A Translation of the New Edition of the Suśrutasaṃhitā

Jason Birch and Dominik Wujastyk

Draft of 28th May 2021 © Jason Birch and Dominik Wyjastyk

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

Contents

The Manuscripts used in the Vulgate editions by Yādavasarma	
Trivikrama Ācārya	3
The manuscripts of the 1915 edition	3
The manuscripts of the 1931 edition	
The manuscripts of the 1938 edition	4
Sūtrasthāna, adhyāya 1	5
Sūtrasthāna, adhyāya 2	12
Literature	12
Sūtrasthāna, adhyāya 16	13
Uttaratantra, adhyāya 17	18
Literature	18
Translation	18

Sūtrasthāna, adhyāya 28		25	
Abbreviations		26	
References		27	
Glossary		31	
Index of Manuscripts	2	40	

The Manuscripts used in the Vulgate editions by Yādavaśarma Trivikrama Ācārya

Yādavaśarma Trivikrama Ācārya produced three successive editions of the *Suśrutasaṃhitā* with the commentary of Dalhaṇa, in 1915, 1931 and 1938. These editions, especially the last, are considered the most scholarly and reliable editions of the work, and have been constantly reprinted up to the present day.

The 1915 edition was based on three manuscripts. The 1931 edition used another nine. For his final 1938 edition, Ācārya used a further three.¹

The manuscripts of the 1915 edition

- 1 Calcutta, Royal Asiatic Society. Covers the sūtra, nidāna, śārīra and kalpa sthānas.
- 2 Jaipur, Pandit Gaṅgādharabhaṭṭaśarman, lecturer at the Royal Sanskrit University. Covers the cikitsāsthānna and the uttaratantra.
- 3 Bundi, my great friend the royal physician Pam. Śrīprasādaśarman Covers the uttaratantra.

The manuscripts of the 1931 edition

- 1 Vārāṇasī, professor of literature, the great Gaurīnāthapāṭhaka. With the *Nibandhasaṅgraha*. Covers the nidānasthāna and uttaratantra.
- 2 Ahmedabad. My friend Sva. Vā. Vaidya Raṇachoḍalāla Motīlālaśarman. With the *Nibandhasaṅgraha*. Covers the śārīrasthāna.
- 3 From the library of my great friend Sva. Vā. Vaidya Murārajīśarman. Extremely old. No commentary. Covers the śārīrasthāna.
- 4 Puṇe, BORI library. With the *Nibandhasangraha*. Covers the śārīrasthāna.²
- 5 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Complete. With some damaged folia.

¹SS 1938: 22.

²Not one of the three MSS of the *śārīrasthāna*described in **shar-vaid**.

6 Bombay, Asiatic Society. Incomplete.3

7 8

9

The manuscripts of the 1938 edition

1 2 3

							Man	uscr	ipts						
edition		1915	;					19	35					19	38
sthāna	1	2	3	1	2	3	4	5	6	7	8	9	1	2	3
$s\bar{u}$.	•						. /		?			1 -43	•		•
ni.	•			•				•	?	(•		•	•	•
śā.	•								?	(•		•		•
ci.									?	•	•		•		●1-9
ka.	•								?	(•		•		
utt.			•						?		•				

³Possibly MS Mumbai, AS B.I.₃ or MS Mumbai, AS B.D.₁₀₉ (Velankar 1925–30: v. 1, # 212 and 213). But both these have the Nibandhasangraha. The first covers only the śārīrasthāna; the second may be complete, but Velankar calls it only "disorderly."

Sūtrasthāna, adhyāya 1

- 1 Now I shall narrate the chapter on the origin of this knowledge.⁴
- 2 Now, as is well-known, Aupadhenava, Vaitaraṇa, Aurabhra, Puṣkalāvata, Karavīra, Gopurarakṣita, Bhoja, Suśruta and others addressed Lord Divodāsa, king of Kāśi, the best of the immortals, who was in his ashram surrounded by an entourage of sages.⁵
- "O Lord, distress arose in our minds after witnessing people thrashing about with cries, assailed by different kinds of pain and injury (*vedanā-bhighāta*), feeling helpless in spite of having friends, because of diseases arising from the body, the mind and external sources.
- "To quell the illnesses of those who seek happiness and for our own purpose of prolonging life, we desire the science of life (āyurveda) that is being taught. Welfare, both in this world and in the next, depends upon it. Therefore, we have come to the Lord in pupillage."
- The Lord said to them:
 "Welcome to you! My children, all of you are beyond reproach and worthy to be taught.
- 6 "As is well known, Ayurveda is the name of what is said to be the subsidiary part of the Atharvaveda. Before creating people, Svayambhū composed it in hundreds of thousands of verses and a thousand chapters and, after observing the short lifespan and low intelligence of people, he presented it again in eight parts.⁶
- 7 "Surgery, treatment of body parts above the clavicle, general medicine,

⁶Svayambhū is another name for Brahmā, the creator.

⁴Dalhaṇa understood the word "knowledge (*veda*)" as specifically "medical knowledge." He said that the word "longevity" (*āyur*) had been elided. After this opening statement, later manuscripts and commentaries include the attribution, "as the venerable Dhanvantari stated." The absence of this statement in the early Nepalese MSS is highly noteworthy because it removes the outer narrative frame of the *Suśrutasaṃhitā* (Dominik Wujastyk 2013: 148; Klebanov 2021a: § 3.1.2). On the figure of Dhanvatari in medical literature, see HIML: IA 358–361.

⁵On these persons, see HIML:IA 361–363, 369 ff. The authority Bhoja does not appear in the list as published in the vulgate edition (SS 1931:1), and was not included in HIML amongst "authorities mentioned in the *Suśrutasaṃhitā*." Meulenbeld gathered textual evidence about Bhoja at HIML:IA 690–691. Klebanov (2021*b*) has discussed these authors in the context of an anonymous commentary on the *Suśrutasaṃhitā* that cites them.

- knowledge of spirits, care of children, and the disciplines of antidotes, rejuvenation and aphrodisiacs.
- 8 "Now, a collection of the characteristics of each component of Āyurveda.
- "Among them, [the component] called surgery has the goal of extracting various grasses, wood, stone, dust, iron (?), soil, bone, hair, nails, discharge of pus, malignant wounds and foreign bodies inside the womb, and of determining the application of surgical instruments, knives, caustics and fire by means of sixty definitions.
- "[The component] named the doctrine of treating body parts above the clavicles has the aim of curing diseases situated above clavicles that is, diseases located in ears, eyes, mouth, nose and so on.
- "[The component] called general medicine has the goal of curing illnesses established in the whole body and [diseases] such as fever, tumour, swelling, hemorrhagic disorders, insanity, epilepsy, urinary diseases, diarrhoea and the like.
- "[The component] called knowledge of spirits is for appeasing demons by pacification rites and making food offerings for those whose minds have been possessed by gods, their enemies, Gandharvas, Yakṣas, demons, deceased ancestors, Piśācas, Vināyakas, Nāgas and evil spirits that possess children.
- "[The component] called care of children is for bearing children and purifying defects in a wet-nurse's milk, and curing diseases that have arisen from bad breast milk and demons.
- "[The component] called the discipline of toxicology is for [knowing] the signs of poison from snake and insect bites and for neutralising various combinations of poisons.9
- "[The component] called the discipline of rejuvenation is maintaining youth, bringing about a long life and mental vigour and for curing diseases.

 $^{^{7}}$ Dānavas. The insertion marks ($k\bar{a}kapadas$) below the text at this point appears to be by the original scribe.

⁸The vulgate doesn't have *vināyakas* but does add *asuras*, probably under the influence of Palhaṇa. Cite Paul Courtright, Ganesha book.

⁹The scribal insertion marks (crosses) above the line at this point in MS K appear to be in a later hand and their referent is lost in the damaged part of the folio. Although MSS N and H include spiders ($l\bar{u}t\bar{a}$) and creepy-crawlies ($sar\bar{t}srpa$) in the list, it does seem that MS K had a shorter list, and the vulgate edition adds rodents ($m\bar{u}sika$).

- "[The component] called the discipline of aphrodisiacs brings about the increase, purity, accumulation and production of semen for those whose semen is minimal, bad, depleted, and dry [respectively] and for inducing an erection.
- "Thus, this Āyurveda is taught with eight components."
 "Among these [components], tell us which is for whom."
- 18 They said, "After you have conveyed the knowledge of surgery, teach us everything."
- 19 He said, "so be it."
- They then said, "Having considered the view of all of us, when we are unanimous, Suśruta will question you. We too will learn what is being taught to him."
- 21 He said, "so be it.
- "Now, as is well-known, the aim of Āyurveda is eliminating the disease of one who have been assailed by disease and protecting the healthy; āyurveda is [that knowledge] in which they find a long life, or that by which long life is known. Learn its best component (i.e., surgery), which is being taught in accordance with tradition, perception, inference and analogy.
- "For this component is first, the most important, because it is referred to first; it cures wounds and joins together the most important thing, Yajña's head. For, just as it has been said of old, 'the head that had been cut off by Rudra was joined again by the two Aśvins.'
- "And also, of the eight disciplines of Ayurveda, [surgery] alone is the best because of the quick action of its procedures ($kriy\bar{a}$), its application of blunt instruments, knives, caustics and fire, and it is common to all disciplines.
- "Therefore, [surgery] is eternal, meritorious, leads to heaven, brings renown, bestows a long life, and affords a livelihood.
- 26 "Brahmā said this, 'Prajāpati learned it. From him, the Aśvins. From the Aśvins, Indra. From Indra, I. In this world, I will transmit to those who desire it for the benefit of people.'

[There a verse about this.]. 10

For, I (i.e., Brahmā) am Dhanvantari, the first god, the remover of old age, pain and death of mortals.

 $^{^{10}}$ This is an expansion of the scribe's abbreviation *bha* for *bhavati cātra ślokaḥ* "There is a verse about this" (sometimes plural).

Having understood surgery, the best of the great knowledge systems, I arrived on earth again to teach it here.

In this context, as far as this discipline is concerned, a human being (puru
otin a) is called an amalgam of the five elements and the embodied soul. This is where procedures (kriy
otin a) apply. This is the locus. Why?

Because of the duality of the world, the world is twofold: the stationary and the moving. Its nature ($\bar{a}tmaka$) is twofold, depending on the preponderance of Agni and Soma. Alternatively, it can be considered as being fivefold. The multitude of beings in it are fourfold: they are termed "sweat-born, stone-born, caul-born and egg-born". Where they are concerned, the human being is the main thing; others are his support. Therefore, the human being ($puru \not sa$) is the locus.

Diseases are said to be the conjunction of the person and suffering (duḥ-kha). There are four of them: invasive, bodily, mental and inherent. The invasive ones are caused by an injury. The bodily ones are based on food, caused by irregularities (vaiṣamya) in wind, bile, phlegm and blood.¹³

The mental $(m\bar{a}nasa)$ ones, caused by desire $(icch\bar{a})$ and hatred (dveṣa), include: anger (krodha), grief $(\bar{a}śoka)$, misery (dainya), overexcitement (harṣa), lust $(k\bar{a}ma)$, depression $(viṣ\bar{a}da)$, envy $(\bar{v}rṣy\bar{a})$, jealousy $(as\bar{u}y\bar{a})$, malice $(m\bar{a}tsarya)$, and greed (lobha).

The inherent $(sv\bar{a}bh\bar{a}vika)$ ones are hunger, thirst, old age, death, sleep and those of the temperament (prakrti).

These too are located (adhisthāna) in the mind and body.

Scarification (lekhana), nourishment (bṛṃhaṇa), purification (saṃśo-dhana), pacification (saṃśamana), diet ($\bar{a}h\bar{a}ra$) and regimen ($\bar{a}c\bar{a}ra$), properly employed, bring about their cure.

Furthermore, food is the root $(m\bar{u}la)$ of living beings as well as of strength (bala), complexion (varna) and vital energy (ojas). It depends on $(\bar{a}yatta)$ the six flavours (rasa). Flavours, furthermore, have substances as their substrate $(\bar{a}\acute{s}rayin)$. And substances are remedies $(o\rlap{s}adh\bar{\imath}-)$.\(^{14}\) There are two types: stationary $(sth\bar{a}vara)$ and moving

¹¹See Dominik Wujastyk 2004.

¹²This fourfold classification of beings is paralleled with closely-related vocabulary in *Bhelasaṃhitā* 4.4.4 (Bhela 2000: 206; Bhela 1921: 81).

¹³Note that four humoral substances are assumed here.

¹⁴Pāṇini 6.3.132 provides that the final vowel of the noun *oṣadhi* may be lengthened

(jaṅgama).

- Of these, there are four types of stationary ones: fruit trees (*vanaspati*), flowering trees (*vṛkṣa*), herbs (*oṣadhi*) and shrubs (*vīrudh*). Amongst these, the "fruit trees" have fruit but no flowers. The "flowering trees" have flowers and fruit. The "herbs" die when the fruit is ripe. "Shrubs" put out shoots.
- As is well known, moving remedies are also of four types: those born in in a caul (<code>jarāyuja</code>), those born from eggs (<code>aṇḍaja</code>), those born of sweat (<code>svedaja</code>), and shoots (<code>udbhid</code>). Amongst these, those born in a caul include animals (<code>paśu</code>), humans, and wild animals (<code>vyāla</code>). Birds, creepycrawlies (<code>sarīsṛpa</code>) and snakes are "born of eggs." Worms (<code>kṛmi</code>), small insects (<code>kunta</code>) and ants (<code>pipīlika</code>) and others are born of sweat. ¹⁷ Shoots include red velvet mites (<code>indragopa</code>) and frogs (<code>maṇḍūka</code>). ¹⁸|
- In this context, among the stationary remedies, skin (tvak), leaves (pa-tra), flowers (puṣpa), fruits (phala), roots ($m\bar{u}la$), bulbs (kanda), sap ($kṣ\bar{t}ra$), resin ($niry\bar{a}sa$), essence ($s\bar{a}ra$), oil (sneha), and juice extract (sva-rasa)¹⁹ are useful; among the moving remedies pelt (carman), hair, nails, and blood (rudhira) and so forth.
- 34 And earthen products (*pārthiva*) include gold and silver.²⁰
- The items created by time $(k\bar{a}lakrta)$ are clusters (samplava) as far as wind and no wind $(niv\bar{a}ta)$, heat and shade, darkness and light and the cold, hot and rainy seasons $(vars\bar{a})$ are concerned. The divisions of time are the blink of the eye (nimesa), a trice $(k\bar{a}sth\bar{a})$, minutes $(kal\bar{a})$,

 $^{(\}rightarrow o sadh \bar{\imath})$ under certain conditions. These conditions require that the word be used in a Vedic mantra and not in the nominative. Neither condition is met in this passage, yet the author uses the form $o sadh \bar{\imath}$. This form is in fact not uncommon in medical literature as well as in epics, purāṇas, smṛtis, and other parts of Sanskrit literature.

¹⁵Ca.sū.1.71–72 also describes these four types of medicinal plant in similar terms but with slightly differing names: *oṣadhi* is a plant that ends after fruiting, *vīrudh* is a plant that branches out, *vanaspati* is a tree with fruit, and *vānaspatya* is a tree with fruit and flowers.

¹⁶The MSS agree in reading *phalavantyaḥ* "having flowers" which is grammatically non-standard. This form is also found in the *Viṣṇudharmottarapurāṇa* (1.92.27, 1.92.27 Viṣṇudharmottarapurāṇa: 56r).

¹⁷The word *kunta*, though marked as "lexical" in most dictionaries, is in fact found in literature, commonly as a compound with *pipīlika*; the compound sometimes seems to be understood a type of ant (*tatpuruṣa* compound) rather than as a pair of insects (*dvandva* compound).

¹⁸On *indragopa*, see Lienhard 1978.

¹⁹On juice extract (*svarasa*) see CS 1.1.73, 1.4.7; SS 4.10.12.

²⁰The flow of concepts in the treatise seems to be interrupted here.

- three-quarters of an hour $(muh\bar{u}rta)$, a day and night $(ahor\bar{a}tra)$, a fort-night (pakṣa), a month $(m\bar{a}sa)$, a season (rtu), a half-year (ayana), a year (samvatsara), and yuga (yuga).²¹
- These naturally cause accumulation (*sañcaya*), irritation (*prakopa*), pacification (*upaśama*) and alleviation (*pratīkāra*) of the humours (*doṣa*). And they have practical purposes (*prayojanavat*).

[There are verses about this:]²²

- This fourfold category is taught by physicians as a cause for the agitation and quelling of bodily diseases.²³
- There are two kinds of invasive diseases. Some certainly²⁴ affect (nipat-) the mind, others the body. Their treatment (kriyā) is of two kinds too.
- For those that affect the body there is physical (śārīravad) therapy, whereas for those that affect the mind there is the collection (varga) of desirable sensory experiences like sound that bring comfort (sukha).
- 40 Along these lines (*evam*), this brief explanation of the four factors (*catuṣtaya*) is given:
 - human being (puruṣa),
 - disease (vyadhi),
 - remedies (oṣadhi),
 - the time for therapies (*kriyākāla*).

In this context,

• from the mention of the word "human," the collection of substances that arise from it, such as the elements, and the particulars (*vikalpa*) of its major and minor parts (*aṅga*) such as skin (*tvak*), flesh (*māṃsa*), ducts (*sirā*), sinews (*snāyu*), bones (*asthi*) and joints (*sandhi*) are meant.

²¹These units are presented at SS 1.6.5 and discussed by Hayashi (2017: § 59).

²²See footnote 10.

²³On the topic of the "group of four," the commentator Dalhana considers them to be "food, behaviour, earthen products and items created by time." He refers to the author of the lost commentary entitled $Pa\tilde{n}jik\bar{a}$, and to Jejjaṭa (HIML: IA, 372–3, 192). In his view, these early commentators do not agree that the fourfold grouping (caturvarga) refers to the quartet of stationary ($sth\bar{a}vara$), moving (jangama), earthen products ($p\bar{a}rthiva$) and items created by time ($k\bar{a}lakrta$) (SS 1938²: 9a).

²⁴The text uses an archaic interjection here, ha.

- From the mention of "diseases," all diseases caused by wind, bile, phlegm, congested humours (sannipāta), external factors (āgantu) and inherent factors (svabhāva) are intended (vyākhyāta).
- From the mention of "remedies," there is the teaching of substances, tastes, potencies, post-digestive tastes.
- From the mention of "procedures (*kriyā*)," therapies (*karman*) such as oiling and excision (*chedya*) are taught.
- From the mention of the word "time," every single teaching about the times for procedures is meant.

[There is a verse about this:]²⁵

- This seed of medicine has been declared in brief. Its explanation will be given in one hundred and twenty chapters.²⁶
- There are one hundred and twenty chapters in five sections (*adhyāya*).²⁷ In that regard, having divided them, according to their subject matter, into the Ślokasthāna, the Nidāna, the Śārīra, the Cikitsita and the Kalpa, we shall mention this in the Uttaratantra.²⁸

[There is a verse about this:]29

Someone who reads this eternal proclamation of the King of Kāśī, that was declared by Svayambhu, will have good karma on earth, will be respected by kings and upon death will achieve the world of Śakra.

²⁵See footnote 10.

 $^{^{26}}$ This is the number of chapters in the first five sections of the work, namely the $S\bar{u}tra$ -, $Nid\bar{a}na$ -, $S\bar{a}r\bar{t}ra$ -, $Cikits\bar{a}$ - and Kalpa-sth $\bar{a}na$ s. These have 46, 16, 10, 40 and 8 chapters respectively. The Uttaratantra has 66 chapters.

²⁷On vimśa in the sense of "greater by 20" see P.5.2.46 śadantavimśateś ca.

²⁸The end of this sentence reads oddly. The vulgate edition adds an object: "[we shall mention] the remaining topics [in the Uttara]" which smooths out the difficulty, but this is supported in none of the Nepalese MSS. At the start of the Uttaratantra (SS 1938: 1.3–4ab) there is indeed a statement that picks up the point about there being 120 chapters.

²⁹See footnote 10.

Sūtrasthāna, adhyāya 2

Literature

HIML: IA, 204; Preisendanz 2007; Dagmar Wujastyk 2012: 82–83, et passim.

1

Sūtrasthāna, adhyāya 16

- 1 Now we shall expound the method for the piercing of the ear.
- One may pierce a child's ears for the purpose of preserving and decorating.
 - During the first half of the sixth or seventh lunar month, during a renowned day, half day, hour and constellation the child who has received a benediction (krtamangala), blessings pronounced (svastivacana) should be placed on the lap of a wet-nurse.³⁰ For a boy, do the right one first; for a girl do the left one. Use a needle on a thin ear; an awl ($\bar{a}r\bar{a}$) on a thick one.
- If there is excess blood or pain one should know that it was pierced in the wrong place. The absence of side-effects is a sign that it has been pierced in the right place.³¹
- 4 In this context, if an ignorant person accidentally pierces a duct (*sirā*) there will be fever, burning, swelling (*śvayathu*), pain, lumps (*granthi*), paralysis of the nape of the neck (*manyāstambhā*), convulsions (*apatānaka*), headache or pain in the ear.
- Having removed the wick (*varti*) in it, one should smear it with a paste of the roots of barley, liquorice, Indian madder (*mañjiṣṭhā*), and the castor oil tree (*gandharvahasta*), thickened with honey and ghee. When it has healed well, one should pierce it again.
- 6 One should treat the properly-pierced ear by sprinkling it raw sesame oil. After every three days one should apply a thicker wick (*varti*) and sprinkle oil right on it.³²
- 7 Once the ear is free from humours or side-effects, one should loosen it with a light dilator (*pravardhanaka*) in order to enlarge it.
- 8 An person's ear enlarged in this way can split in two, either as a result of the humours or as a result of a blow.

Listen to me about the joins (sandhāna) it can have.

³⁰The syntax here is unclear. The expression *svastivācana* may have been a gloss inserted into the text at an earlier period to clarify *maṅgala*. But as it stands, it is not syntactically connected to the rest of the sentence. The Vulgate records a reading in which the words are united in a compound that reads more naturally.

 $^{^{31}}$ From here on, witness K is missing a folio, so the text is contstructed on the basis of witnesses N and H.

 $^{^{32}}$ The manuscripts support the reading $sth\bar{u}latar\bar{t}m$ that is either a non-standard form or a scribal error.

Here, there are, in brief, fifteen ways of mending the ear. They are as follows: Rim-join, Lotus-splittable, Dried Flesh, Fastening, Cheek-ear, Take away, Ready-Split, Multi-joins, Door-hinge, Half door-hinge, Compressed (saṃkṣipta), Reduced-ear, Creeper-ear, Stick-ear, and Crow's lip.

In this context, among these,

"Rim-join" (nemīsandhānaka): both flaps are wide, long, and equal.

"Lotus-splittable" (*utpalabhedyaka*): both flaps are round, long, and equal.

"Dried flesh" (vallūraka): both flaps are short, round, and equal.

"Fastening" (āsaṅgima): one flap is longer on the inside.

"Cheek-ear" (gaṇḍakarṇa): one flap is longer on the outside.33

"Take-away" ($\bar{a}h\bar{a}rya$): the flaps are missing, in fact, on both sides.

"Ready-split" (*nirvedhima*): the flaps are like a dais (*pīṭha*).

"Multi-joins" (*vyāyojima*): one flap is small, the other thick, one flap is equal, the other unequal.

"Door-hinge" (*kapāṭasandhika*): the flap on the inside is long, the other is small.

"Half door-hinge" (ardhakapāṭasandhika): the flap on the outside is long, the other is small.

These ten options (*vikalpa*) for joins (*sandhi*) of the ear should be bound. They can mostly be explained as resembling their names.³⁴ The five below are not so successful:

The five from compressed (saṃkṣipta) on are incurable. Among these, "compressed" has a dry ear canal and the other flap is small. "Reduced ear" has flaps that have no base and have wasted flesh on their edges. "Creeper-ear" has flaps that are thin and uneven. "Stick-ear" has lumpy (granthita) flesh and the flaps are stretched thin and have stiff (stabdha)

³³See fig. ??.

³⁴This is an odd assertion, given the strangeness of the names.

ducts $(sir\bar{a})$. "Crow-lip" has a flap without flesh with compressed (sam-k + ipta) tips and little blood. Even when they are bound up, they do not heal because they are hot, inflamed, suppurating $(sr\bar{a}va)$, or swollen.

A person wishing to perform any of these joins should therefore gather together the supplies prepared according to the recommendations of the 'Preparatory Supplies' chapter.³⁵ And in particular, he should gather decanted liquor (*surāmaṇḍa*), milk, water, fermented rice-water (*dhānyāmla*), and powdered earthenware crockery (*kapālacūrṇa*).

Next, he should prepare the woman or man who have had the ends of their hair tied up, have eaten lightly, and are firmly supported by qualified attendants.

Then, he should ready the bindings (bandha) and carry out the procedure with cutting (chedya), splitting (bhedya), scarification (lekhya), or piercing (vyadhana), examine the blood of the ear to know whether it is tainted (duṣṭa) or not. Then if it is tainted by wind, the ear should be bathed with fermented rice-water (dhānyāmla) and water; if tainted by choler, then cold water and milk should be used; if tainted by phlegm, then decanted liquor (surāmaṇḍa) and water should be used, and then he should scarify it again.

Then, arranging the join in the ear so that it is neither proud, depressed, nor uneven, one should make the join. Next, after anointing it with honey and ghee, each ear should be bandaged with cotton (picu) and gauze (prota), and bound up with a thread, neither too tightly nor too loosely. Then the earthenware powder should be sprinkled on, and medical advice ($\bar{a}c\bar{a}rika$) should be given. And he should supplement with food as taught in the 'Two Wound' chapter.³⁶

One should avoid rubbing, sleeping during the day, exercise, overeating, sex, getting hot by a fire, or the effort of speaking.

One should not make a join when the blood is too pure, too copious, or too thin.³⁷ For when the ear is tainted by wind, then it is obstructed by blood (raktabaddha), unhealed and will peel. When tainted with choler, is becomes pinched ($g\bar{a}dha$), septic ($p\bar{a}ka$) and red. When tainted by phlegm, it will be stiff (stabdha) and itchy. It has excessively copi-

³⁵SS.1.5.

³⁶SS.4.1.

³⁷The vulgate reads "impure" for the Nepalese "too pure," which would appear to make better medical sense. Emending the text to *nāśuddha*- for *nātiśuddha*- in the Nepalese recension would yield the same meaning as the vulgate.

- ous suppuration ($sr\bar{a}va$) and is sopha ($puffed\ up$). It has it has a small amount of wasted ($ks\bar{i}na$) flesh and it will not grow.³⁸
- When the ear is properly healed and there are no complications, one may very gradually start to expand it. Otherwise, it may be angry (samrambha), burning, septic or painful. It may even be split open again.
- Now, massage for the healthy ear, in order to enlarge it. One should gather as much as one can of the following: a monitor lizard ($godh\bar{a}^{39}$), scavenging (pratuda) and seed-eating (viskira) birds, and creatures that live in marshes or water,⁴⁰ fat, marrow, milk, and sesame oil, and white mustard oil. Then cook the oil with an admixture (prativāpa) of the following: purple calotropis ($arka^{41}$), white calotropis ($alarka^{42}$), country mallow ($bal\bar{a}^{43}$), 'strong Indian mallow' ($atibal\bar{a}^{44}$), country sarsaparilla ($anant\bar{a}^{45}$) beggarweed ($vid\bar{a}ri^{46}$), liquorice (madhuka), hornwort ($jalas\bar{u}ka \rightarrow jalan\bar{t}lik\bar{a}^{47}$),⁴⁸ items having the 'sweet' savour (madhuravarga),⁴⁹ and 'milk flower' ($payasy\bar{a} \rightarrow vid\bar{a}r\bar{\iota}^{50}$). This should then be deposited in a well-protected spot.
- The wise man who been sweated should rub the massaged (mardita) ear with it. Then it will be free of complications, and will enlarge properly and be strong.
- 16 Ears which do not enlarge even when sweated and oiled, should be scarified at the edge of the hole (*apāṅga*), but not outside it.
- 17 In this tradition, experts know countless repairs to ears. So a physi-

³⁸This passage exemplifies numerous small changes

³⁹Varanus bengalensis, Schneider (Daniel 1983:58)

⁴⁰For such classifications, see **zimm-jung** and **smit-clas**.

⁴¹Calotropis gigantea, (L.) R. Br. (ADPS 52, AVS 1.341, NK #427, Potter 57, ID 306)

⁴²Calotropis procera, (Ait.) R. Br. (NK #428, GIMP 46b, ID 306)

⁴³Sida cordifolia, L. (ADPS 71, NK #2297)

⁴⁴Abutilon indicum, (L.) Sweet; Sida rhombifolia, L.? (NK #11, IGP ,4 1080; NK #2300)

⁴⁵Hemidesmus indicus, (L.) R. Br. (ADPS 434, AVS 3.141–5, NK #1210)

⁴⁶Desmodium gangeticum (L.) DC (Dymock 1.428, GJM 602, cf. NK #1192; ADPS 382, 414 and IMP 2.319, 4.366 are confusing)

⁴⁷Ceratophyllum demersum, L. (IMP 2371, AVS 2.56, IGP 232)

⁴⁸This name is not certain: in fact, the commentator Dalhana notes that some people interpret it as a poisonous, hairy, air-breathing, underwater creature.

⁴⁹The items which exemplify the 'sweet' savour (*madhuravarga*) are enumerated at SS.1.42.11.

⁵⁰Pueraria tuberosa (Willd.) DC. (ADPS 510, IMP 1.792f., AVS 4.391; not Dymock 1.424f. See GJM supplement 444, 451, IMP 1.187, but IMP 3.1719 = Ipmoea mauritiana, Jacq.)

- cian who is very intent (*suniviṣṭa*) on working in this way may repair (*yojayed*) them.
- 18 If an ear has grown hair, has a nice hole, a firm join, and is strong and even, well-healed, and free from pain, then one can enlarge it slowly.
- 19 Now I shall describe the proper method of repairing a severed nose. First, take from the trees a leaf the same size as the man's nose and hang it on him.
- Next, having cut a slice of flesh (*vadhra*) with the same measurements off the cheek, the end of the nose is then scarified.⁵¹

 Then the diligent (*apramatta*) physician, should quickly put it back together (*pratisandhā*-) so that it is well joined (*sādhubaddha*).

 52
 - Having carefully observed that it has been well sown up, two tubes should be fixed in place. Then, having lifted them up,⁵³ the powder of sappanwood ($patt\bar{a}nga^{54}$),⁵⁵ liquorice ($yast\bar{n}madhuka^{56}$), and Indian barberry ($a\tilde{n}jana^{57}$) should be applied to it.
- The wound should be covered properly with cotton (picu) and should be moistened repeatedly with sesame oil. Ghee should be given to the man to drink. His digestion being complete, he should be oiled and purged in accordance with the instructions specific to him.⁵⁸
- And once healed and really come together, what is left of its flesh (*vadhra*) should then be trimmed. If it is reduced (*hīna*), however, one should make an effort to stretch it, and one should make its overgrown flesh smooth.

⁵¹The vulgate reads bound, connected (*baddham*) for slice of flesh (*vadhra*). This is a critical variant from the surgical point of view. If the slice remains connected, it will have a continuing blood supply. This is one of the effective techniques that so astonished surgeons witnessing a similar operation in Pune in the eighteenth century (**wuja-roots3**).

⁵²Or '... off the cheek, it is fixed to the end of the nose, which has been scarified'. The Sanskrit text is unfortunately not unambiguous on the important point of whether or not the flap of grafted skin remains connected to its original site on the cheek.

⁵³The Sanskrit here, *unnāmayitvā* is non-Pāṇinian.

⁵⁴Caesalpinia sappan, L. (AVS 1.323, IMP 2.847f.)

⁵⁵For pattāṅga there are manuscript variants *pattrāṅga* (MS H) and *pattaṅga* (N). We read with H and K (f. 14r:1) on Y. T. Ācārya and N. R. Ācārya (SS 1938²: 1.14.36). The vulgate reads *pataṅga* and this reading is propagated in modern dictionaries.

⁵⁶Glycyrrhiza glabra, L. (AVS 3.84, NK #1136)

⁵⁷Berberis aristata, DC. (Dymock 1.65, NK #685, GJM 562, IGP 141)

⁵⁸The expression *svayathopadeśa* is ungrammatical but supported in all available witnesses.

Uttaratantra, adhyāya 17

Literature

HIML: IA, 305–306; Deshpande 1999; 2000; Leffler et al. 2020; Dagmar Wujastyk 2019.

Translation

- 1 Now I shall explain the counteraction (*pratiṣedha*) of diseases located in the pupil (*dṛṣṭi*).
- There are three curable $(s\bar{a}dhya)$, three incurable $(as\bar{a}dhya)$, and six mitigatible $(y\bar{a}pya)$ diseases located in peoples eyes. Among these, three are curable $(s\bar{a}dhya)$. Amongst these three, the remedy $(prat\bar{\imath}k\bar{a}ra)$ has been stated for the one called "seeing smoke $(dh\bar{\imath}madarsin)$ ".⁵⁹
- 3–5ab When the eye is inflamed (*vidagdha*) by bile and when it is inflamed by phlegm, one should apply the method for removing bile and phlegm, using nasal medicines (*nasya*), irrigation (*seka*), application of collyrium (*añjana*), liniment (*ālepa*), and medicines cooked in a crucible (*puṭapāka*), together with a balm (*tarpaṇa*), 60 but not cutting with a blade (*śastrakṣata*).61

One should drink ghee (*sarpis*) prepared with the three fruits ($triphal\bar{a}$) and in the first [case where the problem is bile], and prepared with turpeth (traivrta) in the latter [case, of phlegm].

And ghee prepared with tilvaka (*tailvaka*) is wholesome in both cases, or else aged ghee on its own.

5cd–7ab In a collyrium, these four compounds (*yoga*) are beneficial in both cases:

- ochre (*gairika*), Sind salt (*saindhava*), long pepper (*kṛṣṇā*) and the black soot (*masī*) from cow's teeth;
- Cow's flesh (*gomāṃsa*), black pepper (*marica*), siris (*śirīṣa*) and red arsenic (*manaḥśilā*);

masī burned charcoal. Find

where is cutting with a knife related to removing bile or

phlegm.

⁵⁹This disease and its cure are described earlier (SS.6.7.39 and SS.6.10.16 (SS 1938²: 609 and 614) respectively). The latter part of this verse is hard to construe and the text here may have been altered at an early period.

 60 These therapies are described in SS.6.18 (SS 1938 2 : 633–640).

 61 Dalhaṇa interprets this as blood-letting ($sir\bar{a}vedha$), which is discussed in SS.1.14 (SS 1938²).

- stalk (*vṛnta*) from a wood apple (*kapittha*) with honey (*madhu*);⁶²
- or the the fruits of the velvet bean (*svayaṃgupta*).
- 8 The physician should make a collyrium with ground up metal (*ku-pyaka*), ⁶³ Asoka tree (*aśoka*), Sal tree (*śālā*), mango (*amra*), beautyberry (*priyaṃgu*), Indian lotus (*nalina*), blue lotus (*utpala*), together with hareṇu (*hareṇu*), emblic (*āmalaka*), myrobalan (*pathyā*), long pepper (*pippali*). It should be combined with ghee and honey (*kṣaudra*).
- 9–10 Also, when bile and phlegm have developed, the physician should apply harenu (harenu) with the expressed juice (svarasa) of the flowers from mango (amra) and Jambu (jambū) trees.

 Then this collyrium, matured (vipakva) with ghee and honey (kṣaudra), should then be applied.
- Filaments ($ki\tilde{n}jalka$) of Indian lotus (nalina) and blue lotus (utpala), with ochre (gairika), and the juice of cow-dung ($go\acute{s}akr\acute{t}$) are a collyrium in the form of a pill ($gu\acute{q}ik\bar{a}$). This is good for both day and night blindness.
- Elixir-salve ($ras\bar{a}\tilde{n}jana$), honey (ksaudra), ghee, scramberry ($t\bar{a}l\bar{i}sa$), together with gold and ochre, with the juice of cow-dung (gosakrt) are for an eye afflicted with bile.
 - Alternatively, wise physician should first grind together elixir-salve $(s\bar{\imath}ta)$ and stibnite $(sauv\bar{\imath}raka)$, infused $(bh\bar{a}vita)$ with the blood of birds and animals (rasa). Then he mixes it with the bile of a tortoise or with extract of rohu carp (rauhita). It should always be used with powdered collyrium to quell the bile.
 - Thus, a collyrium of white teak $(k\bar{a}r\acute{s}mar\bar{\imath})$ flowers, liquorice (madhuka), tree turmeric $(d\bar{a}rv\bar{\imath})$, lodh tree (lodhra) and elixir salve $(ras\bar{a}\tilde{n}jana)$ is always good as a collyrium in this case.
 - Alternatively, for those who cannot see during the day, this pill (guḍikā), with sandalwood, is recommended: salt (nadīja), conch shell and the three spices, collyrium, realgar (manaḥśilā), the two turmerics (rajana)⁶⁵

⁶²wood apple (*kapittha*) in this verse is ablative singular or accusative plural, neither of which construe obviously.

⁶³A metal other than gold or silver, according to V. Jośī and N. H. Jośī 1968: 1.217. Perhaps lead, which is used in making contemporary collyrium.

 $^{^{64}}$ This is Dalhaṇa's preferred interpretation of *rasa* "juice" in this context. He also notes that some take elixir-salve (± 7.0 to be camphor.

⁶⁵Turmeric (Curcuma longa *Linn*.) and tree turmeric (Berberis aristata DC). The term *rajana* is unusual; the normal term is *rajanī*. *Rajana* occurs in *Suśrutanighanṭu* 158 in the

- and liver extract (yakṛdrasa).66
- One should grind up kohl (*srotoja*),⁶⁷ and Sind salt (*saindhava*) and long pepper and also hareṇu (*hareṇu*). Such wicks with goats urine are good in a collyrium for night blindness (*kṣaṇadāndhya*).
- Alternatively, in such a case, grind together Indian sarsaparilla $(k\bar{a}l\bar{a}-nus\bar{a}riva)^{68}$ long pepper, dried ginger $(n\bar{a}gara)$ and honey, the leaf of the scramberry $(t\bar{a}l\bar{i}\acute{s}apatra)$, the two turmerics (rajana), a conch shell and liver extract (yakrdrasa). Then shade-dried wicks take away illness (ruj).
- 18cd–19ab Wicks made of red arsenic (*manaḥśilā*), chebulic myrobalan (*abhayā*), the three spices (*vyoṣa*). Indian sarsaparilla (*sāriva*), cuttlefish bone (*samudraphena*), combined with goat's milk are good.
- One should cook a honey collyrium (*kṣaudrāñjana*) either in the juices of cow's urine (*gomūtra*), and bile, spirits (*madirā*), liver (*yakṛt*), and emblic (*dhātrī*) or else in the juice of the liver (*yakṛt*) of something different, or else with the extract of the three fruits (*triphalā*). One of these should be mixed with cow urine, ghee and cuttle fish (*arṇavamala*)⁶⁹ with long pepper, honey and box myrtle (*kaṭphala*). It is placed in sea salt and stored in a bamboo tube.
 - One should cook the liver of a sheep, the ghee of a goat, with long pepper and Sindh salt, honey and the juice of emblics. Then one should store it properly in a catechu box. Prepared thus, the honey collyrium is good.
 - Alternatively, a collyrium that is harenu (harenu) mixed with long pepper ($m\bar{a}gadh\bar{\iota}$), the bone and the marrow of a goat, cardamom ($el\bar{a}$) and liver, together with liver extract, is good for eyes afflicted by phlegm.⁷⁰

sense of Ferula asafoetida, Linn.

⁶⁶This verse appears as no. 27 in the vulgate.

⁶⁷Glossed by Palhaṇa as a kind of collyrium. Cf. Nadkarni 1954: 2.M13 and Sharma 1982: 197–198

⁶⁸There are two forms of *sārivā* mentioned widely in Āyurvedic literature, the white and the black. Ideas on the identity of the black form are particularly fluid. See Sivarajan and Balachandran (1994: 434–438) for a clear discussion.

⁶⁹At SS 6.12.31, Dalhaṇa glossed *arṇavamala* as cuttlefish bone (*samudraphena*). It may be worth considering whether the unusual term *arṇavamala* "ocean-filth" might refer to ambergris.

⁷⁰On the identities of *elā* and *hareṇu* Watt (1908: 511 ff) described the former as "true" or "lesser" or "Malabar" cardamom, Elettaria cardamomum, Maton & White, in contrast to the "greater" cardamom is Amomum subulatum (that he discusses on p. 65) that

- Over a fire, one should cook the liver (*yakṛt*) of a monitor lizard (*godhā*) prepared with entrails (*antra*) and stuffed with long pepper (*māgadhi*). As is well known, liver (*yakṛt*) which is used (*niṣevita*) with collyrium certainly destroys night blindness.
- 25 After preparing both a spleen (*plīhan*) and a liver on a spit, one should eat them both with ghee and oil.⁷¹
- As is well known, there are six diseases that can be alleviated (*yāpya*); in those cases (*tatra*) one should release the blood by bloodletting. And for the sake of wellbeing one should also purge using aged ghee combined (*upahita*) with purgative aids (*aṅga*).
 - When an eye-disease is caused by wind (pavanodbhava) they say that castor oil (pañcāṅgulataila) mixed with milk is good.⁷² In the case of diseases of blood (śonita) and bile (pitta), one should drink ghee with the three fruits; it is particularly cleansing.⁷³ In the case of phlegm, a purgative by means of turpeth (trivṛt) is recommended. In the case of all three humours, sandal (sugandhi) in oil is prepared with it (turpeth).⁷⁴
 - 28 In cases of partial blindness (*timira*), aged ghee is recommended. It is good if it is kept in an iron vessel.
- 28cd–29ab One should know that ghee with the three mylobalans is always good, and it is made with what is called periploca of the woods (meṣaviṣāṇa). A man who is suffering from partial blindess should lick the finely-ground three fruits mixed with ghee off his hand (sapāṇa).⁷⁵

is commonly used as an inferior substitute for E. cardamomum. Singh and Chunekar (1972: 467 f) provided an interesting discussion of *hareṇu*, noting that the term refers to two substances, first the *satīna* pulse (Pisum sativum, Linn.), and second an unknown fruit such as perhaps a Vitex. They noted, "None of the text commentators have attempted to disclose the nature of its source plant," although Dalhaṇa described it as aromatic and identical to *renukā* (SS.ci.2.75).

⁷¹We read the locative as if an instrumental; if the locative were intended then it would be the spit that would be coated with oil and ghee.

⁷²Dalhaṇa says that the unexpressed topic of this recipe is partial blindness (*timira*).

⁷³Blood-bile (*śonita-pitta, rakta-pitta*) is a widely-recognized disease in ayurveda, but the compound here is definitely dual, which rules out that interpretation. One would expect blood-bile because the previous verse

⁷⁴The expression "the fragrant one in oil (*tailasugandhi*)" is puzzling. The word *sugandhi* has different referents in the *Nighaṇṭu* literature but is not common as a noun in the extant literature. "Sandal" is just one of its possible meanings.

⁷⁵"Off his hand" translates the adverbial *sapāṇam*, an unusual word. Dalhaṇa reproduces a reading close to the Nepalese recention but says that Jejjaṭa rejects it and so he also does (\$\sum_{1938:627}\$).

- 29cd Alternatively, someone afflicted by phlegm should apply them (the three fruits) mixed with oil and steeped (*pragāḍha*) in honey.
 - The very best oil, well-cooked with a decoction of cow-dung, is good in cases of partial blindness, taken as an errhine.

 In cases caused by bile, ghee by itself is good, as is oil when it arises from wind and blood.
 - And in the case of wind one should apply turpeth (trivrt) based on strong mallow $(atibal\bar{a})$, and country mallow $(bal\bar{a})$ in an errhine $(nasya).^{76}$
 - Ghee which has been extracted from milk cooked with the meat of aquatic creatures and those from marshlands should be prescribed.
 - tAn enclosed roasting (puṭākhya) with Sindh salt and the product of the meat of a carnivore (kravyabhuj) and a deer (eṇa), is combined with honey and ghee.⁷⁷
 - Fat $(vas\bar{a})$ from a horse, a vulture, a snake, and a cock $(t\bar{a}mrac\bar{u}da)$, combined with mahua $(madh\bar{u}ka)$ is always good in a collyrium. †78
 - Having prepared (*niṣevita*) a collyrium made of kohl (*srotas*) and gradually combine it with juices (*rasa*), milk and ghee.⁷⁹ For thirty days, this collyrium is put in the mouth of a black snake that is covered with kuśa grass (*kuśa*).
 - Next, a collyrium that is milk containing long pepper (*māgadhī*), lye (*kṣāraka*) and Sindh salt (*saindhava*) that has been repeatedly prepared

The term 'enclosed roasting' (puṭapāka) does occur in the Suśrutasaṃhitā in the context of eye treatments, but designates a method of obtaining juice from substances by wrapping them in leaves pasted with earth and cooking the bolus on charcoal to finally extract a juice.

 $^{^{76}}$ "Based on" translates - \bar{a} śrita "depending on" which does not construe easily here. The Vulgate has śṛṭa "cooked" which makes easier sense but is not supported by the Nepalese MSS.

⁷⁷Dalhaṇa notes (SS 1938²: 628a) that $puṭ\bar{a}hvaya$ (see verse 35 below) is a synonym for $puṭap\bar{a}ka$, and that the process is described in the $Kriy\bar{a}kalpa$ chapter, i.e., SS.6.18.33–38 (SS 1938²: 635). On the puṭa process in the $Suśrutasaṃhit\bar{a}$, which is earlier and different than that of $rasaś\bar{a}stra$ literature, see the discussion by Dagmar Wujastyk (2019: 83):

⁷⁸This verse contain irresolvable difficulties. There are no significant variants in the Nepalese MS transmission, but the text is ungrammatical. The vulgate reads substantially differently but we have nevertheless made some emendations in line with it and read the verse as two sentences.

⁷⁹Dalhana specifies that the juices are meat soups of various animals (SS_{1938}^2 : 628).

- with the mouth of a black snake, is good in the case of bloodshot blindness ($r\bar{a}gin\ timira$).⁸⁰
- They say that ghee may be produced from that and combined with sweet herbs is good as an errhine for eye-diseases caused by bile. And here, a balm (*tarpaṇa*) is good that is a combination that is the flesh of wild animals taken hot (*puṭāhvaya*).⁸¹
- 36 And realgar ($mana h sil \bar{a}$) mixed with elixir salve ($ras \bar{a} \tilde{n} jana$) and honey is a liquid collyrium ($drav \bar{a} \tilde{n} jana$) which is, in this case, combined with mahua ($madh \bar{u} ka$). 82
 - Alternatively, experts on this say that finely ground copper sulphate (*tuttha*) extracted from a gold mine is the "same collyrium" (*samāñjana*).⁸³
- Conch mixed with equal parts of sheep's horn and stibnite $(a\tilde{n}jana)$ removes the impurity of the glassy opacity $(k\bar{a}ca)$ because of the application of collyrium $(a\tilde{n}jana)$.⁸⁴
 - The extracts (rasa) produced from aflame of the forest ($pal\bar{a}\acute{s}a$), Rohīta tree ($roh\bar{\imath}ta$), 85 mahua ($madh\bar{\imath}ka$), ground with the supernatant layer (agra) of the spirits (madira) is applied.
- 38 Alternatively, one should cook an errhine with cuscus grass ($u\acute{s}\bar{\imath}ra$), lodh tree (lodhra), the three fruits ($triphal\bar{a}$), beauty berry ($priya\dot{n}gu$) to pacify eye diseases caused by phlegm.⁸⁶
 - One should apply smoke of the bark of embelia ($vida\dot{n}ga$), velvet leaf ($p\bar{a}th\bar{a}$), white siris ($kinih\bar{\iota}$), and desert date ($i\dot{n}gud\bar{\iota}$); and cuscus grass ($u\dot{s}\bar{\imath}ra$) alone.

⁸⁰Dalhaṇa describes this blindness as a type of $k\bar{a}ca$ disease caused by wind (SS 1938: 628). The expression "bloodshot blindness" is an attempt to capture the idea of a blind eye that is dyed or coloured (not colour-blindness). This verse is quite different from the Vulgate and also syntactically challenging.

⁸¹The expression taken hot (*puṭāhvaya*) is a guess.

 $^{^{82}}$ The expression liquid collyrium ($drav\bar{a}\tilde{n}jana$) is only known from Dalhaṇa's comments on SS.6.17.11ab (SS 1938 2 : 626). The recipe in the present collyrium is different from that discussed by Dalhaṇa.

⁸³The expression "same collyrium" (*samāñjana*) is a hapax legomenon glossed inexplicably by Dalhaṇa as "a collyrium with an equal amount of fermented barley" (*tulya-sauvīrāñjana*) (SS 1938²: 628).

 $^{^{84}}$ The ablative "from collyrium" is hard to construe, but Palhaṇa uses this term and phrase in his commentary on Utt.41ab (SS 1938 2 : 629).

⁸⁵Probably *Soymida* febrifuga A. Juss.

⁸⁶ Palhaṇa invokes a general rule ($paribh\bar{a}s\bar{a}$) to indicate that this mixture should be cooked with sesame oil.

- 39 A ghee that is cooked ($bh\bar{a}vita$) from a decoction of a non-flowering tree (vanaspati)⁸⁷ as well as turmeric ($haridr\bar{a}$) and spikenard (nalada) is good in a balm (tarpaṇa).
 - Alternatively, one may have an enclosed roasting ($puṭap\bar{a}ka$) done with arid-land animals ($j\bar{a}\dot{n}gala$)⁸⁸ and a plentiful amount of long pepper ($m\bar{a}gadha$), Sindh salt and honey.
- 40 A treatment (*kriyā*) with realgar (*manaḥśilā*), the three spices, conch, honey, along with Sindh salt, green vitriol (*kāsīsa*) and elixir salve (*rasāñjana*).⁸⁹
 - They say that an elixir salve (*rasāñjana*) combined with myrobalans, treacle and dried ginger is good.⁹⁰
- Alternatively, a collyrium that has been prepared many times in the eight types of urine⁹¹ is put into water with the three fruits. Having stored it in the mouth of a nocturnal creature (*niśācara*)⁹² one should place it in a conch (*salilotthita*) for two months.⁹³

find ref.

⁸⁷These are fig trees. The *Sauśrutanighantu* specifies the Udumbara (252).

 $^{^{88}}$ On this term, see SS.1.35.42 (SS 1938 2 :157) and the discussion by Zimmermann (1999:25–31).

⁸⁹ Dalhaṇa glosses treatment ($kriy\bar{a}$) specifically as inspissation ($rasakriy\bar{a}$) (SS 1938²: 629).

⁹⁰We emend *hite* to *hitam*, against the MSS.

⁹² Þalhaṇa glosses nocturnal creature (*niśācara*) as "vulture," although elsewhere in the SS it is more commonly interpreted as a spirit or demon.

⁹³We interpret "water-born" (*salilotthita*) as "conch" in line with *jalodbhava*, but the term is uncertain.

Sūtrasthāna, adhyāya 28

Thus, living creatures and their strength, complexion (*varṇa*) and energy (*ojas*) are rooted in food. That (food) depends on the six flavours (*rasa*). Thus, the flavours depend on substance (*dravya*), and substances depend on medicinal herbs. There are two kinds of them (herbs): stationary and mobile.⁹⁴

⁹⁴SS 1.1.28 Sharma 1999–2001: I, 21, SS 1938²: 7.

Abbreviations

Bhela 1921

Mookerjee, Ashutosh and Ananta Krishna Shastri, Vedantabisharad (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, 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).

HIML

Meulenbeld, Gerrit Jan (1999–2002), *A History of Indian Medical Literature*, 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.

SS 1931

Ācārya, Yādavaśarma Trivikrama सुश्रुतसंहिता, वैद्यवरश्रीडल्हणाचार्यविरचि-(ed.), तया निबन्धसंग्रहाख्यव्याख्यया समूल्लसिता, महर्षिणा विरचिता. सूत्र-निदान-शारीर-चिकित्सा-सुश्रुतेन कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasamhitā of Sushruta with the Nibandhasangraha Commentary of Shree Dalhanāchārya (2nd edn., Mumbayyām: Pāṇḍuraṅga Jāvajī at the Nirṇayasāgaramudrāyantrālaye), ark: / 13960 / t9j41sg94, accessed 09/06/2020; HIML: IB, 312 edition

SS 1938

Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविर्चितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदा-साचार्यविरचितया न्यायचिन्द्रकाख्यपञ्जिकाव्याख्यया च समु- छसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press); HIML: IB, 313 edition cc.

SS 1938²

SS₁₉₁₅

Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सु-श्रुतेन विरचिता सुश्रुतसंहिता, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासा-चार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुझसिता (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition (SS 1938), with changed pagination.

Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्ह-णाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुष्ठसिता, 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.

Viṣṇudharmottarapurāṇa

Śarman, Madhusūdana and Śarman, Mādhavaprasāda (1912) (eds.), *Viṣṇudharmottarapurāṇam* (Mumbai: Khemarāja Śrīkṛṣṇadāsa at the Śrīveṅkaṭeśvara Steam Press), ark:/13960/t6qz6fr23; Lithograph format. Edited on the basis of a manuscript belonking to the astrologer Śudhākaraśarman of the Varanasi Sanskrit Pāṭhaśālā.

References

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.

- Birch, Jason (2021), 'Cleaning the Body like a Conch: The Haṭhasaṅ-ketacandrikā and Śaṅkhaprakṣālana', *Academia Letters* (Jan.). Doi: 10.20935/al144.
- Bronkhorst, Johannes (2021), 'Patañjali's Āryāvarta = Śuṅga realm?', *Academia Letters*. DOI: 10.20935/al291; Article 291.
- 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.
- 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.
- Emeneau, M. B. (1969), 'Sanskrit Syntactic Particles "kila, khalu, nūnam"', *Indo-Iranian Journal*, 11/4: 241–68.
- 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.
- Jośī, Veṇīmādhavaśāstrī and Jośī, Nārāyaṇa Harī (1968), Ayurvedīya Mahākośaḥ arthāt Āyurvedīya Śabdakośaḥ Saṃskṛta—Saṃskṛta (Muṃbaī: Mahārāṣṭra Rājya Sāhityta āṇi Saṃskṛti Maṃḍaḷa), url.
- 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.

- Klebanov, Andrey (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'.
- 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.
- 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.
- 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.
- Sharma, Priya Vrat (1982), *Dalhaṇa and his Comments on Drugs* (Delhi: Munshiram Manoharlal).
- —— (1999–2001), Suśruta-Saṃhitā, with English Translation of Text and Dalhaṇa's Commentary Alongwith (sic) Critical Notes, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhambha Visvabharati).
- 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).
- 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/t9t14xh3x.
- 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.
- (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 (2004), 'Agni and Soma: A Universal Classification', *Studia Asiatica: International Journal for Asian Studies*, IV–V, ed. Eugen Ciurtin: 347–70, ISSN: 1582–9111, URL.
- —— (2013), 'New Manuscript Evidence for the Textual and Cultural History of Early Classical Indian Medicine', in *Medical Texts and Manuscripts in Indian Cultural History*, ed. Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz (New Delhi: Manohar), 141–57, URL.
- Zimmermann, Francis (1999), *The Jungle and the Aroma of Meats* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 8120816188.

Glossary

nipat-	mango: 19	substrate: 8
affect: 10	aṇḍaja	asthi
"same collyrium"	born from eggs: 9	bones: 10
samāñjana: 23	aṅga	asūyā
"water-born"	aids: 21	jealousy: 8
salilotthita: 24	parts: 10	atibalā
,	anger	strong mallow: 22
abhayā	krodha: 8	ātmaka
chebulic		nature: 8
myrobalan: 20	angry saṃrambha: 16	awl
ācāra	animals	ārā: 13
regimen: 8		ayana
ācārika	paśu: 9	half-year: 10
medical advice: 15	añjana	āyatta
accumulation	application of	depends on: 8
sañcaya: 10	collyrium: 18, 23	āyur
adhiṣṭhāna	stibnite: 23	life, longevity: 5
located: 8	antra	āyurveda
adhyāya	entrails: 21	the science of life: 5
sections: 11	ants	
affect	pipīlika: 9	baddham
nipat-: 10	apāṅga	bound, connected:
āgantu	edge of the hole: 16	17
external factors: 11	apatānaka	balā
agra	convulsions: 13	country mallow: 22
supernatant layer:	application of collyrium	bala
23	añjana: 18, 23	strength: 8
āhāra	apramatta	balm
diet: 8	diligent: 17	tarpaṇa: 18, 23f
ahorātra	ārā	bandha
day and night: 10	awl: 13	bindings: 15
aids	arid-land animals	beauty berry
aṅga: 21	jāṅgala: 24	priyaṅgu: 23
ālepa	arṇavamala	beautyberry
liniment: 18	cuttle fish: 20	priyaṃgu: 19
alleviated	asādhya	bhāvita
уāруа: 21	incurable: 18	cooked: 24
alleviation	aśoka	infused: 19
pratīkāra: 10	Asoka tree: 19	bhedya
Along these lines	āśoka	splitting: 15
evam: 10	grief: 8	bile
āmalaka	Asoka tree	pitta: 21
emblic: 19	aśoka: 19	bindings
amra	āśrayin	bandha: 15

black pepper	gandharvahasta: 13	country mallow
marica: 18	caturvarga	balā: 22
black soot	fourfold grouping:	Cow's flesh
maṣī: 18	10	gomāṃsa: 18
blessings pronounced	catuṣtaya	cow's urine
svastivācana: 13	four factors: 10	gomūtra: 20
blink of the eye	caused by wind	cow-dung
nimeṣa: 9	pavanodbhava: 21	gośakṛt: 19
blood	chebulic myrobalan	creepy-crawlies
rudhira: 9	abhayā: 20	sarīsṛpa: 6, 9
śonita: 21	chedya	curable
Blood-bile	cutting: 15	sādhya: 18
śonita-pitta,	excision: 11	cuscus grass
rakta-pitta: 21	clusters	uśīra: 23
blood-letting	samplava: 9	cutting
sirāvedha: 18		chedya: 15
bloodshot blindness	cock	cutting with a blade
rāgin timira: 23	tāmracūḍa: 22	śastrakṣata: 18
blue lotus	collection	cuttle fish
utpala: 19	varga: 10	arṇavamala: 20
bones	combined	cuttlefish bone
	upahita: 21	
asthi: 10	comfort	samudraphena: 20
born from eggs	sukha : 10	dainya
andaja: 9	complexion	misery: 8
born in in a caul	varṇa: 8, 25	dais
jarāyuja: 9	compounds	
born of sweat	yoga: 18	pīṭha: 14
svedaja: 9	compressed	dārvī
bound, connected	saṃkṣipta: 14f	tree turmeric: 19
baddham: 17	Compressed	day and night
box myrtle		ahorātra: 10
kaṭphala: 20	saṃkṣipta: 14	decanted liquor
brmhana	conch	surāmaṇḍa: 15
nourishment: 8	salilotthita: 24	deer
bulbs	congested humours	eṇa: 22
kanda: 9	sannipāta: 11	depends on
	convulsions	āyatta: 8
cardamom	apatānaka: 13	depression
elā: 2 0	cooked	viṣāda: 8
carman	bhāvita: 24	desert date
pelt: 9	copper sulphate	iṅgudī: 23
carnivore	tuttha: 23	desire
kravyabhuj: 22	cotton	icchā: 8
castor oil	picu: 15	dhānyāmla
pañcāṅgulataila: 21	counteraction	fermented
castor oil tree	pratisedha: 18	rice-water: 15
cusion on nec	pranișcum. 10	11CC-watc1. 15

dhātrī	embelia	vadhra: 17
emblic: 20	vidaṅga: 23	flowering trees
dhūmadarśin	emblic	vṛkṣa: 9
seeing smoke: 18	āmalaka: 19	flowers
diet	dhātrī: 20	puṣpa: 9
āhāra: 8	ena	fortnight
dilator	deer: 22	pakṣa: 10
pravardhanaka: 13	enclosed roasting	four factors
diligent	puṭākhya: 22	catuștaya: 10
apramatta: 17	puṭapāka: 24	fourfold grouping
disease	energy	caturvarga: 10
vyadhi: 10	ojas: 25	frogs
doșa	entrails	maṇḍūka: 9
humours: 10	antra: 21	fruit trees
dravāñjana	envy	vanaspati: 9
liquid collyrium:	īrṣyā: 8	fruits
23	errhine	phala: 9
dravya	nasya: 22	,
substance: 25	essence	gāḍha
dried ginger	sāra: 9	pinched: 15
nāgara: 20	evam	gairika
dṛṣṭi	Along these lines:	ochre: 18f
pupil: 18	10	gandharvahasta
duct	excision	castor oil tree: 13
sirā: 13	chedya: 11	gauze
ducts	expressed juice	prota: 15
sirā: 10, 15	svarasa: 19	general rule
duḥkha	external factors	paribhāṣā: 23
suffering: 8	āgantu: 11	ghee
dușța	extract of rohu carp	sarpis: 18
tainted: 15	rauhita: 19	glassy opacity
dveṣa	extracts	kāca: 23
hatred: 8	rasa: 23	godhā
natica.	711011. 25	monitor lizard: 21
earthen products	Fat	gomāṃsa
pārthiva: 9f	vasā: 22	Cow's flesh: 18
edge of the hole	fermented rice-water	gomūtra
apāṅga: 16	dhānyāmla: 15	cow's urine: 20
elā	Filaments	gośakṛt
cardamom: 20	kiñjalka: 19	cow-dung: 19
elixir salve	flame of the forest	juice of cow-dung:
rasāñjana: 19, 2 3f	palāśa: 23	19
Elixir-salve	flavours	granthi
rasāñjana: 19	rasa: 8, 25	lumps: 13
elixir-salve	flesh	granthita
ćīta: 10	māmea: 10	lumpy: 14

greed	mañjiṣṭhā: 13	sandhi: 14
lobha: 8	Indian sarsaparilla	joints
green vitriol	kālānusāriva: 20	sandhi: 10
kāsīsa: 24	sāriva: 20	juice extract
grief	indragopa	svarasa: 9
āśoka: 8	red velvet mites: 9	juice of cow-dung
guḍikā	inflamed	gośakṛt: 19
pill: 19	vidagdha: 18	juices
r	infused	rasa: 22
half-year	bhāvita: 19	
ayana: 10	iṅgudī	kāca
hareņu	desert date: 23	glassy opacity: 23
hareņu: 19f	inherent factors	kalā
hareṇu	svabhāva: 11	minutes: 9
hareņu: 19f	inherent	kālakṛta
haridrā	svābhāvika: 8	items created by
turmeric: 24	inspissation	time: 9f
harşa	rasakriyā: 24	kālānusāriva
overexcitement: 8	intended	Indian sarsaparilla:
hatred	vyākhyāta: 11	20
dveṣa: 8	irregularities	kāma
herbs	vaiṣamya: 8	lust: 8
oṣadhi: 9	irrigation	kanda
hīna	seka: 18	bulbs: 9
reduced: 17	irritation	kapālacūrņa
honey collyrium		powdered
kṣaudrāñjana: 20	prakopa: 10	earthenware
honey	īrṣyā	crockery: 15
kṣaudra: 19	envy: 8	kapittha
madhu: 19	items created by time	wood apple: 19
human being	kālakṛta: 9f	karman
puruṣa: 8, 10	Jambu	therapies: 11
humours	jambū: 19	kārśmarī
doșa: 10	jambū	white teak: 19
uoșu. 10	Jambu: 19	kāsīsa
icchā	jāṅgala	green vitriol: 24
desire: 8	arid-land animals:	kāṣṭhā
illness	24	trice: 9
ruj: 20	jaṅgama	kaṭphala
in those cases	moving: 9f	box myrtle: 20
tatra: 21	jarāyuja	kinihī
incurable	born in in a caul: 9	white siris: 23
asādhya: 18	jealousy	kiñjalka
Indian lotus	asūyā: 8	Filaments: 19
nalina: 19		knowledge
Indian madder	joins sandhāna: 12	rieda: E
unulah maduet	SUTTUTUUTU 13	UPMU L

kohl	lekhya	madirā
srotas: 22	scarification: 15	spirits: 20
srotoja: 20	life, longevity	madira
kravyabhuj		
carnivore: 22	<i>āyur</i> : 5 liniment	spirits: 23
		māgadha
kriyā	ālepa: 18	long pepper: 24
procedures: 7f, 11	liquid collyrium	māgadhī
treatment: 10, 24	dravāñjana: 23	long pepper: 20
kriyākāla	liquorice	māgadhi
the time for	madhuka: 19	long pepper: 21
therapies: 10	liver extract	māgadhī
kṛmi	yakṛdrasa: 20	long pepper: 22
Worms: 9	liver	mahua
krodha	yakṛt: 20f	madhūka: 22f
anger: 8	lobha	malice
kṛṣṇā	greed: 8	mātsarya: 8
long pepper: 18	located	māṃsa
kṛtamaṅgala -	adhiṣṭhāna: 8	flesh: 10
received a	lodh tree	manahśilā
benediction: 13	lodhra: 19, 23	realgar: 19, 23f
kṣaṇadāndhya	lodhra	red arsenic: 18, 20
night blindness: 20	lodh tree: 19, 23	mānasa
kṣāraka	long pepper	mental: 8
lye: 22	kṛṣṇā: 18	maṇḍūka
kṣaudra	māgadha: 24	frogs: 9
honey: 19	māgadhī: 22	mango
kṣaudrāñjana	māgadhi: 21	amra: 19
honey collyrium:	māgadhī: 20	mañjiṣṭhā
20	pippali: 19	Indian madder: 13
kṣīṇa	lumps	
wasted: 16	granthi: 13	manyāstambhā
kṣīra	lumpy	paralysis of the
sap: 9	granthita: 14	nape of the neck: 13
kunta	lust	mardita
small insects: 9	kāma: 8	massaged: 16
kupyaka	lūtā	marica
metal: 19	spiders: 6	black pepper: 18
kuśa grass	lye	māsa
kuśa: 22	kṣāraka: 22	month: 10
kuśa	·	maṣī
kuśa grass: 22	madhu	black soot: 18
<u></u>	honey: 19	massaged
leaves	madhuka	mardita: 16
patra: 9	liquorice: 19	mātsarya
lekhana	madhūka	malice: 8
Scarification: 8	mahua: 22f	matured

vipakva: 19	nasal medicines	oṣadhī-
may repair	nasya: 18	remedies: 8
yojayed: 17	паѕуа	overexcitement
medical advice	errhine: 22	harṣa: 8
ācārika: 15	nasal medicines: 18	
medicines cooked in a	nature	pacification
crucible	ātmaka: 8	saṃśamana: 8
puṭapāka: 18	night blindness	upaśama: 10
mental	kṣaṇadāndhya: 20	pain and injury
mānasa: 8	nimeṣa	vedanābhighāta: 5
meṣaviṣāṇa	blink of the eye: 9	pāka
periploca of the	niryāsa	septic: 15
woods: 21	resin: 9	pakṣa
metal	niśācara	fortnight: 10
kupyaka: 19	nocturnal creature:	palāśa
minutes		flame of the forest:
kalā: 9	24 nișevita	23
	prepared: 22	pañcāṅgulataila
misery	used: 21	castor oil: 21
dainya: 8	nivāta	paralysis of the nape of
mitigatible		the neck
yāpya: 18	no wind: 9	manyāstambhā: 13
monitor lizard	no wind	paribhāṣā
godhā: 21	nivāta: 9	general rule: 23
month	nocturnal creature	pārthiva
māsa: 10	niśācara: 24	•
moving	non-flowering tree	earthen products:
jaṅgama: 9f	vanaspati: 24	9f
muhūrta	nourishment	partial blindness
three-quarters of	bṛṃhaṇa: 8	timira: 21
an hour: 10	1 11 11 1	particulars
mūla	obstructed by blood	vikalpa: 10
root: 8	raktabaddha: 15	parts
roots: 9	ochre	aṅga: 10
mūṣika	gairika: 18f	paśu
rodents: 6	off his hand	animals: 9
myrobalan	sapāṇa: 21	pāthā
pathyā: 19	oil	velvet leaf: 23
1-3-3	sneha: 9	pathyā
nadīja	ojas	myrobalan: 19
salt: 19	energy: 25	patra
nāgara	vital energy: 8	leaves: 9
dried ginger: 20	options	pavanodbhava
nalada	vikalpa: 14	caused by wind: 21
spikenard: 24	oṣadhi	pelt
nalina	herbs: 9	carman: 9
Indian lotus: 10	remedies: 10	periploca of the woods

meṣaviṣāṇa: 21	dilator: 13	rajana
phala	prayojanavat	turmerics: 19f
fruits: 9	practical purposes:	raktabaddha
physical	10	obstructed by
śārīravad: 10	prepared	blood: 15
picu	nișevita: 22	rasa
cotton: 15	prepared with tilvaka	extracts: 23
piercing	tailvaka: 18	flavours: 8, 25
vyadhana: 15	prepared with turpeth	juices: 22
pill	traivṛta: 18	the blood of birds
guḍikā: 19	priyamgu	and animals: 19
pinched	beautyberry: 19	rasakriyā
gāḍha: 15	priyangu	inspissation: 24
pipīlika	beauty berry: 23	rasāñjana
ants: 9	procedures	elixir salve: 19, 23f
pippali	kriyā: 7f, 11	Elixir-salve: 19
long pepper: 19	prota	rauhita
pīṭha	gauze: 15	extract of rohu
	puffed up	
dais: 14	sopha: 16	carp: 19 realgar
pitta	pupil	0
bile: 21	dṛṣṭi: 18	manaḥśilā: 19, 23f received a benediction
plīhan	purification	
spleen: 21	saṃśodhana: 8	kṛtamaṅgala: 13
powdered earthenware	puruṣa	red arsenic
crockery	human being: 8, 10	manaḥśilā: 18, 20
kapālacūrņa: 15	puṣpa	red velvet mites
practical purposes	flowers: 9	indragopa: 9
prayojanavat: 10	put it back together	reduced
pragāḍha	pratisandhā-: 17	hīna: 17
steeped: 22	puṭāhvaya	regimen
prakopa	taken hot: 23	ācāra: 8
irritation: 10	puṭākhya	remedies
prakṛti	enclosed roasting:	oṣadhi: 10
temperament: 8	22	oṣadhī-: 8
pratīkāra	puṭapāka	remedy
alleviation: 10	enclosed roasting:	pratīkāra: 18
remedy: 18	24	resin
pratisandhā-	medicines cooked	niryāsa: 9
put it back	in a crucible: 18	rodents
together: 17	in a cracible. To	mūṣika: 6
pratiședha	rāgin timira	rohīta
counteraction: 18	bloodshot	Rohīta tree: 23
pratuda	blindness: 23	Rohīta tree
scavenging: 16	rainy seasons	rohīta: 23
nrazvardhanaka	marcā: o	root

mūla: 8	accumulation: 10	seed-eating
roots	sandal	vișkira: 16
mūla: 9	sugandhi: 21	seeing smoke
rtu	sandhāna	dhūmadarśin: 18
season: 10	joins: 13	seka
rudhira	sandhi	irrigation: 18
blood: 9	joins: 14	septic
ruj	joints: 10	pāka: 15
illness: 20	sannipāta	shoots
	congested	udbhid: 9
sādhubaddha	humours: 11	shrubs
well joined: 17	sap	vīrudh: 9
sādhya	kṣīra: 9	Sind salt
curable: 18	sapāṇa	saindhava: 18, 20
saindhava	off his hand: 21	Sindh salt
Sind salt: 18, 20	sāra	saindhava: 22
Sindh salt: 22	essence: 9	sinews
Sal tree	śārīravad	snāyu: 10
śālā: 19	physical: 10	sirā
śālā	sarīsṛpa	duct: 13
Sal tree: 19	creepy-crawlies: 6,	ducts: 10, 15
salilotthita	9	sirāvedha
conch: 24	sāriva	blood-letting: 18
"water-born": 24	Indian sarsaparilla:	siris
salt	20	śirīṣa: 18
nadīja: 19	sarpis	śirīṣa
samāñjana "como collumium":	ghee: 18	siris: 18
"same collyrium":	śastrakṣata	śīta
23 saṃkṣipta	cutting with a	elixir-salve: 19
compressed: 14	blade: 18	skin
Compressed: 14	sauvīraka	tvak: 9f
compressed: 15	stibnite: 19	slice of flesh
samplava	Scarification	vadhra: 17
clusters: 9	lekhana: 8	small insects
saṃrambha	scarification	kunta: 9
angry: 16	lekhya: 15	snāyu
saṃśamana	scavenging	sinews: 10
pacification: 8	pratuda: 16	sneha
saṃśodhana	scramberry	oil: 9
purification: 8	tālīśa: 19	śonita
samudraphena	tālīśapatra: 20	blood: 21
cuttlefish bone: 20	season	śonita-pitta, rakta-pitta
saṃvatsara	ṛtu: 10	Blood-bile: 21
year: 10	sections	śopha
sañcaya	adhyāya: 11	puffed up: 16
	-	
	38	
	<i>J</i> -	

spiders	sugandhi	scramberry: 20
lūtā: 6	sandal: 21	tāmracūḍa
spikenard	sukha	cock: 22
nalada: 24	comfort: 10	tarpaṇa
spirits	sunivișța	balm: 18, 23f
madirā: 20	very intent: 17	tatra
madira: 23	supernatant layer	in those cases: 21
spleen	agra: 23	temperament
plīhan: 21	suppurating	prakṛti: 8
splitting	srāva: 15	the blood of birds and
bhedya: 15	suppuration	animals
srāva	srāva: 16	rasa: 19
suppurating: 15	surāmaṇḍa	the fragrant one in oil
suppuration: 16	decanted liquor: 15	tailasugandhi: 21
śreyas	svabhāva	the science of life
welfare: 5	inherent factors: 11	āyurveda: 5
srotas	svābhāvika	the three fruits
kohl: 22	inherent: 8	triphalā: 23
srotoja	svarasa	the three spices
kohl: 20	expressed juice: 19	vyoṣa: 20
stabdha	juice extract: 9	the time for therapies
stiff: 14f	svastivācana	kriyākāla: 10
stalk	blessings	therapies
vṛnta: 19	pronounced: 13	karman: 11
	svayaṃgupta	three fruits
stationary sthāvara: 8, 10	velvet bean: 19	
	śvayathu	triphalā: 18, 20
steeped	swelling: 13	three-quarters of an hour
pragāḍha: 22 sthāvara	svedaja	muhūrta: 10
	born of sweat: 9	
stationary: 8, 10	swelling	timira
stibnite	śvayathu: 13	partial blindness:
añjana: 23		21
sauvīraka: 19	tailasugandhi	traivṛta
stiff	the fragrant one in	prepared with
stabdha: 14f	oil: 21	turpeth: 18
strength	tailvaka	treatment
bala: 8	prepared with	kriyā: 10, 24
strong mallow	tilvaka: 18	tree turmeric
atibalā: 22	tainted	dārvī: 19
substance	duṣṭa: 15	trice
dravya: 25	taken hot	kāṣṭhā: 9
substrate	puṭāhvaya: 23	triphalā
āśrayin: 8	tālīśa	the three fruits: 23
suffering	scramberry: 19	three fruits: 18, 20
duhkha. 🙎	tālīćanatva	trizzet

turpeth: 21f turmeric haridrā: 24 turmerics rajana: 19f turpeth trivṛt: 21f tuttha copper sulphate: 23 tvak skin: 9f udbhid shoots: 9	wick: 13 vasā Fat: 22 veda knowledge: 5 vedanābhighāta pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17 vidagdha	vyāla wild animals: 9 vyoṣa the three spices: 20 wasted kṣīṇa: 16 welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23 white teak
haridrā: 24 turmerics rajana: 19f turpeth trivṛt: 21f tuttha copper sulphate: 23 tvak skin: 9f tudbhid shoots: 9	vasā Fat: 22 veda knowledge: 5 vedanābhighāta pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	vyoṣa the three spices: 20 wasted kṣīṇa: 16 welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
turmerics rajana: 19f turpeth trivyt: 21f tuttha copper sulphate: 23 tvak skin: 9f udbhid shoots: 9	veda knowledge: 5 vedanābhighāta pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	the three spices: 20 wasted kṣīṇa: 16 welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
rajana: 19f turpeth trivṛt: 21f tuttha copper sulphate: 23 tvak skin: 9f udbhid shoots: 9	knowledge: 5 vedanābhighāta pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	wasted kṣṇṇa: 16 welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
turpeth trivṛt: 21f tuttha copper sulphate: 23 tvak skin: 9f udbhid shoots: 9 upahita	knowledge: 5 vedanābhighāta pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	kṣīṇa: 16 welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
trivṛt: 21f tuttha copper sulphate: 23 tvak skin: 9f udbhid shoots: 9	vedanābhighāta pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	kṣīṇa: 16 welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
tuttha copper sulphate: 23 tvak skin: 9f udbhid shoots: 9	pain and injury: 5 velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	welfare śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
copper sulphate: 23 tvak skin: 9f udbhid shoots: 9 upahita	velvet bean svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	śreyas: 5 well joined sādhubaddha: 17 white siris kinihī: 23
23 tvak skin: 9f udbhid shoots: 9 upahita	svayaṃgupta: 19 velvet leaf pāthā: 23 very intent suniviṣṭa: 17	well joined sādhubaddha: 17 white siris kinihī: 23
skin: 9f udbhid shoots: 9 upahita	velvet leaf pāthā: 23 very intent suniviṣṭa: 17	sādhubaddha: 17 white siris kinihī: 23
skin: 9f udbhid shoots: 9 upahita	pāthā: 23 very intent suniviṣṭa: 17	white siris kinihī: 23
udbhid shoots: 9 upahita	very intent sunivișța: 17	kinihī: 23
shoots: 9 upahita	sunivișța: 17	
shoots: 9 upahita		WILLCHAR
upahita		kārśmarī: 19
•	inflamed: 18	wick
combined: 21	vidaṅga	varti: 13
upaśama	embelia: 23	wild animals
pacification: 10	vikalpa	vyāla: 9
	•	wood apple
	•	kapittha: 19
uśīra	-	Worms
		kṛmi: 9
•		yakṛdrasa
		liver extract: 20
vadhra	•	yakṛt
flesh: 17		liver: 20f
slice of flesh: 17	•	уāруа
vaiṣamya		alleviated: 21
		mitigatible: 18
vanaspati	vṛkṣa	year
fruit trees: 9	flowering trees: 9	saṃvatsara: 10
non-flowering tree:	vṛnta	yoga
24	stalk: 19	compounds: 18
varga	vyadhana	yojayed
collection: 10	piercing: 15	may repair: 17
varṇa	vyadhi	yuga
complexion: 8, 25	disease: 10	yuga: 10
varṣā	vyākhyāta	yuga
rainy seasons: 9	intended: 11	yuga: 10
	nișevita: 21 uśīra cuscus grass: 23 utpala blue lotus: 19 vadhra flesh: 17 slice of flesh: 17 vaișamya irregularities: 8 vanaspati fruit trees: 9 non-flowering tree: 24 varga collection: 10 varņa complexion: 8, 25 varṣā	options: 14 niṣevita: 21 particulars: 10 vipakva cuscus grass: 23 matured: 19 virudh blue lotus: 19 viṣāda cadhra flesh: 17 slice of flesh: 17 viaṣamya irregularities: 8 vanaspati fruit trees: 9 non-flowering tree: 24 varga complexion: 8, 25 viṣāda depression: 8 viṣkira seed-eating: 16 vital energy ojas: 8 viṭṣa flowering trees: 9 vṛnta stalk: 19 vyadhana piercing: 15 vyadhi disease: 10 vyākhyāta

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

Kathmandu, KL 699: 1 Mumbai, AS B.D.109: 4 Kathmandu, NAK 1-1079: 1 Mumbai, AS B.I.3: 4

Kathmandu, NAK 5-333: 1 Thanjavur TMSSML 10773: 26