Portugal, in November 2001* (Lisbon: Centro de História de Além-Mar, Universidade Nova de Lisboa), 45–73, ISBN: 972-98672-5-9, URL, accessed 27/05/2019.
- —— (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.
- —— (2013*b*), "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.
- Wujastyk, Dominik, SKSEC Team, and Kessler, O. (2020), "Suśrutasaṃhitā," PanditProject (6 Oct.), URL, accessed 14/09/2022.
- Yano, Michio (1986), "A Comparative Study of *Sūtrasthānas*: Caraka, Suśruta, and Vāgbhaṭa," in Teizo Ogawa (ed.), *History of Traditional Medicine: Proceedings of the 1st and 2nd International Symposia on the Comparative History of Medicine—East and West* (Osaka: Division of Medical History, the Taniguchi Foundation), 325–44.
- 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.

Lexical Index

adhiṣṭhāna elephant/snake nāga

base, foundation, 3 $n\bar{a}ga$, 4 elephant/snake, 4 carriers, 3 nipping with the mouth avaśardhita fart $mukhasamdamś\bar{a}$, 3

fart, 3 avaśardhita, 3

kalpa rule

base, foundation rule, 3 kalpa, 3

adhiṣṭhāna, 3

bristles ioose stool $s\bar{u}ka$ $s\bar{u}ka$, 3 vidbheda, 4 bristles, 3

mukhasamdamśā

carriers nipping with the *vidbheda*

adhiṣṭhāna, 3 mouth, 3 loose stool, 4

Botanical Reference Works

ADPS Sivarajan, V. V. and Balachandran, Indira (1994), Ayurvedic Drugs

and Their Plant Sources (New Delhi, Bombay, Calcutta: Oxford

& IBH Publishing).

AVS 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).

Chopra, R. N., Nayar, S. L., and Chopra, I. C. (1956), Glossary of

Indian Medicinal Plants (3rd reprint, 1992, New Delhi: Council of Scientific and Industrial Research); vol. 2: R. N. Chopra, I. C.

Chopra, and Varma (Chopra suppl.).

Chopra suppl. Chopra, R. N., Chopra, I. C., and Varma, B. S. (1969), Supplement

to Glossary of Indian Medicinal Plants (Reprint 1986, New Delhi: National Institute of Science Communication), ISBN:

8185038872.

CIPP Pillay, V. V. (2010), "Common Indian Poisonous Plants," in D. A.

Warrell, T. M. Cox, and J. D. Firth (eds.), *Oxford Textbook of Medicine* (5th edn., Oxford University Press), 1371–5. DOI: 10.1093/

med/9780199204854.003.090302.

Dutt

Dutt, Uday Chand (1922), The Materia Medica of the Hindus...with a Glossary of Indian Plants by George King. Revised Edition...by Binod Lall Sen and Ashutosh Sen and Pulin Krishna Sen (Krishnadas Sanskrit Studies; 3rd edn., Calcutta: Madan Gopal Dass for the Adi-Ayurveda Machine Press), URL, accessed 04/10/2017; Reprinted Varanasi: Chowkhamba Saraswatibhavan, 1980.

GVDB

Singh, Thakur Balwant and Chunekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhattrayī* (Varanasi: Chowkhamba Sanskrit Series Office).

IGP

Griffiths, Mark (1994), *The New Horticultural Society Index of Garden Plants* (London: Macmillan).

NK

Nadkarni, K. M. (1982a), 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.

Glossary and Index of Medical Substances

axlewood (*dhava*) Anogeissus latifolia (Roxb. ex DC.) Wall. ex Guill & Perr. See AVS: vol. 1, 163 f, Chopra: 20, 4

beautyberry (*priyangu*) ← śyāmā. Callicarpa macrophylla, Vahl. See AVS: vol. 1, 334, NK: #420. Some say also Setaria italica Beauv. GVDB: 263−264. See also GVDB: 413, 5

cardamom (*elā*) Elettaria cardamomum, Maton. See AVS: vol. 2, 360, NK: #924, Potter 66, 5

certain minerals (*tārāvitāra*) Unknown. It is not even certain that these are minerals. The variant reading in the vulgate, *tāraḥ sutāraḥ* was glossed by Dalhaṇa on 5.3.14 (Su 1938: 568) as follows *tāro rūpyaṃ*, *sutārah pāradaḥ*, "tāra means silver; sutāra

means mercury.", 4

corky coral tree (*pāribhadra*) Erythrina suberosa Roxb. See GVDB 245, 4

costus (*kuṣṭha*) Saussurea costus, Clarke. See NK: #2239, 5

country sarsaparilla (*anantā*) Hemidesmus indicus, (L.) R. Br. See ADPS: 434, AVS: vol. 3, 141–5, NK: #1210. But see GVDB: 13 for complications that may suggest that it is to be equated with *sārivā*, which may sometimes be Cryptolepis or Ichnocarpus fruitescens R. Rr. (GVDB: 429-431), 4

crape jasmine (*tagara*) Tabernaemontana divaricata (L.) R.Br. ex Roem. & Schultes. See GJM 557, AVS: vol. 5, 232. Synonym of ??. But some say Valeriana jatamansi,

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Jones See GVDB: 173-174 for discussion
   (and charming comments on brain liquid
   testing), 27
crimson trumpet-flower tree (pāṭalā)
   Stereospermum chelonides, (L. f.) A. DC.
   See GJM 573, AVS: vol. 5, 192 ff,
   ADPS: 362 f, AVS: vol. 3, 1848 f, IGP 1120,
   Dymock et al. 1890: vol. 3, 20 ff, 4
garjan oil tree (aśvakarṇa) Dipterocarpus
   turbinatus Gaertn. f. See GVDB: 28,
   Chopra: 100, 4
gold and sarsaparilla (surendragopa)
   Unknown. Dalhana on 5.3.15 (Su 1938: 568)
   glossed surendra as "gold" and gopā as
   "Indian sarsaparilla." He also noted other
   opinions that surendra was "Tellicherry
   bark", 4
golden shower tree (rājadruma) rājadruma =
   āragvadha. Cassia fistula L. See GVDB 37,
Himalayan mayapple (vakra) Podophyllum
   emodi, Wall. (NK: #1971). But perhaps a
   synonm of crape jasmine and ??
   (GVDB: 354), 5
Himalayan monkshood (ativiṣā) Aconitum
   heterophyllum Wall. GVDB: 12, NK: #39, 5
Indian sarsaparilla (s\bar{a}riv\bar{a}) \rightarrow anant\bar{a}
   (Hemidesmus indicus, (L.) R. Br.ADPS: 434,
   AVS: vol. 3, 141-5, NK: #1210) and black
   creeper (pālindī. Ichnocarpus frutescens,
   (L.) R.Br. or Cryptolepis buchanani,
   Roemer & Schultes AVS: vol. 3, 141, 3.145,
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3.203, NK: #1283, #1210, ADPS: 434), 27

Meulenbeld 1974: 445, NK: vol. 2, #32. Watt

lac (lākṣā) Kerria lacca (Kerr.). See

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(1908: 1053-1066) is characteristically
   informative, and is definite about the
   antiquity of lac in India, 5
myrobalan (abhayā) Terminalia chebula, Retz.
   See ADPS: 172, NK: #2451, Potter 214, 5
nutgrass (kuruvinda) Unknown. Dalhana on
   5.3.15 (Su 1938: 568) glossed the term as
   nutgrass, but noted other opinions that it
   was a whetstone or a very special metallic
   gem. Singh and Chunekar (GVDB: 108)
   added that it could be a variety of rice,
   sastika dhānya, 5
nutgrass (mustā) Cyperus rotundus, L. See
   ADPS: 316, AVS: vol. 2, 296, NK: #782, 27
peas (harenu) harenu = satīna. Pisum sativum,
   L. Singh and Chunekar (GVDB: 419-420,
   467-468) notes that two plants are usually
   meant under this name, but there is no
   agreement on the identity of the second, 5
small-flowered crape myrtle (sidhraka)
   Lagerstroemia parviflora Roxb. See
   GVDB: 432, 4
Tellicherry bark (kuṭaja) Holarrhena
   pubescens Wall. ex G.Don, with Wrightia
   tinctoria and W. arborea considered
   GVDB: 101-102, ADPS: 267-270, 27
turmeric (haridrā) Curcuma longa Linn.
   GVDB: 465, 5
weaver's beam tree (muskaka) Schrebera
   swietenioides, Roxb. See AVS: vol. 5, 88,
   Lord, NK: #2246, 4
white cutch tree (somavalka) Acacia
   polyacantha, Willd. See AVS: vol. 1, 30,
   IGP 7, GJM 602, AVS: vol. 2, 935; pace
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NK: #1038, 4

Todo list

Come back to the issue of "kalpa". Look up passages in the Kośa	3
write footnote: don't repeat ativiṣā; vulgate similar to H	5