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# The *Suśrutasamhitā* on the Plastic Surgery of the Ears and Nose: The Nepalese Recension

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## Introduction

# Introduction

The *Compendium of Suśruta* (*Suśrutasaṃhitā*) is amongst the most important treatises on medicine to survive from the ancient world. It has been studied seriously by historians since it first became available in print in the mid-nineteenth century.<sup>1</sup> Meulenbeld listed forty-four editions of the work since the first edition of 1835 by Gupta in Calcutta, and eight translations, starting from the Latin translation of 1844 by Hessler.<sup>2</sup> Many more translations have appeared in recent decades.

The study of this work has yielded rich historical discoveries about the earliest history of surgery, ancient pharmacology, toxicology and many other social and medical topics. Yet there remain fundamental unanswered questions about the history of the text itself and about related issues in the history of medicine in Asia.<sup>3</sup>

In January 2007, a manuscript of the *Suśrutasaṃhitā*, previously unknown to contemporary scholarship, was brought to international attention.<sup>4</sup> MS Kathmandu KL 699 is a Nepalese palm-leaf manuscript covering about two thirds of the Sanskrit text. It is dated to 878 CE, making it one of the earliest dated manuscripts known from South Asia.<sup>5</sup> The manuscript has been declared by UNESCO to be part of the Memory of the World.<sup>6</sup>

The newly-discovered manuscript in Nepal is related to two other early palm-leaf manuscripts in the National Archives in Kathmandu, MS Kathmandu NAK 5-333 and MS Kathmandu NAK 1-1079. Klebanov (2010; 2021a) has assembled compelling evidence for believing that these Nepalese manuscripts present a version of the text that was in wider circulation in northern India, especially Bengal, in the period up to about 1200 CE. Generally speaking, the Nepalese version of the *Suśrutasaṃhitā* is more rudimentary than the versions commented on by Cakrapāṇidatta (fl. eleventh century) and Ḏalhaṇa (fl. twelfth century). The version of the *Suśrutasaṃhitā* commented on by Ḏalhaṇa has formed the basis of modern

<sup>1</sup> A selection of prominent contributions includes: Hoernle 1897; 1906a,b; 1907a,b; Strauss 1934; Singhal et al. 1972–82; P. V. Sharma 1975; Rāy et al. 1980; R. Adriaensen et al. 1984; Yano 1986; HIML; P. V. Sharma 1999–2001a; Valiathan 2007.

<sup>2</sup> HIML: IB, 311 ff.

<sup>3</sup> HIML: IA, 203–389.

<sup>4</sup> Dimitrov and Tamot 2007.

<sup>5</sup> Harimoto 2011: 87–88.

<sup>6</sup> UNESCO 2013.

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printed editions, such as those of Yadavaśarman Trivikramātmaja Ācārya and others.<sup>7</sup> Some of the changes in the text between the Nepalese version and what we might call the Ḏalhaṇa version, or the vulgate version, consist of the addition and loss of numerous verses, changes to medical recipes, and reordering of chapters, especially in the *Uttaratana* or last part of the work. Lariviere hypothesized long ago, in a different context, that Sanskrit texts tended to continue to expand through the addition of new materials,

The process of addition to these compilations must have gone on for centuries. The hearers or readers of these compilations must have known other verses ... and it would be natural for them to include these verses in the compilation. This type of addition may have continued until a commentary on the collection was composed. A commentary would have served to fix the text. and the expansion of the text would have been more difficult after that.<sup>8</sup>

In the case of the *Suśrutasamhitā*, the Nepalese manuscripts appear to present us with the last recoverable snapshot of this stage of the work when it was still open to absorbing new materials, most notably the *Uttaratana*, and before the text was fixed as a result of the authority of the major commentators, Cakrapāṇidatta and Ḏalhaṇa.<sup>9</sup> It is in this sense that we use the expression, “Ḍalhaṇa’s version,” when referring to the vulgate text of the *Suśrutasamhitā*.

The present study offers a critical edition and annotated translation of the sixteenth chapter of the *Ślokasthāna*, the first book of the Nepalese version of the *Suśrutasamhitā*.<sup>10</sup> This chapter is important in the history of In-

<sup>7</sup> [Su 1915](#); [Su 1938](#); P. V. Sharma [1999–2001b](#).

<sup>8</sup> Lariviere [2003](#): xii, cited with agreement by Olivelle ([2005](#): 51) in the context of legal literature and by Bronkhorst ([2016](#): 62–63) in the context of epic literature. See the latter citation for further discussion of Sanskrit text formation between the empires.

<sup>9</sup> The roles of earlier commentators including Jejāṭa, Gayadāsa and Candraṭa in closing the text and influencing Cakrapāṇidatta and Ḏalhaṇa remains an open research problem.

<sup>10</sup> This book is called the *Sūtrasthāna* in later versions of the *Suśrutasamhitā*. Note that the *Suśrutasamhitā* itself used the name *Ślokasthāna* at several places, e.g., 6.42.61 ([Su 1938](#): 721), 6.65.30 and 31 ([Su 1938](#): 818), usually referring to identifiable passages in that part of the work. The name is also used in the *Ślokasthāna* itself, at 1.1.40 of the Nepalese version.

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dian medicine because of its discussion of surgical methods for repairing torn ears and severed noses. In addition to discussing the manuscripts and published editions used in this new edition, the introduction of this study addresses some of the challenges of editing the Nepalese manuscripts and the salient differences between the Nepalese version of the *Suśrutasamhitā* 1.16 and the text as known to Cakrapāṇidatta and Dalhaṇa. The notes to the edition incorporate alternative readings mentioned by the commentators. The annotations to the translation discuss the following topics: instances where the text is uncertain; non-standard spellings and syntax; the meaning of technical and obscure terms; relevant remarks by the commentators; ambiguities in the identification of medical ingredients, in particular, plant names; and the additional compounds, verses and passages in Dalhaṇa's version of the text. In short, this is a pilot study for undertaking a complete edition and translation of the Nepalese version of the *Suśrutasamhitā*.

## Importance of SS.1.16 in the History of Medicine

Simple forms of surgery have a long history in South Asia. In works datable to at least 1200 BCE we learn how a reed was used as a catheter to cure urine retention.<sup>11</sup> Cauterization too was described in the same ancient sources, to prevent wounds from bleeding. The *Atharvaveda*, in the early first millennium BCE, described the bones of the human body, showing early anatomical awareness in a religious context.<sup>12</sup> The *Brāhmaṇa* literature of the only slightly later contains more detailed descriptions of animal butchery in the context of religious sacrifice that involved the enumeration of internal organs and bones.<sup>13</sup> This exemplifies an early Sanskrit vocabulary for internal parts of bodies. However, this is not the same as anatomical dissection, whose methods and intentionality are quite different. As was pointed out long ago by Keith (1908), the enumeration of the bones in the Brāhmaṇas was derived from correspondences with the numbering of various verse forms, not from anatomical observation. With the *Suśrutasamhitā* we find ourselves in the presence of something quite different and more medically developed, in which the body was studied specifically for medical and

<sup>11</sup> Zysk 1985: 70–71.

<sup>12</sup> Translation by Hoernle (1907b: §43, §100). Further bibliography: HML: IIB, 819.

<sup>13</sup> Malamoud 1996; Saha 2015.

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surgical purposes.<sup>14</sup> The text gives us a historical window onto a school of professionalised medicine, including surgical practice, that existed almost two millennia ago, and which in its day was perhaps the most advanced school of surgery in the world.

The author of the *Suśrutasamhitā* described how a surgeon should be trained and how various operations should be done. There are descriptions of ophthalmic couching (the dislodging of the lens of the eye), perineal lithotomy (cutting for stone in the bladder), the removal of arrows and splinters, suturing, the examination of dead human bodies for the study of anatomy, and other procedures.<sup>15</sup> The author of the *Suśrutasamhitā* claimed that surgery is the most ancient and most efficacious of the eight branches of medical knowledge.<sup>16</sup> Anecdotal discussion with contemporary surgeons suggests that many details in the descriptions could only have been written by a practising surgeon: it is beyond doubt that elaborate surgical techniques were a reality in the author's circle.

### Torn ear lobes

Suśruta's description of the repair of torn ear lobes is unique for its time.<sup>17</sup> Majno, a practising surgeon, noted that, "through the habit of stretching their earlobes, the Indians became masters in a branch of surgery that Europe ignored for another two thousand years".<sup>18</sup> The different types of mutilated ear lobe which the *Suśrutasamhitā* describes are not always easy to understand from the Sanskrit: the illustrations supplied in Majno's text help visualization.<sup>19</sup>

<sup>14</sup> Zysk 1986. The *Carakasamhitā* too has brief descriptions of surgical techniques, but the *Suśrutasamhitā* goes into greater detail.

<sup>15</sup> Wilson 1823; Mukhopādhyāya 1913; Deshpande 2000; Wujastyk 2003; Valiathan 2007; Narayana and Thrigulla 2011 and many other studies.

<sup>16</sup> *Suśrutasamhitā* 1.1.15–19 (Su 1938: 4).

<sup>17</sup> The comprehensive study of ears in the history of Indian culture by Bollée (2010) oddly omits reference to *Suśrutasamhitā*'s surgery, although it mentions the text's description of ear diseases.

<sup>18</sup> Majno 1975: 291.

<sup>19</sup> Majno 1975: 290–291; reproduced with permission in Wujastyk 2003: 92–93.

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### Rhinoplasty

One of the best-known surgical techniques associated with *Suśrutasamhitā* is rhinoplasty, the repair or rebuilding of a severed nose. The history of this operation was discussed by Wujastyk (2003: 67–70, 99–100), and a translation of the Sanskrit passage from the vulgate edition of the *Suśrutasamhitā* was given.<sup>20</sup> This fascinating technique is certainly old in South Asia, having been witnessed by travellers from Marco Polo in the seventeenth century onwards.<sup>21</sup> Many witnesses, including the most famous, Cruso and Findlay,<sup>22</sup> described an operation that differs from *Suśrutasamhitā* in that it takes the grafting skin from the forehead, not the cheek. But the nineteenth-century account of Thorburn is especially interesting, since the technique follows *Suśrutasamhitā* exactly in taking flesh from the cheek, not the forehead.<sup>23</sup>

As noted by Meulenbeld, none of the extant commentators – Jejāṭa, Gayadāsa, Cakrapāṇi or Ḏalhaṇa – explained the technique in any detail beyond short lexical glosses.<sup>24</sup> This suggests that the commentators did not in fact know the technique at first-hand.

### The skin flap

It is worth highlighting here a point of critical medical importance: the continued attachment of the skin flap. One of the crucial innovations of the “Hindu Method” of nasal reconstruction, as observed and internationally reported in the eighteenth century, was that the skin flap taken from the face remained partially connected to its original location.<sup>25</sup> This ensures the blood flow essential to keeping the skin alive while it heals in its new location. The Sanskrit of the vulgate is ambiguous on this critical point and the wording of the Nepalese version is unclear. However, Ḏalhaṇa

<sup>20</sup> See also HIMAL: IB, 327–328, note 186, for further literature and reflections.

<sup>21</sup> Manucci 1907–8: ii.301.

<sup>22</sup> Longmate 1794: 883, 891 f.

<sup>23</sup> Thorburn 1876: 352–3.

<sup>24</sup> HIMAL: IB, 328. Ḏalhaṇa also noted cryptically that a rather different version of the text, cast in *śloka* metre, was also known to him from other sources (1.16.27–31 (*Su* 1938: 81a)). Ḏalhaṇa’s variant bears a resemblance to the description of the operation given in printed editions of the *Aṣṭāṅgahṛdayasaṃhitā* (Utt.18.59–65 (*Ah* 1939: 841))).

<sup>25</sup> See Wujastyk 2003: 67–70.

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clarified the meaning of the vulgate here by stating that when reading the expression “connected,” one should understand “connected flesh”.<sup>26</sup> He thus indicated that he understood the flesh to be connected to the face.<sup>27</sup> Thus, we cannot know definitively at present whether the connection of the flap was known to the redactors of the Nepalese version, although it seems likely. It was probably known to the redactors of the vulgate, and was certainly known to Ḑalhaṇa in the twelfth century.

Earlier in the chapter, in the context of ear-piercing and repair, the vulgate has a passage that is more explicit and conclusive. After listing the names and characteristics of different types of earlobe, the vulgate cites some summary verses from an unknown source.<sup>28</sup> The last of these verses says,

If no lobe exists, an expert may create an ear lobe by scarifying and then using living flesh still attached to the cheek from which it has been sliced.<sup>29</sup>

The commentator Ḑalhaṇa was even more explicit in his gloss on this passage:

“Living” [flesh] means “together with blood”.<sup>30</sup>

Thus, Ḑalhaṇa’s comment gives us unequivocal evidence for the concept of a living skin flap in the twelfth century, and it is almost certain that this is also what the text of the *Suśrutasaṃhitā* intended by the word “living.” The one remaining historical problem is that these specific verses, 1.16.11–14, are not present in the Nepalese version of the text. That suggests that they were part of a different tradition of practice with a verse literature that was integrated into the *Suśrutasaṃhitā* at the latest by the time of Ḑalhana but perhaps after the Nepalese version.

If we can assume that the descriptions of ear-surgery and rhinoplasty were part of a single professional tradition of surgical method, then the above passage, in the context of ear-lobe repair, strongly supports the idea

<sup>26</sup> *Suśrutasaṃhitā* 1.16.28 ([Su 1938](#): 81).

<sup>27</sup> See p. 55 below.

<sup>28</sup> 1.16.11–14 ([Su 1938](#): 78).

<sup>29</sup> 1.16.14 ([Su 1938](#): 78): गण्डादुत्पात्य मांसेन सानुबन्धेन जीवता | कर्णपालीमापालेस्तु कुर्यान्निर्लिख्य शास्त्रवित् | Cf. the translation of the whole passage by Wujastyk ([2003](#): 94).

<sup>30</sup> 1.16.14 ([Su 1938](#): 78): जीवेति शोणितसहितेनेत्यर्थः।

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that rhinoplastic surgery too was conducted with attention to keeping a living skin flap.

By the late first millennium, had the rhinoplastic technique moved from the professional competence of physicians (*vaidyas*) to that of barber-surgeons (*Ambaṣṭhas* and others)? Or perhaps the influence was in the other direction, and a technique known to practitioners elsewhere in South Asia in the first millennium was integrated into the text of *Suśrutasan̄hitā*. The rhinoplastic description consists of only five verses and they are written in the Upendravajrā metre, which is different from the rest of the chapter. The description's appearance at the very end of the chapter, its terseness, its ornate metre, and the paucity of the commentators' treatment could all be taken as pointing in this direction.

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### The Nepalese Version

In the present article and the other publications of our research group, we focus on the study of what we call the ‘Nepalese version’ of the *Suśrutasamhitā*. The primary rationale behind using this designation was outlined by Klebanov,<sup>31</sup> but we consider it necessary to reflect upon its meaning here, given the conceptual significance that this term occupies in our research. It is possible that in the course of our research, we will refine our understanding of the phenomenon and, consequently, review and modify our current interpretation.

Put plainly, the ‘Nepalese version’ refers to a hypothetical text-critical reconstruction of the wording of the *Suśrutasamhitā* that is based primarily on the evidence of three ancient Nepalese manuscripts that we have briefly introduced above and that we will describe in more detail in a later section. We call these MSS “Nepalese” not just because they were preserved and discovered by modern scholarship in the Kathmandu Valley but also because we believe that they were produced in the same area. We conclude this because all three MSS are written in a specific variety of Indic scripts which, to the best of our knowledge, was not used outside of the region.

Furthermore, we speak of a single “version” because we hold that these manuscripts attest to a peculiar line of transmission of the text. That is to say, in terms of stemmatic analysis they share a common ancestor or (hyparchetype), while at the same time, they bear no signs of significant contamination. This hypothesis was postulated by Klebanov (2010) and reiterated by Klebanov (2021b) as the result of a systematic analysis of two complete chapters (SS.1.3 and SS.1.15) as well as several shorter excerpts from the *Suśrutasamhitā* transmitted in the Nepalese manuscripts. On the one hand, these studies highlighted that all three MSS preserve a highly uniform text with very few variations, virtually all of which can be explained as standard scribal errors or corrections. On the other hand, Klebanov (2010; 2021b) systematically compared the concerned textual excerpts with four printed editions, alternative readings (पाठ) reported by several commentators, parallel passages in other texts, and with a limited number of additional manuscripts of the *Suśrutasamhitā*. This analysis

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<sup>31</sup> Klebanov 2021a: 2–3.

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demonstrated that the text of the *Suśrutasaṃhitā* preserved in the Nepalese MSS differs decidedly from all the above standards of comparison. In this way, for example, we establish that another Nepalese manuscript of the *Suśrutasaṃhitā*, MS Kathmandu NAK 1-1146,<sup>32</sup> does not belong to the peculiar line of textual transmission and need not be taken into consideration when reconstructing the reading of its hyparchetype.

However, in view of the more than two hundred handwritten copies of the *Suśrutasaṃhitā* preserved in different libraries across South Asia and in the absence of their systematic inclusion into the project's current collation, the assumption about the regional character of the transmission line remains hypothetical.<sup>33</sup> As a matter of fact, we believe that the Nepalese MSS preserve many archaic features of the early *Suśrutasaṃhitā* and it is possible, even likely, that some of these features will be found in other manuscripts of this work that have yet to be studied.

Our research group builds upon the above hypothesis about the existence of a distinct Nepalese version of the *Suśrutasaṃhitā* and concentrates primarily on the study of this text in its own right and, additionally, in comparison to a single version of the compendium popularized by its late medieval commentator Dalhaṇa and recorded in the widely-used [Su 1938](#). The present study of SS.1.16 also considers the readings found in [Su 1939](#) and incorporates various observations made by both medieval commentators, Cakrapāṇidatta and Dalhaṇa, into the notes of the edition and some annotations of the translation.

The current paper and several earlier publications furnish a large catalogue of uniform features that are characteristic of the Nepalese MSS and set them apart from the vulgate version.<sup>34</sup> These features of the Nepalese MSS include orthographic variants, peculiarities in the structure and structuring elements, as well as the actual wording of the text. As argued elsewhere in this article, many of these variants are likely to be closer to an archaic version of the *Suśrutasaṃhitā*. This is partly because they preserve a version of the text that appears to be less edited, that is, slightly more idiosyncratic and original in expression, that in turn suggests that it precedes

<sup>32</sup> Rimal and Wujastyk [2022](#).

<sup>33</sup> For a list of known manuscript copies of the *Suśrutasaṃhitā*, see the sources mentioned in footnote [97](#) below.

<sup>34</sup> Earlier publications include, for example, Harimoto [2011](#); Wujastyk [2013](#); Birch, Wujastyk, Klebanov, Parameswaran, et al. [2021](#); Birch, Wujastyk, Klebanov, Rimal, et al. [2021](#).

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later editorial intervention, according to the principle of *lectio difficilior potior*. We also assign a high historical value to many Nepalese readings because they constitute an internally more consistent and coherent text that is at times further supported by external testimonia.

Additionally, we want to make it clear that we do not think that the Nepalese MSS provide a so-called original text of the *Suśrutasamhitā*. Rather, the Nepalese MSS are witnesses to a hyparchetype, not the archetype, of the *Suśrutasamhitā*. The Nepalese MSS provide us with an intermediary node in the history of this work between the oldest reconstructable text and the vulgate version that was known to Ḏalhaṇa in the twelfth century and is reproduced in printed editions of the *Suśrutasamhitā*. The oldest reconstructable text will only come into focus when all surviving witnesses for the work are studied. Having said that, our belief is that the Nepalese version is certain to be closer to the oldest reconstructable text than are contemporary printed versions of the work. One of the reasons for this belief is simply that the Nepalese MSS give us physical evidence for the state of the work in the ninth century, which cannot be many centuries later than the original assembly of the work in the form we are familiar with, i.e., a work of five topical sections with a large added sixth section, the *Uttaratana*, that has a somewhat different character.

To summarize: the evidence arising from our studies to this point leads us to think that the Nepalese MSS provide access to single line of textual transmission that goes back to a hyparchetype that predates the composition of all major commentaries on the *Suśrutasamhitā* and that, due to its regional character, has suffered relatively little contamination. We term this hyparchetype the “Nepalese version.”

## The Versions of Cakrapāṇidatta and Ḏalhaṇa

The commentaries of Cakrapāṇidatta and Ḏalhaṇa, titled *Bhānumatī* and *Nibandhasaṅgraha* respectively, are based on similar but not identical versions of the *Suśrutasamhitā*, both of which are significantly different to the Nepalese version.<sup>35</sup> Ḏalhaṇa was aware of Cakrapāṇidatta’s work and reit-

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<sup>35</sup> See [HIML:IA 374–379](#) on these authors. Meulenbeld already noted that “the text of the *Suśrutasamhitā* in the [1939] edition of the *Bhānumatī* differs at many places from the text of the [vulgate edition of 1938]” and gave examples from the *sūtrasthāna*

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erated many of his predecessor's remarks, so the interpretation of the root text by these two commentators is, broadly speaking, consistent.<sup>36</sup> Ḏalhaṇa evidently also had several manuscripts of the *Suśrutasaṃhitā* available to him, since he frequently recorded their variant readings.<sup>37</sup>

In addition to the fine-grained issues raised by the relationship between these commentators, there are added difficulties introduced by the way the editors of the printed versions of these commentaries handled the texts in several cases. The most obvious difficulty is that Y. T. Ācārya and N. Šarman's text of the *Sūtrasthāna* commented on by Cakrapāṇidatta ([Su 1939](#)) simply duplicated the text of that section from Y. T. Ācārya and N. R. Ācārya's edition of Ḏalhaṇa's commentary ([Su 1938](#)).<sup>38</sup> This duplication of the root text creates the misleading impression that both commentators had the same *Suśrutasaṃhitā* before them. However, there is much evidence, including in SS.1.16, that this was not the case. For example, Ḏalhaṇa commented on four verses, 1.16.11–14 ([Su 1938](#): 78), as part of his root text, that Cakrapāṇidatta cited separately only in his commentary ([Su 1939](#): 128–129). Cakrapāṇidatta introduced each verse with “some people say” (केचित्पठन्ति). This clearly indicates that these verses were not in the version of the *Suśrutasaṃhitā* upon which Cakrapāṇidatta was commenting, but a century or so later they were part of the text before Ḏalhaṇa. But the editors Y. T. Ācārya and N. Šarman included them in the root text of the *Suśrutasaṃhitā* as if they were. Such cases make it harder than it would otherwise be to remain clear that these two commentators were working off different versions of the *Suśrutasaṃhitā*.

Also, Cakrapāṇidatta did not acknowledge or comment on some verses in the version of the *Suśrutasaṃhitā* known to Ḏalhaṇa. Although it is possible that a commentator may not have remarked on a verse because its

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([HIML](#): IB, 496, note 76).

36 [HIML](#): IB, 499, n. 162.

37 Cf. [HIML](#): IA, 377. Meulenbeld drew attention to Ḏalhaṇa's commentary on 5.8.24cd–25ab ([Su 1938](#): 587) as a particularly striking example of such awareness ([HIML](#): IB, 497, n. 112). In this passage, Ḏalhaṇa noted that certain readings known to the earlier commentators Jejjīṭa and Gayadāsa were, “not to be found in current manuscripts” (स च वर्तमानपुस्तकेषु न दृश्यते).

38 There are a few exceptions where Cakrapāṇidatta glossed a word or compound that is different to the one glossed by Ḏalhaṇa. For example, in SS.1.16.18, Cakrapāṇidatta glossed राजसर्षप whereas Ḏalhaṇa glossed गौरसर्षप, and the editors reflected this in the root texts of the *Bhānumatī* ([Su 1939](#): 130) and *Nibandhasaṅgraha* ([Su 1938](#): 79) respectively.

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स्वेदितोन्मर्दितं कर्णं छेहेनैतेन योजयेत् ॥  
 अथानुपद्रवः सम्यग्बलवांशं विचर्धते ॥ १९ ॥  
 ( यवाऽवगन्धायष्टाहैस्तिलैश्चोद्धर्तनं हितम् ॥  
 शतावर्यश्वगन्धाभ्यां पयस्यैरण्डजीवनैः ॥ २० ॥  
 तैलं विपकं सक्षीरमभ्यङ्कृतं पालिवर्धनम् ॥ )  
 कर्णवर्धनार्थं सम्मर्दनयोगिनेहमाह—तत्या गोपेत्यादि । प्रहृदा लह्वादयोऽजपान-  
 वर्णात्यः, विकिरा लावादयः, आनुपा गहियादयः । राजसर्पः, वेतसर्पः, दल-  
 तैलम्, एवं हि लेहोऽयम् । पयश्चात्र पाकार्थं इवान्तरातुकेशवतुर्युणमेव । ये हु पयःस्यावे-  
 सर्पिः पठन्ति, तन्मर्ते जलसाध्योऽयम्; अन्ये हु चहुःसेहेनेव पयःस्याध्यं पठन्ति ।  
 अलक्षः अक्षेदः, जलशक्तो जलतृपातको भवति ‘जलसुंजा’ इति प्रलिङ्गः । प्रतीचाप-  
 ककः । ये लत्र मधुरार्थं पठन्ति पयश्चात् च, तन्मर्ते पयसा क्षीरविदारी । तैलं वेति  
 तैलमेव वा ॥ १९-२० ॥

स्वेदितोन्मर्दितं कर्णं छेहेनैतेन योजयेत् ॥  
 अथानुपद्रवः सम्यग्बलवांशं विचर्धते ॥ २० ॥  
 अस्य तैलयाव चारणमाह,—स्वेदितोन्मर्दितमिलादि ॥ २० ॥  
 यवाऽवगन्धायष्टाहैस्तिलैश्चोद्धर्तनं हितम् ॥  
 अभ्यक्तस्योद्धर्तनमाह,—यवेत्यादि ॥—  
 शतावर्यश्वगन्धाभ्यां पयस्यैरण्डजीवनैः ॥ २१ ॥  
 तैलं विपकं सक्षीरमभ्यङ्कृतं पालिवर्धनम् ॥  
 कर्णपालिविश्वार्थमपरं तैलमाह,—शतावर्यश्वगन्धाभ्यासि-  
 त्यादि । शतावर्यादिकलकेन लेहतुर्याशेन केवलश्चारेण चतुर्गु-  
 णेन तैलमत्र पचनीयम् । पयसा अर्कपुणी । जीवनैः काको-  
 त्यादिद्रवैः ॥ २१ ॥—

Figure 1: The text as it appears in Cakrapāṇi (left) and Dalhaṇa (right) ([Su 1939](#): 130, [Su 1938](#): 79).

meaning was clear, in some cases the commentarial convention of citing the first words of a new verse or passage provides firmer ground for suspecting the absence of a verse in the root text.

To give an example, there is a prose passage at Su.1.16.18 of the *Suśrutasamhitā* that Cakrapāṇidatta commented on in his *Bhānumatī* (Fig. 1, left).<sup>39</sup> It is followed by several verses also in the main text of the *Suśrutasamhitā* that elaborate on the content of the prose passage.<sup>40</sup> Dalhaṇa commented on these explanatory verses (Fig. 1, right), citing keywords that show they all formed part of the main text of the *Suśrutasamhitā* that was before him.<sup>41</sup> However, Cakrapāṇidatta’s older commentary showed no awareness of the first few verses in this group, Su.1.16.19–21ab.<sup>42</sup> Apparently, they were not part of the text of the *Suśrutasamhitā* as he knew it. In spite of that, the editors printed these verses in their edition of Cakrapāṇidatta’s work as if they were indeed part of the *Suśrutasamhitā* known to to him.<sup>43</sup>

A similar instance of this occurs in the edition of the *Bhānumatī* at *Suśrutasamhitā* 1.16.31 where the editors of the 1939 printed edition included a verse in parenthesis that was commented on by Dalhaṇa but not by Cakra-

<sup>39</sup> [Su 1939](#): 130, i.e., अथाप्रदुष्टस्याभिवर्धनार्थम् ... निदध्यात् । It is numbered Su.1.16.19 in Dalhaṇa’s *Nibandhasaṅgraha* ([Su 1938](#): 79).

<sup>40</sup> Su.1.16.19–23 in [Su 1939](#), i.e., स्वेदितो ..., यवाश्व ..., तैल ..., तेषाम् ..., वद्ध ....

<sup>41</sup> 1.16.19–23 ([Su 1938](#): 79–80).

<sup>42</sup> [Su 1939](#): 130–131.

<sup>43</sup> The editors remarked in a footnote that verses 20–21a were not in the Nepalese manuscript that they consulted ([Su 1939](#): 130, n. 2).

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( नाडीयोगं विनौष्टस्य नासासन्धानवद्विधिम् ॥  
य पवमेव जानीयात् स राज्ञः कंतुमर्हति ॥ ३१ ॥ )  
इति सौश्रुते शब्दयतन्त्रे स्फुरस्थाने कर्णव्यधवन्धविधिर्नाम  
पोडशोऽध्यायः ॥ १६ ॥

Figure 2: *Suśrutasaṃhitā* 1.16.31 in the 1939 printed edition.

pāṇidatta (see Fig. 2).<sup>44</sup> This verse was almost certainly not in the text of the *Suśrutasaṃhitā* known to Cakrapāṇidatta.

The manuscript on which the editor's edition of the *Bhānumatī* was mainly based, MS London BL H. T. Colebrooke 908, does not include the root text of the *Suśrutasaṃhitā*.<sup>45</sup> Therefore, it requires a detailed reading of the commentary itself to infer what its author, Cakrapāṇidatta, was seeing in the manuscripts of the *Suśrutasaṃhitā* that he had before him in the eleventh century. But, to summarize, there is no evidence that they included the verses SS.1.16.19–21ab and 31 that are printed in Su 1939 as if they were present to Cakrapāṇidatta.

### Cakrapāṇidatta and the Nepalese version

In fact, there is some evidence that the Nepalese version of the *Suśrutasaṃhitā* was more similar to Cakrapāṇidatta's version than to Dalhaṇa's. For example, *Suśrutasaṃhitā* 1.16.5 of the Nepalese version begins with the compound दोषसमुदयात्.<sup>46</sup> Dalhaṇa's version, on the other hand, inserted two compounds, क्लिष्टजिह्वाप्रशस्तसूचीव्यधात् and गाढतरवर्तित्वात्, before this.<sup>47</sup> Cakrapāṇidatta began his comment on this passage by glossing दोषसमुदयात्, which suggests that he was not aware of the compounds that Dalhaṇa saw.<sup>48</sup>

44 The verse begins नाडीयोगं विनौष्टस्य. It is printed in the vulgate as 1.16.32 (Su 1938: 81), with Dalhaṇa's commentary. It is printed in parentheses as 1.16.31 in the edition of the *Bhānumatī* (Su 1939: 133).

45 The MS is described in IOLR: vol. 1.5, 928, #2647. The section on p. 29 below describes the sources that the editors used for the 1939 edition.

46 Su 1939: 126.

47 *Suśrutasaṃhitā* 1.16.6 (Su 1938: 77).

48 *Suśrutasaṃhitā* 1.16.5 (Su 1939: 126–127).

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If one looks beyond *Suśrutasaṃhitā* 1.16, there are instances where the Nepalese version and the root text as read by Cakrapāṇidatta have the same reading, but Ḏalhaṇa mentions it as an alternative that is, “read by others.” For example, *Suśrutasaṃhitā* 1.1.28 of the Nepalese version has तत्रास्मिज्ञास्ते, which is also the reading commented on by Cakrapāṇidatta.<sup>49</sup> However, Ḏalhaṇa commented on अस्मिज्ञास्ते and states that “others read तत्रास्मिज्ञास्ते”.<sup>50</sup> Another example is the reading of पष्ट्या विधानैः in Ḏalhaṇa’s commentary on 1.1.8.1 ([Su 1938](#): 3) that is not in his main text but that he ascribes to “some others.” This reading is likely to be derived from the expression पष्ट्याभिधानैः in the main text of the Nepalese version, and to have been rewritten before Ḏalhaṇa’s time because it was hard to understand.<sup>51</sup>

## Differences between the Nepalese and Subsequent Versions of SS.1.16

Several differences between the text of the *Suśrutasaṃhitā* as found in its multiple printed versions and as reconstructed on the basis of the Nepalese MSS have already been pointed out in previous publications. Klebanov ([2021a](#): 27 f) listed differences in the chapter sequence as they affect the overall organization and structuring themes and elements of the text. Others have explored variations in the frame story of the work as a whole.<sup>52</sup> Klebanov highlighted the interchangeable use of two names of the first book of the text, namely Ślokasthāna and Sūtrasthāna. He also discussed another peculiarity of the Nepalese version, namely the additional verse or prose colophons found at the end of each book and also at the end of each decade of chapters of the work.<sup>53</sup>

As the present paper demonstrates, many distinct features pertaining to the actual content of the Nepalese version continuously come to light as we proceed with our study of the manuscripts.

Harimoto ([2011](#): 101–104) provided an exemplary investigation of textual variants in the Nepalese version. His study looked at the classification

49 [Su 1939](#): 17.

50 *Suśrutasaṃhitā* 1.1.22 ([Su 1938](#): 5).

51 See the discussion by Birch, Wujastyk, Klebanov, Rimal, et al. ([2021](#): 4–5).

52 Wujastyk [2013](#); Klebanov [2021a](#): 28–32; Birch, Wujastyk, Klebanov, Parameswaran, et al. [2021](#); Birch, Wujastyk, Klebanov, Rimal, et al. [2021](#): 2–4.

53 Klebanov [2021a](#): 32–44.

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of snakes in *Suśrutasamhitā* 5.4 and revealed that the Nepalese MSS preserve a text that is internally more consistent and coherent than the versions of the *Suśrutasamhitā* found in different printed sources.

Klebanov too has contributed some general remarks and examples of substantive differences between the Nepalese and vulgate texts and detailed two particular case studies.<sup>54</sup> The first case study dealt with the list of skin lesions associated with urinary disease (प्रमेहपिटका in the Nepalese spelling). Their signs and pathogenesis are described in the Nidānasthāna and their treatment in the *cikitsāsthāna*.<sup>55</sup> This list of skin lesions exemplifies a case where the text of the *Suśrutasamhitā* transmitted in the Nepalese MSS is internally more coherent than that commented on by Dalhaṇa. The incoherence of Dalhaṇa's version was already identified by an earlier commentator, Gayadāsa (fl. ca. 1000), who proposed a textual conjecture that corresponds to the reading of the Nepalese version.<sup>56</sup>

The second case study by Klebanov (2021a) focussed on the variation in another list, that of the bodily winds (प्राण, *Suśrutasamhitā* 3.4). This discussion too relied upon Gayadāsa's learned remarks. He commented on a version of the *Suśrutasamhitā* corresponding to the Nepalese MSS and reported an alternative reading and its interpretation preferred by another ancient commentator, Jejjaṭa. It is precisely Jejjaṭa's reading that is known to modern readers of the *Suśrutasamhitā* from the vulgate version of the text.

The present paper also provides an example of interpolation. This is a rare case in which we have a fairly good idea of where the inserted text came from, namely the medical theory associated with the *Carakasamhitā*.

On the whole, these observations indicate that many features of the Nepalese version of the *Suśrutasamhitā* are likely to go back to an early state of the work that was common to other versions of the compendium. However, other textual features, such as the text-structuring colophons concluding every tenth chapter, are likely to have occurred within a local Nepalese transmission of the text, and it is improbable that they are attested in the MSS from other regions. When evaluating the Nepalese readings historically, it is necessary to keep in mind that there is plentiful evidence that Dalhaṇa's version of the text also included extremely early read-

54 Klebanov 2021a: 44–55.

55 2.6 (*Su* 1938: 289–294) and 4.12 (*Su* 1938: 454–455) respectively.

56 MS Kathmandu KL 699 was copied a century or more before Gayadāsa's time, so its version cannot have been influenced by Gayadāsa's innovations or suggestions.

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ings and variants, suggesting that some of the readings accepted by Dalhaṇa were ancient, if not original. Each case has to be weighed.

The following detailed comparison of 1.16 of the Nepalese version with Dalhaṇa's *Nibandhasaṅgraha* unfolded as the chapter was edited. The differences appear to emanate largely from attempts to standardise, simplify or clarify the language of the Nepalese version, add and redact information, and introduce changes to recipes and treatments. Examples from 1.16 have been provided to demonstrate the general observations which, it is hoped, a larger survey of the text will support.

Figure 3 reveals the extent to which 1.16 of the Nepalese version was redacted to create the one known by Dalhaṇa. In this particular case, twenty-seven verses have been added. Eight of these verses (11–14, 21–22ab, 23cd–24, 32) are well-integrated with the existing material in so far as they reiterate and elaborate on the content of passages in the Nepalese version. A block of nineteen verses (26.1–19) at the end of this chapter in Ācārya's edition of the *Nibandhasaṅgraha* (Su 1938: 80) was known by Dalhaṇa. These verses cover additional diseases of the ear lobes, with their treatment and complications. Although Dalhaṇa conceded that some read them in this chapter, he concludes that they were not composed by sages and, therefore, should not be read. Ācārya probably included these verses because they were in his manuscripts, and Dalhaṇa's comments prompted him to place them in parentheses.<sup>57</sup> Be this as it may, this large block of verses is absent in the Nepalese version.

In Figure 3, one can also see that verses 17 and 18 of the Nepalese version were transposed in the redaction of Dalhaṇa's version, in which they are numbered 26 and 25 respectively. Although this only occurs once in 1.16, such transposing of verses and even their hemistiches is common in the redaction of other chapters of the *Suśrutasaṃhitā*.

Apart from the addition of verses, the redacting of the version known to Dalhaṇa involved many small, yet sometimes significant, changes that are summarised below.<sup>58</sup>

57 Ācārya (Su 1938: 80) did not state that these verses were absent in some or all of his manuscripts, which he usually did in a footnote if this was the case. A broader survey of manuscripts would be helpful for establishing whether these verses were part of the transmission of the *Suśrutasaṃhitā* in India. For example, they are present in MS Hyderabad Osmania 137-3(b).

58 The present study focusses on the commentary of Dalhaṇa, but many of the same investigations could be made with regard to the surviving parts of the other early

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Nepalese version	Dalhaṇa's version
1	1
—	2
2–9	3–10
—	11–14
10–15	15–20
—	21–22ab
16	22cd–23ab
—	23cd–24
—	25
17	26
—	26.1–19
18	—
19–23	27–31
—	32

Figure 3: A Comparison of verses in 1.16 of the Nepalese and Dalhaṇa's versions.

### Changing Spelling, Sandhi and Syntax

Later commentators like Dalhaṇa often made efforts to standardise, simplify or improve the language of the Nepalese version. Such changes include the standardising of spelling,<sup>59</sup> sandhi,<sup>60</sup> and verbal forms,<sup>61</sup> as well as interventions to simplify and clarify syntax.<sup>62</sup> These efforts often in-

commentaries. See the discussion below, p. 31.

59 For example, पत्ताङ्ग (SS.1.16.21) → पतङ्ग (1.16.29, Su 1938: 81). For more information on this, see the relevant footnote to the translation.

60 or example, ऋस्तेन ऋजु (SS.1.16.2) → ऋस्तेन जु (1.16.3, Su 1938: 76).

61 For example, उच्चामयित्वा (SS.1.16.21) → प्राप्नम्य (1.16.29, Su 1938: 81); अवचूर्णयीत (SS.1.16.21) → उपहरेत् (1.16.29, Su 1938: 81).

62 For example, शोणितबहुत्वनिवेदनायां चान्यदेशविद्धुमिति जानीयात् | निरुपद्रवता तद्देशविद्धुलिङ्गम् | (SS.1.16.3) → शोणितबहुत्वेन वेदनया चान्यदेशविद्धुमिति जानीयात् | निरुपद्रवतया तद्देशविद्धुम् इति | (1.16.4, Su 1938: 76); आमतैलपरिषेकेणोपचरेत् (SS.1.16.6) → आमतैलेन परिषेचयेत् (1.16.7, Su 1938: 77); सुपरिगृहीतं (SS.1.16.10) → सुपरिगृहीतं च कृत्वा (1.16.15, Su 1938: 78); अनेन (SS.1.16.15) → स्त्रेहेनैतेन (1.16.20, Su 1938: 79).

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volved splitting compounds.<sup>63</sup> In some instances, these changes improved the grammar,<sup>64</sup> or altered the meaning.<sup>65</sup> However, some prefixes of verbal forms,<sup>66</sup> case endings,<sup>67</sup> and indeclinables were changed for less apparent reasons.<sup>68</sup> There is also a tendency to replace uncommon words with generic ones,<sup>69</sup> add indeclinables,<sup>70</sup> omit the verb to be at the end of sentences,<sup>71</sup> and introduce verses after a prose passage with the phrase भवति चात्र.<sup>72</sup>

### Changing Technical Terms

There is evidence of standardising and altering technical terminology in versions of the *Suśrutasamhitā* subsequent the Nepalese one. Two examples of this in *Suśrutasamhitā* 1.16 are the terms for joins (*bandha*) and a slice of flesh (*vadhra*). The Nepalese version uses three terms for joining (*bandha*, *sandhāna*, *sandhi*) splits in the ear flaps and the flesh of nose. Redactors of subsequent versions appear to have tried to standardise this terminology by replacing सन्धान and सन्धि with बन्ध in prose passages.<sup>73</sup> However, the use of the term सन्धान was retained in verses, perhaps because of the metrical challenges of making such a change. Also, the names of joins which

63 For example, यहच्छाविद्वायां सिरायाम् (SS.1.16.4) → यहच्छया विद्वासु सिरासु (1.16.5, Su 1938: 76); धान्याम्लकपालचूर्ण (SS.1.16.10) → धान्याम्लं कपालचूर्ण (1.16.20, Su 1938: 78).

64 For example, सुरामण्डक्षीरम् (SS.1.16.10) → सुरामण्डं क्षीरम् (1.16.15, Su 1938: 78).

65 For example, क्षीणाल्प्यमांसः (SS.1.16.12) → क्षीणोऽल्प्यमांसः (1.16.17, Su 1938: 79).

66 For example, सम्वर्द्धितः (SS.1.16.8) → विवर्द्धितः (1.16.9, Su 1938: 77); निवेश्य (SS.1.16.10) → सन्निवेश्य (1.16.15, Su 1938: 78); अवबध्य (SS.1.16.10) → च बद्धा (1.16.15, Su 1938: 78).

67 For example, मासे (SS.1.16.2) → मासि (1.16.3, Su 1938: 76).

68 For example, अपि (SS.1.16.13) → वा (1.16.18, Su 1938: 79); च (SS.1.16.16) → तु (1.16.23, Su 1938: 79); तु (SS.1.16.18) → च (1.16.25, Su 1938: 80).

69 For example, प्रक्षयेत् (SS.1.16.15) → योजयेत् (1.16.20, Su 1938: 79); नह्येत् (SS.1.16.21) → बद्धा (1.16.29, Su 1938: 81).

70 For example, [absent] (SS.1.16.6) → च (1.16.7, Su 1938: 77); [absent] (SS.1.16.10) → तत्र (1.16.15, Su 1938: 78); [absent] (SS.1.16.12) → अपि (1.16.17, Su 1938: 79).

71 The words भवति or भवन्ति are omitted four times in Dalhana's version (1.16.10 (twice), 1.16.17 and 1.16.18, Su 1938: 77, 79).

72 For example, [absent] (SS.1.16.11) → भवति चात्र (1.16.16, Su 1938: 79).

73 For example, पञ्चदशसन्धानाकृतयः (SS.1.16.9) → पञ्चदशबन्धाकृतयः, (cf. 1.16.10 (Su 1938: 77)); दशकर्णसन्धिविकल्पाः (SS.1.16.9) → कर्णबन्धविकल्पाः (cf. 1.16.10 (Su 1938: 77))

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incorporate सन्धान and सन्धि remained the same.<sup>74</sup>

The Nepalese version contains the rather obscure term वध्र for the slice of flesh that a surgeon cuts from the cheek in order to construct a new nose (SS.1.16.20 and 23). Modern dictionaries define वध्र as a leathern strap or a slice of bacon,<sup>75</sup> the latter of which is more indicative of its meaning in the Nepalese version. This word was written out of subsequent versions,<sup>76</sup> and it was not mentioned as an alternative reading by either Cakrapāṇidatta or Ḏalhaṇa, which suggests that its use and meaning may not have been known to them. However, वध्र was used by the author of the *Aṣṭāṅgahṛdaya-saṅhitā* in the context of rhinoplasty, so it likely to be the correct reading in the Nepalese version.<sup>77</sup>

## Augmenting the Text

Apart from adding whole passages and verses (as seen in Figure 3), redactors of subsequent versions augmented the text by expanding existing compounds and inserting new compounds and words. Within the microcosm of 1.16, adjectives and adverbs were inserted to clarify statements,<sup>78</sup> and phrases added to elaborate on diseases and treatments.<sup>79</sup> In particular, the characteristics and number of symptoms of a disease, as well as their reasons for arising, tend to increase in subsequent versions. For example, the Nepalese version (SS.1.16.5) said that the wick in a newly pierced ear should be removed because of aggravated humours or a culpable piercing whereas the version known to Ḏalhaṇa (1.16.6 (Su 1938: 77)) included two further reasons, namely, because of piercing with a painful, crooked and unrecommended needle or because of a wick that is too thick. Some of the split ear flaps in Ḏalhaṇa's version have

74 These names are नेमीसन्धानक, कपाटसन्धिक, and अर्धकपाटसन्धिक in SS.1.16.9 (cf. 1.16.10 (Su 1938: 77)).

75 Apte: 1385; MW: 917.

76 वधम् (SS.1.16.20) → बद्धम् (SS.1.16.28, Su 1938: 81) and तद्वधशोषं (SS.1.16.23) → तदर्धशोषं (SS.1.16.31, Su 1938: 81).

77 Utt.18.62 (Ah 1939: 841). The word is old, occurring, also in the form वध्र्ण, from the *Atharvaveda* onwards (Mayrhofer 1986–2001: vol. 2, 521–522).

78 For example, छिद्रे (1.16.2, Su 1938: 76) → छिद्र आदित्यकरावभासिते (1.16.3, Su 1938: 76); [absent] (1.16.2) → शनैः शनैः (1.16.3); [absent] (SS.1.16.3) → आशु (1.16.5, Su 1938: 77).

79 For example, धात्र्यङ्के (SS.1.16.2) → धात्र्यङ्के कुमारधराङ्के वा (1.16.3); [absent] (SS.1.16.2) → बालक्रीडनकैः प्रलोभ्य (1.16.3); [absent] (SS.1.16.3) → पिचुवर्ति प्रवेशयेत् (1.16.5).

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additional characteristics,<sup>80</sup> and a list of four symptoms associated with incurable joins in the Nepalese version (SS.1.16.19) was increased to six in Dalhaṇa's version (1.16.10 (*Su 1938*:77)). Also, models of classifying symptoms were introduced in subsequent versions. For example, the Nepalese version (SS.1.16.4) lists the symptoms of mistakenly piercing a duct in the ear whereas the version known to Dalhaṇa (1.16.5, *Su 1938*:76–77) classifies these symptoms according to three ducts called कालिका, मर्मिका and लोहितिका, which results in some repetition of the symptoms mentioned.<sup>81</sup>

### Transposing Words, Verses and Passages

A close comparison of the Nepalese version with the vulgate reveals changes in the order of words, sentences and verses. Examples of such transpositions occur in SS.1.16. In most cases, the changes in word order are insignificant and may be result of different preferences in syntax or even scribal eye-brain-hand miscommunication.<sup>82</sup> However, the transposition of verses and passages is usually the result of efforts at redacting the text to add new material. A good example of this is the transposition of SS.1.16.17 and SS.1.16.18 in the Nepalese version to 1.16.26 and 1.16.25, respectively, in Dalhaṇa's. It seems that this transposition may have resulted from the insertion of new verses 1.16.23cd–24 and 1.16.26.1–19 in the latter.

80 For example, पीठोपमपालिनिर्वेदिमः (1.16.9, *Su 1938*:77) → पीठोपमपालिरुभयतः क्षीणपुत्रिकाश्रितो निर्वेदिमः (1.16.10, *Su 1938*:77); इतराल्पपालिः संक्षिसः (SS.1.16.9) → उत्सन्नपालिरितराल्पपालिः संक्षिसः (1.16.10); तनुविषमपालिः (SS.1.16.9) → तनुविषमाल्पपालिः (1.16.10).

81 In Dalhaṇa's version (1.16.5, *Su 1938*:76–77), the symptoms of fever and pain (ज्वर, वेदना) are repeated. This repetition does not occur in the Nepalese version. It is possible that this classification was not in the version of the *Suśrutasaṅhitā* known to Cakrapāṇidatta (1.16.4, *Su 1939*:126) because he mentions that some read classifications of ducts at this point in the text and he cites verses from Bhoja on कालिका, मर्मिका and लोहितिका, but he does not gloss or comment on the passage known to Dalhaṇa.

82 For example, अणुस्थूल० (SS.1.16.9) → स्थूलाणु० (1.16.10, *Su 1938*:77); तत्रैते दशकर्ण० (SS.1.16.9) → तत्र दशैते कर्ण० (1.16.10, *Su 1938*:77); नातिगाढन्नातिशिथिलं सूत्रेणवबध्य (SS.1.16.9) → सूत्रेणानवगाढमनतिशिथिलं च बद्धा (1.16.10, *Su 1938*:77); पूर्वन्दक्षिणं कुमारस्य वामङ्ग्न्यायाः | प्रतनुं सूच्या बहलमारया (SS.1.16.2) → प्रतनुकं सूच्या बहलमारया । पूर्वं दक्षिणं कुमारस्य वामङ्ग्न्यायाः (1.16.3, *Su 1938*:76).

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### Redacting Recipes and Elaborating on Treatments

Some of the additional text in subsequent versions of the *Suśrutasamhitā* introduces new ingredients in recipes and different procedures in treatments. In many instances, the new material merely clarifies or elaborates on the original but sometimes it changes the recipe or treatment significantly. An example of a suppletion that clarifies the text of the Nepalese version can be seen in 1.16.3 of Ḏalhaṇa's version ([Su 1938: 76](#)), which contains a statement that the physician should insert a wick of cotton after the ear has been pierced.<sup>83</sup> This statement anticipates the instructions in the Nepalese version (SS.1.16.5–6) on removing the wick because of aggravated humours and replacing the wick with a thicker one every three days. In this case, the additional statement of Ḏalhaṇa's version elucidates the role of the wick in the procedure of piercing the ear.

A similar clarification occurs in 1.16.18 of Ḏalhaṇa's version ([Su 1938: 79](#)), which reiterates the cure for an ear tainted by a humour that was described in 1.16.7 (= SS.1.16.6). The reiteration is quite apt because it follows a passage (1.16.17, [Su 1938: 79](#) = SS.1.16.12) that outlines the various symptoms of ear disease arising from each of the three humours. The author of the Nepalese version probably assumed that, after reading SS.1.16.12, the reader would refer back to SS.1.16.6 for the cure of an ear affected by a humour. However, in Ḏalhaṇa's version, the treatment is reiterated at 1.16.18.

In Ḏalhaṇa's version of 1.16, there are two instances in which ingredients were added to recipes of medicines in the Nepalese version. The first is the recipe of an anointment that should be applied to a pierced ear that has not healed. In Ḏalhaṇa's version (1.16.7, [Su 1938: 77](#)) the recipe was rewritten to include sesame seeds.<sup>84</sup> A more significant change occurs in another recipe for an admixture of an oil that is supposed to be rubbed into a healthy ear to enlarge it. Ḏalhaṇa's version (1.16.7, [Su 1938: 77](#)) of the admixture has five additional ingredients, namely, prickly chaff-flower (*apāmārga*), *Withania* (*aśvagandhā*), giant potato (*kṣīraśuklā*), the 'sweet' savour (*madhuravarga*)<sup>85</sup> and 'milk flower' (पयस्या → विदारि<sup>86</sup>). It also has

83 For example, [absent] (SS.1.16.2) → पिचुवर्ति प्रवेशयेत् (1.16.3, [Su 1938: 76](#)).

84 यवमधुकमञ्जिष्ठागन्धर्वहस्तमूलैर्मधुघृतप्रगाढैरालेपयेत् (SS.1.16.5) → मधुकैरण्डमूलमञ्जिष्ठायवतिलक-ल्कैर्मधुघृतप्रगाढैरालेपयेत् (1.16.7, [Su 1938: 77](#)).

85 The items which exemplify the 'sweet' savour (मधुरवर्ग) are enumerated at SS.1.42.11.

86 *Pueraria tuberosa* (Willd.) DC. (ADPS 510, IMP 1.792f., AVS 4.391; not Dymock

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beggarweed (*vidārigandhā*) instead of milk flower (*vidāri*).<sup>87</sup> This method of redacting a recipe of Nepalese version appears to be somewhat typical in so far as most of the ingredients of the original were retained and new ones simply added.

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1.424f. See GJM supplement 444, 451, IMP 1.187, but IMP 3.1719 = *Ipomoea mauritiana*, Jacq.).

87 अर्काल्के बलातिबलानन्ताविदारीमधुकजलशूकप्रतिवापन्तैलम्पाचयित्वा (SS.1.16.14) → अर्काल्के-बलातिबलानन्तापामार्गाश्वगन्धाविदारिगन्धाक्षीरशुक्लाजलशूकमधुरवर्गपयस्याप्रतिवापं तैलम्बा पाचयित्वा (1.16.19, Su 1938: 79).

## The Printed Editions

### The Printed Editions

The careful survey of printed editions of the *Suśrutasaṃhitā* by Meulenbeld lists no fewer than 44 entries.<sup>88</sup> These range from the first edition by Madhusūdana Gupta (1835) to editions in the 1970s. The number of reprints and editions since that time might almost double that number. Translations begin with Hessler's Latin translation in 1844 and continue up to the present in scores of publications in many languages.<sup>89</sup>

### The vulgate

The great ayurvedic scholar Yādavaśarman Trivikrama Ācārya produced three successive editions of the *Suśrutasaṃhitā* with the commentary of Dalhana, in 1915, 1931 and 1938. These editions, especially the last, are generally considered the most scholarly and reliable editions of the work, and have been constantly reprinted up to the present day.<sup>90</sup> We refer to the last of these editions as "the vulgate."

The 1915 edition was based on three manuscripts. The 1931 edition used another seven manuscripts plus two printed editions. For his final 1938 edition, Ācārya used a further three manuscripts.<sup>91</sup> These sources are described as follow, with an overview in Table 1.

### The sources 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 *cikitsāsthāna* and the *uttaratatantra*.
- 3 Bundi, my great friend the royal physician Paṁ. Śrīprasādaśarman  
Covers the *uttaratatantra*.

88 [HIML](#): IIB, 311–314.

89 Zysk 1984: E.g., [HIML](#): IIB, 314–315.

90 See also the studies of these editions by Klebanov (2021a: §1.2) and Wujastyk (2013: 143–144).

91 The following account is paraphrased from Y. T. Ācārya and N. R. Ācārya's own account of their sources ([Su](#) 1938: 22).

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### The sources 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 Raṇachodālāla Motilālaśarman. With the *Nibandhasaṅgraha*. Covers the *śārīrasthāna*.
- 3 From the personal library of my great friend Sva. Vā. Vaidya Murāra-jīśarman. Extremely old. No commentary. Covers the *śārīrasthāna*.
- 4 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Covers the *śārīra-sthāna*.<sup>92</sup>
- 5 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Complete. With some damaged folia.
- 6 Bombay, Asiatic Society. Incomplete.<sup>93</sup>
- 7 Varanasi, the private library of Vaidya Tryambakaśāstrī. Covers the *cikitsāsthāna*. The variant readings of this MS were compiled by Prof.
- 8 A printed edition together with the commentary *Suśrutasandīpanabhaṣya* by Professor Hārāṇacandra Cakravārtti. Complete work. This is the 1910 Calcutta edition numbered “t” by Meulenbeld ([HIML](#): IB, 312).<sup>94</sup>
- 9 A printed edition of the first 43 chapters of the *sūtrasthāna*, printed in Bengali script, with the commentaries *Bhānumatī*, *Nibandhasaṅgraha*, edited by Vijayaratnasena and Niśikāntasena. This is the 1886 Calcutta edition numbered “g” by Meulenbeld ([HIML](#): IB, 311).<sup>95</sup>

### The sources of the 1938 edition

- 1 Gwalior, from the library of my great friend Paṇ. Rāmeśvaraśāstrin Śukla. Covers the *sūtra*, *nidāna*, *śārīra*, *cikitsā* and *kalpasthānas*.

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<sup>92</sup> Not one of the three MSS of the *śārīrasthāna* described in H. D. Sharma [1939](#).

<sup>93</sup> Possibly 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 *Nibandhasaṅgraha*. The first covers only the *śārīrasthāna*; the second may be complete, but Velankar calls it only “disorderly.”

<sup>94</sup> Bhatṭācārya [1910–7](#).

<sup>95</sup> Sena et al. [1886–93](#).

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Table 1: The sources of Yādavaśarman T. Ācārya's three editions: manuscript coverage (●) and print coverage (○).

edition source	1915			1931						1938					
	1	2	3	1	2	3	4	5	6	7	8	9	1	2	3
<i>sthāna</i>															
<i>sū.</i>	●						●	?		○	○	†	●		●
<i>ni.</i>	●			●			●	?		○			●	●	●
<i>śā.</i>	●			●	●	●	●	?		○			●		●
<i>ci.</i>		●					●	?	●	○			●		●††
<i>ka.</i>	●						●	?		○			●		
<i>utt.</i>		●	●	●			●	?		○					

† Covers chapters 1–43 only. †† Covers chapters 1–9 only.

- 2 Bikaner, from the library of the Royal Palace, supplied by Paṇ. Candraśekharasāstrin. Contains the commentary *Nyāyacandrikāpañjikāvyākhyā* by Gayadāsa. Covers the *nidānasthāna*. This is almost certainly MS Bikaner Anup 4390.<sup>96</sup>
- 3 Kathmandu, located in the private library of the Royal Guru Hemarāja Śarman. An extremely old palm-leaf manuscript. Readings from this MS were compiled by Paṇ Nityānandaśarman Joṣī and sent to Ācārya. Covers from the beginning of the work to the end of the ninth chapter of the *cikitsāsthāna*. The siglum for this manuscript in footnotes was ता for तालपत्रपुस्तके.

## Evaluation

Estimates show that there are approximately 230 extant manuscript witnesses for the *Suśrutasaṃhitā*.<sup>97</sup> Although many of these manuscripts cover only parts of the whole work, they amount to approximately twenty times the evidence that was used by Ācārya for his vulgate editions.

<sup>96</sup> See Dominik Wujastyk, "MS Bīkāner AnupLib 4390." *Pandit.* <<http://panditproject.org/entity/108068/manuscript>>.

<sup>97</sup> This figure is arrived at by summing the MSS mentioned by Raghavan et al. (NCC: vol. 39, 373–375) and in the NGMCP. The real figure could be many scores higher. Cf. the overview at Wujastyk et al. 2020..

## The Printed Editions

While the descriptions provided by Ācārya of his source materials seems at first to be moderately comprehensive, Table 1 reveals the underlying paucity of textual sources for these editions. At first, it appears that fifteen manuscripts were consulted. However, we quickly see that two of the sources were other people's printed editions, and one of those covered less than a quarter of the work (no. 9 of 1931). That reduces the manuscript base to 13 manuscripts. Ācārya does not appear to have seen two of the manuscripts at all, having been sent collations prepared for him by others (7 of 1931 and 3 of 1938). Thus, Ācārya's final edition was based on the personal consultation of eleven partial manuscripts. One of them remains unidentified (6 of 1931). Only a single manuscript covers the whole of the *Suśrutasamhitā*, no. 5 of the 1931 edition. Manuscript 1 of 1938 is the next most complete, but it omits the *uttaratana*, which comprises a third of the work. Manuscript 1 of the 1915 edition is third in size, but it still omits both of the longest chapters, and thus offers less than half the work. For the rest, the evidence is spotty, with each part of the work being supported by only between four and eight manuscripts, excluding the printed editions.

Two sources stand out for their historical importance. The first is no. 3 of 1931, which Ācārya calls "extremely old." It covered the *śārīrasthāna* only, and unfortunately we know nothing of the later history of this manuscript. The second is no. 3 of 1938, which is one of the important Nepalese manuscripts being considered in the present project. Ācārya's remarks and references to Hemarājaśarman's introduction to the *Kāśyapasamhitā* allow us to identify this manuscript as MS Kathmandu NAK 5-333.<sup>98</sup> The editors of the vulgate, Y. T. Ācārya and N. R. Ācārya, stated that this manuscript covered up to the ninth chapter of the *cikitsāsthāna*, but in fact it covers the whole work.<sup>99</sup> Perhaps the editors only received collations for this portion of the manuscript and did not know that it was a witness for the whole work.

<sup>98</sup> Su 1938: 22; Hemarāja Śarman 1938: 56–57. Discussed by Klebanov (2021a: §1.1, 2.3). See also HIML: IIB, 25–41; Wujastyk 2003: 161–169.

<sup>99</sup> Su 1938: 22.

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### The 1939 edition

In 1939, Yādavaśarman Trivikrama Ācārya and Nandakiśora Śarman co-edited an edition of the *sūtrasthāna* of the *Suśrutasamhitā* that was published by the Swami Laxmi Ram ayurvedic centre in Jaipur, and printed at the famous Nirṇayasāgara Press in Mumbai (see Fig. 4).<sup>100</sup> The text was edited on the basis of the following sources.

#### For the Bhānumatī

1. A printed edition. Covered the *Bhānumatī* up to chapter Su.sū.40. The siglum was मु for मुद्रित.<sup>101</sup>
2. A manuscript in the India Office Library library provided through the Bhandarkar Oriental Research Institute in Pune.<sup>102</sup> This manuscript covered the *Bhānumatī* b up to the end of the *sūtrasthāna*. The siglum was ह for हस्तलिखित.<sup>103</sup>

#### For the Suśrutasamhitā

1. A palm leaf manuscript from Hemarājaśarman's personal library.<sup>104</sup> The siglum was ता for ताडपत्र.
2. His own published edition. The siglum was ड for डल्हणसंस्मतः पाठः.<sup>105</sup>
3. Hārāṇacandra Cakravarti's published edition with his own commentary.<sup>106</sup> The siglum was हा.

<sup>100</sup> *Su* 1939. The description of the sources below is based on Yādavaśarman T. Ācārya's remarks in his introduction (pp. 3–4). See also the remarks on this edition by Klebanov (2021b: 7). On the Swami Laxmi Ram centre, see Hofer 2007

<sup>101</sup> Sena et al. 1886–93. The manuscript on which this edition was based is probably in the library of the Calcutta Sanskrit College, and described in H. Sastri and Gui 1895–1917: v. X.1, which is not available to me. See also HIML: IB, 495, n. 57 for mention of this manuscript. The reference at Rama Rao et al. 2005: 217 to CSCL accession number 97 in Bengali script may be this manuscript.

<sup>102</sup> At this time, manuscripts from Britain were routinely lent to scholars in India and vice versa.

<sup>103</sup> Wujastyk 2021; MS London BL H. T. Colebrooke 908 ([PanditProject #109978](#), consulted on July 03, 2021).

<sup>104</sup> I.e., MS Kathmandu NAK 5-333.

<sup>105</sup> *Su* 1938. It is noteworthy that Ācārya refers to his 1938 edition as representing “the Dalhaṇa recension.”

<sup>106</sup> Bhaṭṭācārya 1910–7.

१ अध्यायः ] सुकृतसंहिता ११

चरके—“लाभोपायो हि शत्तानां रसाचीनां रसायनम्” ( च. चि. अ. १ पा. १ ) । पारिशेष्याद्वाजीकरणतत्रम् । अवाजिनं वाजीकृत्वंनित येन तद्वाजीकरणम् । ‘अन्येषामपि दृश्यते’ ( पा. अ. ६।३।१३७ ) इति सीर्वत्तम् । येन वाऽत्यर्थं स्त्रीषु व्यज्यते तद्वाजीकरणम् । तदुक्तं चरके—“येन नारीषु सामर्थ्यं वाजिवल्लभते नरः । ब्रजोच्चाप्यविकं येन वाजीकरणमेव तद्” ( च. चि. अ. २, पा. ४ ) इति ॥ ५ ॥

अथास्य प्रत्येकाङ्गलक्षणसमाप्तः—तत्र, शत्यं नाम विविधतुणकाष्ठपाषाणपांशुलोहलोप्तास्थिवालनखपूयास्त्रावदुष्टव्यान्तर्गम्भेशल्योद्धरणार्थं घट्या विधानैः, यच्चशत्ताक्षाराद्विप्रणिधानव्यविनिश्चयार्थं च; शालाक्षं नामोर्ध्वंजनुगतानां श्रवणनयनवदनद्वाणादिसंश्चितानां व्याधीनामुपशमनार्थं; कायचिकित्सा नाम संवर्बाङ्गसंश्चितानां व्याधीनां ज्वररक्तपित्तशोषोन्मादापसारकुप्तमेहातिसारादीनामुपशमनार्थं; भूतविद्या नाम देवौसुरगन्धवैयक्षरक्षःपितृपिशाचनौग्रहाद्युपस्त्रपृच्छेतसां शान्तिकर्मवलिहरणादिग्रहोपशमनार्थं; कौमारभूतं नाम कुमारभरणधात्रीक्षीरदोपसंशोधनार्थं दुष्टस्तन्यग्रहसमुत्थिनां च व्याधीनामुपशमनार्थम्; अगदतत्रं नाम सर्पकीटलूतामूष्पकादिदृष्टव्यञ्जनार्थं विविधविद्येसंयोगोपशमनार्थं च; रसायनतत्रं नाम वयःस्थापनमायुर्मधावलंकरणं रोगापहरणसमर्थं च; वाजीकरणतत्रं नामावपदुष्टक्षीणशुक्करेतसामाप्यायैनप्रसादोपचयजनननिमित्तं प्रहर्षणजननार्थं च ॥ ६ ॥

शत्याङ्गविशेषात् ज्ञातुं प्रतिलक्षणं संक्षेपेणाह—अथासेत्यादि । एकमेकमहं प्रति लक्षणानां समाप्तः संक्षेपः प्रत्येकाङ्गलक्षणसमाप्तः । तृण्डीनां, तथा दुष्टव्यान्तर्गत(भूत्य)स्य उद्धरणार्थमिति प्रत्येकमुद्धरणशब्दः संवृद्ध्यते । दुष्टव्यान्तर्गतस्तुणायाहरणार्थमिलन्त्ये । घट्या विधानैरिति द्वित्रीयोक्तैरपत्तेणादै रक्षविधानान्तैः; दृश्यभूतलक्षणे तृतीया । जनु ग्रीवामूलं, जनुण ऊर्ध्वमूर्धजनु । ग्राणादील्यादिग्रहणचित्तरःकपालादिग्रहणम् । उत्तरतत्रे प्रतिपादितकमप्राप्त्या ज्वरानन्तरमतीसारः पठितः, तस्यान्ते पाठोऽप्तिसारस्य सर्वाङ्गीणदोपारब्धलात्, अन्येषामपि तन्मध्यपाठेन सर्वाङ्गीणदोपारब्धलप्रतिपादनाध्यतिकर्म वदन्ति । शान्तिकर्म वलिहरणादिना ग्रहणां देवादीनामुपशमो यस्तदर्थं; यदि वा ग्रहणं ग्रहो देवानामावेशस्तुपशमार्थम् । दुष्टस्तन्यग्रहसमुत्थितानामिति दुष्टस्तन्येन

१ ‘सर्वशरीरावस्थितानां व्याधीनामुपशमकरणार्थं ज्वरशोफहुश्मरक्तपित्तोन्मादापसारप्रमेहादीनामादीनां च’ इति ता । २ ‘देवदानव०’ इति ता । ३ ‘विनायकनाग्रहोपस्त्रचैतसा०’ इति ता । ४ ‘विपवेगोपशमनार्थ०’ इति ता । ५ ‘शुक्राप्यायन०’ इति ता । ६ ‘शुणादूर०’ इति सु ।

Figure 4: A page of the 1939 *Bhānumatī* edition, showing the variant readings in the footnotes.

## The Printed Editions

### Evaluation

The main innovation of this publication was to present the only surviving part of the commentary on the *Suśrutasaṃhitā* by the great eleventh-century medical scholar Cakrapāṇidatta, namely the *Bhānumatī*.<sup>107</sup> A secondary purpose was to present the text of the *sūtrasthāna* as read in MS Kathmandu NAK 5-333, that had recently been brought to the editors' attention. In their judgement, the Kathmandu manuscript presented a text that was closer to what Cakrapāṇidatta had before him than the text according to Ḏalhaṇa. This was the first *Suśrutasaṃhitā* edition in which Ācārya used sigla to identify the sources from which variant readings were reported, so while it has limitations, it for the first time enables us to get some idea of origins of the text (see Figure 4).

Ācārya noted in his introduction that the manuscripts containing Ḏalhaṇa's commentary all came together with the root-text of the *Suśrutasaṃhitā*, and thus the main *Suśrutasaṃhitā* text reflected the readings chosen by Ḏalhaṇa. But the manuscripts of the *Bhānumatī* contained the commentary alone, without the root-text, and had many explanations based on different readings of the root-text than those of Ḏalhaṇa. In many of these cases it was hard to infer what readings Cakrapāṇidatta had before him. But Ācārya noted that Cakrapāṇidatta had a text before him that had much in common with the text of the Nepalese manuscript.<sup>108</sup>

There is compelling evidence that Cakrapāṇidatta's *Bhānumatī* commentary once covered the whole text of the *Suśrutasaṃhitā*.<sup>109</sup> The loss of the rest of the work ranks amongst the greatest disasters in Āyurvedic literature. Remarkably, the whole *Bhānumatī* may still have existed in the early twentieth century. In 1903, Palmyr Cordier reported being privately informed of a complete copy of the work in a personal manuscript collection in Benares.<sup>110</sup>

<sup>107</sup> HIML: IA, 374–375 and IB, 495–496.

<sup>108</sup> Su 1939: 3–4. See discussion by Klebanov (2021b: 7).

<sup>109</sup> HIML: IA, 375.

<sup>110</sup> Cordier 1903: 332.

## The Manuscripts



Figure 5: Folio 17r of MS Kathmandu Kaiser Library 699.

## The Manuscripts

Our edition is based on the textual evidence of three manuscripts. All three were produced in the Kathmandu Valley, Nepal and preserved in libraries there. Klebanov (2021a: §2.1) provided a comprehensive description of the individual manuscripts, quotes and translates their colophons and thoroughly examines various problems involved in their interpretation. That is why we will present only the key data essential for the study of our edition in the present paper. In referring to the manuscripts, we use the sigla K, N and H, which correspond to the initial letters in the names of the libraries and collection where the respective bundles were discovered.

**Siglum K (Fig. 5)** The MS has been preserved at the Kaiser Shamsher (KL) library in Kathmandu, accession number KL 699. It was microfilmed and catalogued by the NGMPP/ NGMCP as C 80-7.<sup>111</sup> The MS comprises 152 palm-leaf folios that originally belonged to several different codicological units written by different scribes.<sup>112</sup> The folios are 53.5 × 4.4 cm in size and have two string holes. The text is written in the so-called transitional Gupta script, with six to eight lines per folio.<sup>113</sup> The MS is incomplete and contains a large part of the *Suśrutasamhitā* as well as the *Sauśrutanighanṭu*.<sup>114</sup> The date stated in the colophon at the end of the compendium is verified for Sunday, April 13, 878 CE. However, some controversy is involved in interpreting the exact roles of two persons mentioned in the same

<sup>111</sup> See [http://catalogue-old.ngmcp.uni-hamburg.de/mediawiki/index.php/C\\_80-7\\_Suśrutasamhitā](http://catalogue-old.ngmcp.uni-hamburg.de/mediawiki/index.php/C_80-7_Suśrutasamhitā) (accessed on October 22, 2021).

<sup>112</sup> Bhattacharai (2020: 46) and Klebanov (2021a: 11) agree that four to five scribes were involved in the manuscript's production.

<sup>113</sup> Codicological features of the manuscript, such as the layout, peculiarities of the script, various ornamental and text-dividing symbols and many more, were scrutinized in Bhattacharai (2020).

<sup>114</sup> Klebanov (2021a: 11) provided a detailed description of the content.

## The Manuscripts

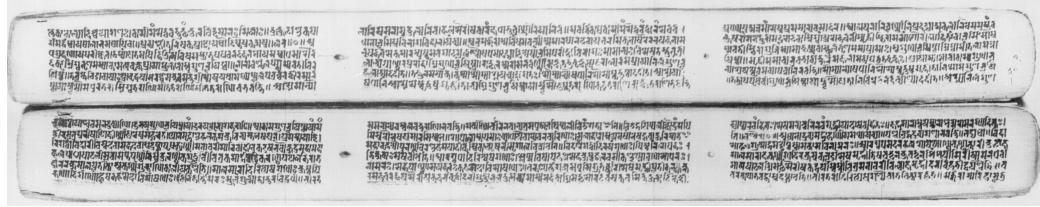


Figure 6: Folios 30r and 30v of MS Kathmandu National Archives 1-1079.

concluding remarks, someone called Śrī Harṣacandra and Vaidya Vasuvarman. Klebanov (2021a: 16) thinks that the former,

...either sponsored the copying enterprise or wrote the manuscript himself, [and that he subsequently] donated it to Vaidya Vasuvarman on the condition that he (Vasuvarman) would study the text and explain it to others. The second condition was that the manuscript should remain in the family and not be given away either for sale or as a pawn. If the manuscript sat unused, it should be returned to Śrī Harṣacandra.<sup>115</sup>

**Siglum N (Fig. 6)** This MS is kept at the National Archives Kathmandu (NAK), under accession number 1-1079 क. It was microfilmed twice by the NGMPP as A 45-5(1) and A 1267-11(2).<sup>116</sup> The MS comprises 65 palm-leaf folios, 56 × 5 cm in size, with two string holes each, and it is bundled together in a composite manuscript with at least one other medical work. The text is written in a variety of Newari script, with ca. seven lines per folio. Although the text contained in the MS does not cover the entire *Suśrutasamhitā* and breaks off abruptly in the second chapter of the *sārīrasthāna*, the actual MS, as a codicological unit, appears complete, that is, no leaf seems to be missing from the originally unitary artefact. Based on paleographic considerations, the MS can be dated tentatively to the twelfth or thirteenth century.

<sup>115</sup> Klebanov (2021a: 13–17) gave a translation and study of the colophon, as well as an exposition of different positions related to its interpretation.

<sup>116</sup> See [\(accessed on October 22, 2021\)/](http://ngmcp.fdm.uni-hamburg.de/mediawiki/index.php/A_45-5_(Suśrutasamhitā))

## The Manuscripts

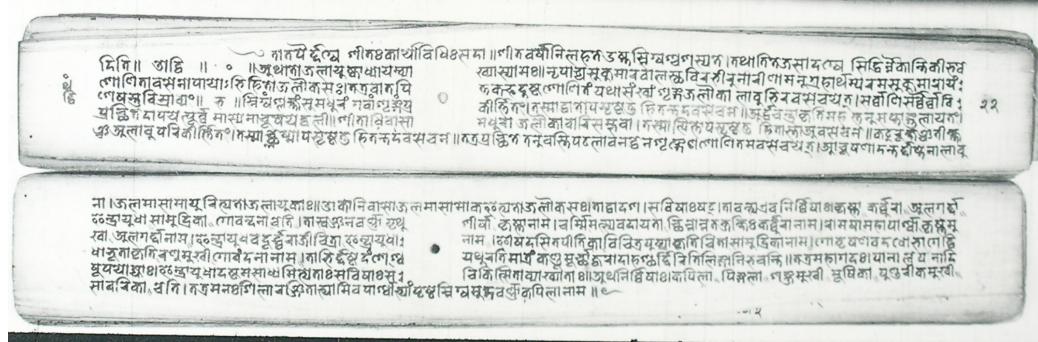


Figure 7: Folios 22v and 23r of MS Kathmandu National Archives 5-333.

**Siglum H (Fig. 7)** The MS belongs to the historical collection of Hemarāja Śarman (fl. 1878–1953) and is currently kept at the NAK under accession number NAK 5-333. It is microfilmed twice by the NGMPP as B 29-19 and B 30-15, but the latter microfilm is incomplete.<sup>117</sup> The manuscript comprises 435 palm-leaf folios, 34 × 5 cm in size, with one string-hole in the middle. It is written in a type of Newari script that is more recent than the one used in N, with approximately six lines per folio. The MS is exceptionally well-preserved and complete, containing the text of the *Suśrutasamhitā* as well as the *Sauśrutanighāṇṭu*. The final colophon identifies the scribe of the MS as Vaidya Amarasimhaka, son of Kamaladatta, and states the date on which he concluded the copying of the text. Both reading, that is, deciphering the actual characters, and interpretation of the concerned passage involve diverging opinions, all of which concur, however, in assigning the MS to the sixteenth century. Klebanov (2021a: 21–26) gives an analytical account of the views expressed in literature, considers further options and puts forward his understanding that the MS was completed on Sunday, July 29, 1543 CE.

In future publications, palaeographical features of these witnesses will be described.

<sup>117</sup> See [http://ngmcp.fdm.uni-hamburg.de/mediawiki/index.php/B\\_29-19\\_Suśrutasamhitā](http://ngmcp.fdm.uni-hamburg.de/mediawiki/index.php/B_29-19_Suśrutasamhitā) (accessed on October 22, 2021).

## Editorial Principles

### Method

The data for the critical edition comes from the witnesses of the Nepalese version, which are MS KL 699, NAK 5-333 and NAK 1-1079. Diplomatic transcriptions of SS.1.16 of these manuscripts have been created by researchers of the [Suśruta Project](#) according to a subset of TEI Guidelines that has been formulated by Charles Li.<sup>118</sup> MS NAK 5-333 was transcribed first because its script is relatively easy to read, the scans are clear, and it is the most complete of the manuscript witnesses. Following that, MS KL 699 and MS NAK 1-1079 were transcribed.

The diplomatic transcriptions were uploaded to Li's manuscript collation platform Saktumiva, chapter by chapter as they were completed. An electronic edition of the vulgate of the *Suśrutasamhitā*, that was transcribed, without the commentaries, by Tsutomu Yamashita and Yasutaka Muroya on the basis of Ācārya's 1931 and 1938 Bombay editions has also been included in the collation.<sup>119</sup>

Saktumiva's collation function standardises punctuation and orthographic variants according to filters which can be turned off or on. These filters enable the editors to ignore दण्ड, numbers and पुष्टिका in the transcripts, as well as orthographic variants, such as ब्र and व्र, certain germinated consonants, and विसर्ग variants. On the basis of the automatic collation, Jason Birch created a provisional edition of SS.1.16, which the project's researchers read together at weekly seminars. Manuscript images were routinely checked to verify the transcripts, particularly when a reading was uncertain; the commentaries of Cakrapāṇidatta and Dalhaṇa were read, and variant readings reported by these commentators were included in notes to the edition. Also, various reference books were consulted, such as Nadkarni (1954) and V. Jośī and N. H. Jośī (1968) and Meulenbeld ([HIML](#)), to elucidate the meaning of technical terms and identify relevant information in other medical works.

An initial draft of the translation and many annotations were written

<sup>118</sup> These guidelines are at <https://saktumiva.org/wiki/tei>, accessed 20/10/2021.

<sup>119</sup> This electronic edition is also available on the SARIT website; <https://sarit.indology.info/susrutasamhita.xml?view=div>, accessed 20/8/2021. The version at Saktumiva has received several corrections and the intention is to merge these back into the SARIT version eventually.

## Editorial Principles

by Wujastyk during the seminars as the Project researchers discussed the text's meaning. The transcripts, provisional edition and translation were uploaded to the project's repository at Github on a weekly basis. Therefore, the project's work has been publicly available as it evolves. The software tools used in the project have been described on the project website.<sup>120</sup>

## Stemma

The data from transcripts collated by Saktumiva can be exported as a FASTA file and aligned according to characters, syllables or words by a program called Helayo. The resulting NEXUS file can be read by phylogenetics software to build a stemmatic tree.<sup>121</sup> This procedure was done with transcripts of several chapters of the Nepalese witnesses, and the results confirmed the editors' provisional stemmatic hypothesis that K and H are more closely related to one another than K and N.<sup>122</sup> Given the early date of K and the small number of other surviving witnesses of the Nepalese version, the relationship between the manuscripts at our disposal is reasonably clear and, in the case of SS.1.16, the manuscript data was largely confined to N and H owing to a missing folio of K. Rather than have to assess numerous variant readings from a large number of witnesses, the challenge of editing has been to repair the text where it has become corrupt in the few witnesses available to us.

## The Edition and Apparatus

The critical edition of SS.1.16 in this article retains many of the peculiarities of MS KL 699 because the editors have endeavoured to present to the reader an archetype of the text that was transmitted by this ninth-century manuscript. Therefore, the Sanskrit has been standardised as minimally as possible and, although the text has been corrected and repaired wherever it was corrupt in the witnesses, it has not been normalized or conventionalized to the extent of many modern editions of Sanskrit works.

The editors have assumed that the authors of the Nepalese *Suśrutasamhitā* were familiar with Pāṇinian Sanskrit and, although there are some

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<sup>120</sup> <http://sushrutaproject.org>, consulted 15 September 2022.

<sup>121</sup> This process is discussed in greater detail by Charles Li at <https://chchch.github.io/sanskrit-alignment/docs/index.html#tree>, accessed 21/8/2021.

<sup>122</sup> See section 'Features of the Manuscript Transmission' for further discussion of this.

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non-standard spellings and grammatical forms in the text, there are very few instances of hyper-Sanskritization, Buddhist-hybrid Sanskrit or Epic forms that would suggest that this assumption is unreasonable. Therefore, the editors of SS.1.16 have opted to retain some unusual features of the Sanskrit in MS KL 699 when they are grammatically correct. For example, in external *sandhi*, the class nasal is usually used at the end of a word instead of an *anusvāra* (e.g., 1.16.3, °वाचनस्थात्र्य०), although the *anusvāra* is sometimes used (1.16.15, उदकं धान्याम्ल०). In most cases, the consonant following a रेफ is doubled, but this is not always the case.<sup>123</sup> Since these inconsistencies seem inherent to the transmission of the text and may have even been authorial, the critical edition reflects them as they occur in K and, when the testimony of K is not available, the witness most similar to K, which is H.

The Nepalese manuscripts often have an *anusvāra* before a दण्ड at the end of a sentence or verse. Whether these *anusvāras* should be changed to the consonant म् is a moot question because there is no Pāṇinian concept of ‘end-of-sentence’ and his rules on *sandhi* are contingent on the close contact of sounds (*samhitā*). However, it is reasonable to assume that at the end of a verse, paragraph or sentence the speakers would have paused for breath or thought, so *sandhi* should be applied, in which case a final *anusvāra* or class nasal of the following consonant is changed to म्. Nonetheless, this remains an assumption about how the text would be pronounced. Therefore, in a critical edition, inserting *dandas* and changing *anusvāras* to म् before them are subjective decisions by the editors. The scribal use of *dandas* and *anusvāras* in the Nepalese manuscripts can be seen in the digital edition if one switches off the filters for ignoring *dandas* and final *anusvāra* variants.

Unconventional spellings and grammatical forms have been retained and noted in the annotations to the translation. However, the editors have corrected scribal errors and repaired corruptions in the transmitted text with conjectures wherever possible. Therefore, although the edition retains many of the peculiarities of the Nepalese manuscripts, it is not a diplomatic transcript or a hybrid of diplomatic and critical editing because the features of the transmitted text have been retained or changed deliberately,

<sup>123</sup> Examples of the germination of consonants are कर्ण (1.16.1 ff), मुहूर्त (1.16.2), पूर्व (1.16.2), गन्धर्व (1.16.5), °मूलै॒ मधु० (1.16.5), वर्ति (1.16.6) and पुनर्विष्ट्येत् (1.16.6). Examples where it does not occur in 1.16 are °आर्थम् (1.16.8,19), कुर्यात् (1.16.16, 32), °पालिक्ष्मीर० (1.16.10); °पालिव्यायोजिमः (1.16.10) and दीर्घैक० (1.16.10).

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and the reasons for doing so are given in either the introduction or, in more specific cases, the annotations to the translation.

### Printed Edition

The editors intend to produce both printed and digital editions of the Nepalese *Suśrutasamhitā*. Since the print and digital environments differ markedly, each edition has its own format. The printed edition of SS.1.16 in this article has four layers of footnotes. The first layer reports the witnesses that have been collated. Line numbers and lemmata have been used to identify the witnesses that have been collated for a particular section of the text, as seen in the following example.

१-७ अथातः – °विद्वलिङ्गम् ] MSS K, H, and N

The above entry means that a textual passage beginning with अथातः on line 1 and ending with °विद्वलिङ्गम् on line 7 is attested by manuscripts K, H and N. This layer also indicates passages that are missing or omitted in a particular witness.

The second layer of footnotes reports the variant readings of the Nepalese witnesses. This apparatus is negative, that is to say, only the testimony of the variant readings have been reported, and not that of the lemma. The following entry is an example of the apparatus' syntax:

५ प्रतनुं ] प्रतनू N H

This entry means that on line five of the edition the editors have chosen to read प्रतनुं, instead of प्रतनू, which is attested by witnesses N and H. The reader can infer that प्रतनुं is attested by K because the first layer of footnotes indicate that K has been collated here. In prose passages, the lemmata and variants consist of corresponding words and, in verses, corresponding syllables. Emendations by the editors are indicated by the abbreviation *em.*, and omissions and suppletions in the witnesses are indicated by *om.* and *add.*, respectively. A wavy line under a letter means that it is unclear to the editors. If some text has been deleted by a scribe, it is underscored by double lines.

The third layer of footnotes contains the variant readings of the vulgate, which have been presented in the same format as the second layer. If a reading of the vulgate has been accepted by the editors against different

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The screenshot shows a line of text in a dark font on a light background. On the left, there is a small box containing 'd SP, K' followed by a red square with a white '≡'. The text line reads: 'urvvan dakṣinām kumāra- pratānum sūcyā bahalam ārayā ||2||'. To the right of the text, there is a purple bracketed apparatus. It contains three entries: 'A: tataḥ N, H: pratānū', 'A: [ADD] picuvartim', and 'A: [OM] praveśayet ||'. The 'pratānū' entry is highlighted in yellow.

Figure 8: The digital edition of SS.1.16.3

readings in the Nepalese witnesses, the siglum for the vulgate (i.e., A) has been placed next to lemma in the second layer of footnotes.

Various testimonia and notes have been included in the fourth layer of footnotes. The testimonia mainly consists of the variant readings noted by the commentators Cakrapāṇidatta and Dalhaṇa. Those known to Gayādāsa may be added in future publications. The notes include brief comments on certain emendations and editorial decisions. More elaborate discussions on such issues have been included in the annotations to the translation.

## Digital Edition

Instructions for reading the digital edition have been provided by Li at [Sak-tumiva](#). In brief, you can generate the apparatus by choosing a base text and one or more of the other witnesses. You can also choose to hide or ignore in varying degrees TEI tags, punctuation and orthographical variants in the transcripts of the witnesses. On the right side of the text, the digital edition displays an apparatus that is negative in so far as the lemma and its witnesses are not included. This apparatus truncates variants wherever possible.

For example, as seen in Figure 8, the apparatus for the words *pratānum sūcyā bahalam ārayā* is on the right side of the display. This entry means that the editors have chosen to read *pratānum*, which the reader must infer is attested by K, whereas A has *tataḥ* and N and H *pratānū*. Witness A has added the word *picuvartim* after *tataḥ*, omitted *sūcyā bahalam*,<sup>124</sup> and has *praveśayet* instead of *ārayā*, which is attested by all of the Nepalese witnesses.

A popup on a dark background, as shown in Figure 8, displays the manuscript sigla for the witnesses that support the selected reading. The positive apparatus can be expanded by highlighting with the cursor one or

<sup>124</sup> The omitted words are displayed by hovering the cursor over [OM] adjacent to A in the apparatus.

## Editorial Principles

<b>SP:</b> pratanum	sūcyā bahalam ārayā
A: tataḥ [ADD]	picuvartim [OM]
K: pratanum	sūcyā bahalam ārayā
N: pratanū	sūcyā bahalam ārayā
H: pratanū	sūcyā bahalam ārayā

Figure 9: The witnesses to a selected passage of SS.1.16.3

more words, and even entire passages or verses, and clicking on the collapsed menu icon. As seen in Figure 9, the positive apparatus of *pratanum sūcyā bahalam ārayā* appears in a pop-up window in which the lemma and variants are aligned according to letters, and the variations are highlighted in yellow.

In both the negative and positive apparatuses of the digital edition, you must infer conjectures and corrections by the editors. Testimonia and notes are in the apparatus on the right side of the “provisional edition” text. They give an opportunity for the editors to provide scholarly commentary of various kinds, but the editors cannot write comments directly into the textual apparatus itself, since it is constructed live each time the text is displayed.

## Critical Edition of Sūtrasthāna 16

अथातः कर्णव्यधविधिं व्याख्यास्यामः ॥ १ ॥

रक्षाभूषणनिमित्तम्बालस्य कर्णो व्यधयेत्। तौ षष्ठे मासे सप्तमे वा शुक्लपक्षे प्रशस्तेषु तिथिकरणमुहूर्तनक्षत्रेषु कृतमङ्गलस्वस्तिवाचनं<sup>१</sup> धात्र्यङ्के कुमारमुपवेश्याभिसान्त्ययमानो<sup>२</sup> भिषग्वामहस्तेनाकृष्य कर्णन्दैवकृते छिद्रे दक्षिणहस्तेन ऋजु विध्येत्। दक्षिणं कुमारस्य वामङ्गन्यायाः। प्रतनुं सूच्या बहलमारया ॥ २ ॥

शोणितबहुत्वेऽतिवेदनायां चान्यदेशविद्धमिति जानीयात्। निरुपद्रवता तदेशविद्धलिङ्गम् ॥ ३ ॥

तत्र यद्यच्छाविद्धायां सिरायामज्जेन ज्वरदाहश्यथुवेदनाग्रन्थिमन्यास्तम्भापतानकशिरोग्रहकर्णशूलानि भवन्ति ॥ ४ ॥

१० दोषसमुदयादप्रशस्तव्यधाद्वा तत्र वर्त्तिमपहृत्य यवमधुकमञ्जिष्ठागन्ध्वर्वहस्तमूर्मधुघृतप्रगाढैरालेपयेत्। सुरूढवैनमुनर्विध्येत् ॥ ५ ॥<sup>३</sup>

<sup>१-५</sup> अथातः--०विद्धलिङ्गम्] MSS K, H, and N

८ तत्र] MSS H and N. From here to the end of 1.16, MS K is missing a folio.

१ व्याख्यास्यामः] व्या K. २ सप्तमे] om. N. ३ ०मङ्गलस्वस्तिवाचनं] A; ०मङ्गलं स्वस्तिवाचनं K, H, N. ३ धात्र्यङ्के] धात्र्यङ्के K. ३ कुमार] कुमारकम् N. ४ ऋजु] जुम् N H. ५ प्रतनु] प्रतनू N H. ८ ०श्यथु०] em.; ०श्यथु० N; ०श्यथु० H. १० ०गन्ध्वर्वहस्तमूरै०] ०गन्ध्वर्वहस्तमूलै० N.

१ कर्णव्यधविधिं] कर्णव्यधवन्धविधिं अध्यायं A. १ व्याख्यास्यामः] add. यथोवाच भगवान् धन्वन्तरिः॥ A. २ व्यधयेत्] विध्येते A. २ मासे] मासि A. ३ धात्र्यङ्के] add. कुमारधराङ्के वा A. ३-४ मुपवेश्याभिसान्त्ययमानो] उपवेश्य बालकीडनकैः प्रलोभ्याभिसान्त्ययन् A. ४ कर्णन्] कर्ण A. ४ छिद्रे] छिद्र A. ४ छिद्रे] add. आदित्यकरावभासिते शनैः शनैर् A. ४ ऋजु] जु आ ४ विध्येत्] add. प्रतनुकं सूच्या बहलमारया A. ५ कन्यायाः] कुमार्याः A. ५ आरया] add. ततः पितॄवर्ति प्रवेशयेत्॥ A. ६ बहुत्वे] बहुत्वेन A. ६ ऽतिवेदनायां] वेदनया A. ६ ०द्रवता] ०द्रवतया A. ७ ०विद्धलिङ्गम्] ०विद्धम् इति A. ८ तत्र] तत्राज्ञेन A. ८ यद्यच्छाविद्धायां] यद्यच्छया विद्धासु A. ८ सिरायाम्] सिरासु A. ८ सिरायाम्] add. कालिकामर्मरिकालोहितिकासूपद्रवा भवन्ति। तत्र कालिकायां A. ८ ज्वर०] ज्वरो ८ ०दाह०] दाहः ८ ०श्यथु०] श्यथुर A. ८ ०वेदना०] add. च भवति मर्मरिकायां वेदना ज्वरो A. ८ ०ग्रन्थिं०] ग्रन्थयश्च A. ८ ०ग्रन्थिं०] add. च लौहितिकायां A. ९ भवन्ति] add. तेषु यथास्वं प्रतिकुर्वीति॥ क्षिटिजिह्वाप्रशस्तसूचीव्यधाद् गाढतरवर्तिवाद् A. १० वा] add. यत्र संरम्भो वेदना वा भवति A. १० अपहृत्य] उपहृत्याशु A. १० यवमधुक०] मधुकैरण्डमूर० A. १० ०मञ्जिष्ठागन्ध्वर्वहस्तमूरै०] ०मञ्जिष्ठागवतिलकलकै० A. १० आलेपयेत्] add. तावद् यावत् सुरूढ इति॥ A. ११ विध्येत्] add. विधानं तु पूर्वोक्तमेव॥ A.

<sup>१</sup>The compound कृतमङ्गलस्वस्तिवाचनं is an emendation based on the similar text at Su.śā.3.2.25.

<sup>२</sup>The *ātmanepada* participle is a permitted form, although the vulgate has the *parasmaipada*. Dalhaṇa records the alternative reading भश्यविशेषैर् वा before बालकीडनकैः प्रलोभ्य in the vulgate.

<sup>३</sup>Dalhaṇa (1.16.6) stated that some do not read सुरूढवैनमुनर्विध्येत्.

सम्यग्विद्धमामतैलपरिषेकेणोपचरेत् । त्र्यहात्यहाद्वर्ति स्थूलतरीङ्<sup>४</sup> कुर्वीत परिषे-  
कञ्च तमेव ॥ ६ ॥

अथ व्यपगतदोषोपद्रवे कण्ठेऽलंप्रवर्द्धनार्थं लघुप्रवर्द्धनकमामुच्चेत् ॥ ७ ॥

एवं सम्वर्द्धितः कण्ठशिछयते तु द्विधा नृणाम् ।  
दोषतो वाभिघाताद्वा सन्धानान्तस्य मे शृणु ॥ ८ ॥

तत्र समासेन पञ्चदशसन्धानाकृतयो भवन्ति ।<sup>५</sup> तद्यथा । नेमीसन्धानकः । उत्पल-  
भेद्यकः । वल्लूरकः । आसङ्गिमः । गण्डकण्ठः । आहार्यः । निर्वेधिमः । व्यायोजिमः ।  
कपाटसन्धिकः । अर्द्धकपाटसन्धिकः । सङ्ख्लिसः । हीनकण्ठः । वल्लीकण्ठः । यष्टीक-  
ण्ठः । काकौषः । इति । तेषु तत्र पृथुलायतसमोभयपालिन्मीसन्धानकः । वृत्तायत-  
समोभयपालिरुत्पलभेद्यकः । हस्तवृत्तसमोभयपालिर्वल्लूरकण्ठकः । अभ्यन्तरदीर्घैक-  
पालिरासङ्गिमः । बाह्यदीर्घैकपालिर्गण्डकण्ठकः । अपालिरुभयतोऽप्याहार्यः । पीठोप-  
मपालिनिर्वेधिमः । अणुस्थूलसमविषमपालिर्व्यायोजिमः । अभ्यन्तरदीर्घैकपालिरितरा-  
ल्पपालिः कपाटसन्धिकः । बाह्यदीर्घैकपालिरितराल्पपालिश्वार्द्धकपाटसन्धिकः । तत्रैते  
दशकण्ठसन्धिविकल्पा बन्ध्या भवन्ति । तेषान्नामभिरेवाकृतयः प्रायेण व्याख्याताः । सं-

१ ०परिषेकेणोप० H. १ ०तरीङ्] ०तरीं N ३ लघुप्रवर्द्धनकम्] लघुप्रवर्द्धनकम् N; प्रवर्द्धनकामा॒ मै॒  
H. ३ आमुच्चेत्] em.; मुच्चेत् N H. ४ नृणाम्] नृणा N. ५ ] A; दोषटो N H. ६ ०सन्धान०] ०सन्धा० N.

८ अर्द्धकपाटसन्धिकः] om. N. ९ काकौषः] काकौषः H. ९ इति] ति H. ९ ०यतसमो०] A; ०यसमो० H;  
०तसमो N. १० भेद्यकः] ०भेद्यः N; ०भेदकः H. १० वल्लूर०] वल्लूर० N. ११ बाह्य] A; बाह्यैक N H. १२  
अणुस्थूल०] अशुस्थूल० H. १२ कपाट०] कपाटा० H. १३ चार्द्धकपाट०] em.; चार्द्धकवाट० H; चार्द्धकवाप० N.

१ सम्यग०] तत्र सम्यग० A. १ आमतैलपरिषेकेणोपचरेत्] आमतैलेन परिषेचयेत् A. १ त्र्यहाद्] add. च A. १  
०तरीङ्] ०तरां A. १ कुर्वीत] दद्यात् A. ३ लंप्रवर्द्धनार्थं] ओम् A. ३ लघुप्रवर्द्धनकम्] लघुव० A ३ आमुच्चेत्]  
कुर्यात्] A. ४ सम्वर्द्धितः] विवर्धितः A. ५ सन्धानान्] सन्धानं A. ६ ०दशसन्धानाकृतयो०] ०दशकण्ठवन्ध्याकृतयः  
A. ६ भवन्ति] om. A. ६ नेमी०] नेमि० A. ८ ०सन्धिकः। अर्द्ध०] ०सन्धिकोऽर्द्ध० A. ८ यष्टी०] यष्टिं० A. ९  
काकौषः] काकौषः A. ९ तत्र] om. A. ९ नेमी०] नेमि० A. १० वल्लूर०] वल्लूरकः A. ११ पीठोपमपालिर्]  
add. उभयतः क्षीणपुत्रिकाश्रितो A. १२ अणुस्थूल०] स्थूलाणु० A. १३ चार्द्ध०] अर्ध० A. १३ तत्रैते] तत्र A.  
१३ दशकण्ठसन्धिविकल्पा] दशैते कण्ठवन्ध्यविकल्पाः A. १४ बन्ध्या भवन्ति] साध्याः A. १४ तेषान्] तेषां A. १४  
नामभिर्] स्वनामभिर् A. ४२.१४-४३.१ शुष्कशाष्कुलिर्] add. उत्सन्धपालिर् A.

<sup>४</sup>The unusual form स्थूलतरी० is supported by both manuscripts and we have retained it in spite of only meagre evidence for the form in epic Sanskrit.

<sup>५</sup>Cakrapāṇi (1.16.9-13) and Dālhaṇa (1.16.10) pointed out that others read पञ्चदशकण्ठकृतयः (instead of पञ्चदशसन्धानाकृतयः). Dālhaṇa (1.16.10) also mentioned that some read समुन्नतसमोभयपालिः (instead of वृत्तायतसमोभयपालिः) and others do not read संक्षिप्तादयः पञ्चासाद्यः.

क्षिसादयः पञ्चासाध्याः। तत्र शुष्कशङ्कुलिरितराल्पपालिः संक्षिसः। अनधिष्ठानपालिः पर्यन्तयोश्च क्षीणमांसो हीनकर्णः। तनुविषमपालिर्वल्लीकर्णः। ग्रन्थितमांसः स्तब्यसि-  
राततसूक्ष्मपालिर्यष्टीकर्णः। निर्माससंक्षिसाग्राल्पशोणितपालिः काकौष्ठ इति। बद्धेष्वपि  
दाहपाकस्वावशोफयुक्ता न सिद्धिमुपयान्ति ॥९॥<sup>६</sup>

५

अतोऽन्यतमस्य बन्धन्विकीर्षुः अग्रोपहरणीयोक्तोपसमृतसम्भारः विशेषतश्चात्रोपह-  
रेत्<sup>७</sup> सुरामण्डक्षीरमुदकं धान्यामूकपालचूर्णं च्छेति। ततोऽङ्गनां पुरुषम्वा ग्रथितकेशान्तं  
लघुभुक्तवन्तमासैः सुपरिगृहीतं च कृत्वा बन्धानुपधार्य छेद्यभेद्यलेख्यव्यव्यधनैरुपपाद्य क-  
र्णशोणितमवेक्ष्यैतद्दुष्टमदुष्टम्वेति ततो वातदुष्टे धान्यामूकोदकाभ्यां पित्तदुष्टे शीतोदकपयो-  
भ्यां श्लेष्मदुष्टे सुरामण्डोदकाभ्यां प्रक्षाल्य कर्णम्पुनरवलिखेत्। अनुन्नतमहीनमविषमञ्च  
१० कर्णसन्धिन्निवेश्य स्थितरक्तं सन्दर्श्य मधुघृतेनाभ्यज्य पिचुपोतयोरन्यतरेणावगुणञ्च

<sup>१ पर्यन्तयोश्च ] om. N. २ ग्रन्थितमांसः ] ०ग्रन्थितमान्सः N H. ३ निर्मास० ] A; निर्मास० N; निर्मास० H. ३ ०स्नाव० ] ०शाव० H. ३ ०शोफ० ] ०सोफ० N. ६ अतो ] ततो N. ६ ०पहरणीयो० ] ०पसंहरणीयो० N. ६-७ चात्रोपहरेत्] A; चाग्रोपहरणीयात् N H. ७ पुरुषम्] पुरुषज् N. ८ च कृत्वा] A; om. N H. ८ उपधार्य] उपपाद्य H. ९ ०शोणितमवेक्ष्यैतद्] ०शोणितत अवेक्ष्यैतद् N. ९ अदुष्टम्] अदुष्टश् N. ९ वेति] A; चेति N H. ९ धान्यामूक० ] धान्यामूक० N ९-१० शीतोदक० ] शीतोदक० N. १० अवलिखेत्] अवलिखेत N. ११ ०सन्धिन्] ०सन्धिं N ११ ०गुणञ्च] ०गुणञ्चो H. ४३.११-४४.१ ०गाढन्] ०गाढं N.</sup>

१ च ] om. A. २ ०षमपालिर्] ०षमाल्पपालिर् A. २ ग्रन्थितमांसः] ग्रथितमांस० A. २ ०सिराततसूक्ष्म०] ०सिरासंततसूक्ष्म० A. ३ काकौष्ठ] काकौष्ठक A. ३ अपि] add. तु शोफ A. ३ ०दाह०] add. ०राग० A. ३ ०पाक०] add. ०पिडक० A. ३ ०शोफ०] om. A. ५ inserted passage] भवन्ति चात्र। यस्य पालिद्वयमपि कर्णस्य न भवेदिह। कर्णपीठं समे मध्ये तस्य विद्धा विवर्धयेत्॥ बाह्यायामिह दीर्घायां सन्धिराभ्यन्तरो भवेत्। आभ्यन्तरायां दीर्घायां बाह्यसन्धिरुदाहतः॥ एकैव तु भवेत्पालिः स्थूला पृथ्वी स्थिरा च या। तां द्विधा पाटायित्वा तु छित्त्वा चोपरि सन्धयेत्॥ गण्डादुत्पाट्य मांसेन सानुवन्धेन जीवता। कर्णपालीमापालेष तु कुर्यान् निर्लिख्य शास्त्रवित्॥ A. ६ ०न्यतमस्य] ०न्यतमं A. ६ ०सम्भारः] ०सम्भारं A. ७ सुरामण्डक्षीरम्] सुरामण्डं क्षीरम् A. ७ धान्यामूकपाल०] धान्यामूकं कपाल० A. ८ बन्धम्] बन्धम् A. ८ ०व्यधनैर्] add. उपपन्नैर् A. ९ अवेक्ष्यैतद्] अवेक्ष्य A. ९ ततो] तत्र A. ९ धान्यामूकोदक०] धान्यामूकोदक० A. १० ०मण्डोदक०] ०मण्डोदक० A. १० कर्णम्] कर्णौ A. १० अवलिखेत्] अनुन्नतम्] अवलिख्यानुन्नतम् A. ११ ०सन्धिन्] ०सन्धिं A ११ निवेश्य] सन्धिवेश्य A. ११ सन्दर्श्य] सन्दध्या T.A. ११ सन्दर्श्य] add. ततो A. ४३.११-४४.१ नातिगाढन्] सूत्रेणानवगाढमन् A.

<sup>८</sup>The vulgate passage inserted between 9 and 10 (from भवन्ति चात्र to शास्त्रवित्) was probably also absent in the version of the *Suśrutasamhitā* commented on by Cakrapāṇi, who cited it in his commentary as being “read by some” in regard to the joins (सन्धान) that they describe.

<sup>९</sup>विशेषतश्च चाग्रोपहरणीयात् of the MSS has been emended to विशेषतश्चात्रोपहरेत् to make sense of the list of ingredients, which is in the accusative case. Also, the repetition of अग्रोपहरणीयात् in the Nepalese version suggests that its second occurrence, which does not make good sense here, is a dittographic error.

नातिगाढन्नातिशिथिलं सूत्रेणावबध्य कपालचूर्ण्णनावकीर्याचारिकमुपदिशेत्। द्विवर्णी-योक्तेन चान्नेनोपचरेत् ॥ १० ॥

विघट्टनन्दिवास्वप्नं व्यायाममतिभोजनम् ।  
व्यवायमग्रिसन्तापम्वाकश्चमञ्च विवर्जयेत् ॥ ११ ॥

५ नातिशुद्धरक्तमतिप्रवृत्तरक्तं क्षीणरक्तं वा सन्दध्यात्। स हि वातदुष्टे रक्तबद्धोऽरुद्धो परिपुटनवान्भवति। पित्तदुष्टे गाढपाकरागवान्। श्लेषदुष्टे स्तब्धकर्णः कण्ठूमानतिप्रवृत्तस्नावः शोफवान्धीणाल्पमांसो न वृद्धिमुपैति ॥ १२ ॥

स यदा रुद्धो निरुपद्रवः कर्णो भवति तदैनं शनैः शनैरभिवर्द्धयेत्। अन्यथा संरम्भदाहपाकवेदनावान्भवति। पुनरपि छिद्येत ॥ १३ ॥

१० अथाप्रदुषस्याभिवर्द्धनार्थम् अभ्यङ्गः। गोधाप्रतुदविष्किरानूपौदकवसामज्ञापयस्तैलं गौरसर्षपजञ्च यथालाभं संभृत्याकार्लक्कवलातिबलानन्ताविदारीमधुकजलशूकप्रतिवापन्तैलम्पाचयित्वा स्वनुग्रुप्तन्निदध्यात् ॥ १४ ॥<sup>c</sup>

१ वृद्ध] ०बद्ध N. २ चान्नेनोपचरेत्] उपपोचरेत् N. ३ inserted passage] add. ॥ ७॥ N. ३ विघट्टनन्] विघट्टनं N. ४ अग्रिसन्तापम्] आग्रिसन्ताप N. ५-४ विवर्जयेत्] वर्जयेत् N. ५ ०शुद्ध०] ०सुद्ध० N. ५ ०वृत्तरक्तं] ०वृत्तं रक्तं N. ५ रक्तबद्धोऽरुद्धो] em.; रक्तबद्धो रुद्धो H. ६ ०पुटनवान्] ०पुटवाम् N; ०पुटनवाम् H. ६ ०दुष्टे] ०दुष्टे N. ६ श्लेष०] श्लेष० N. ६ ०कर्णः] ०वर्णः N. ६-७ ०स्नावः] ०श्नावः H. ७ क्षीणाल्प०] क्षीणो ल्प० N. ८ रुद्धो] रुद्धो N. ८-९ ०पाकवेदनावान्] ०पाकरागवेदनावान् N; ०पाकवेदनावाम् H. १० अथाप्र०] अथास्याः प्र० H. १० ०दुषस्याभिवर्द्धनार्थम्] ०दुषस्याविवर्द्धनार्थम् N. ११ ०आर्कालक्कवलातिं०] ०आर्कालक्कवलातिं० N. ११ ०प्रतिवापन्] ०प्रतिवापन् N. १२ ०गुस्तं] ०गुस्तं N. १३-१२ निदध्यात्] निदध्यात् N.

१ नातिं०] अतिं० A. १ सूत्रेणावबध्य ] च बद्धा A. ३-२ चान्नेनोपचरेत्] च विधानेनोपचरेत् A. ३ inserted passage] भवति चात्र। A. ३ विघट्टनन्] विघट्टनं A. ५ नातिं०] न चाश० A. ५ रक्तबद्धोऽरुद्धो] रक्ते रुद्धोऽपि A. ७-६ भवति] om. A. ७-६ गाढपाकरागवान्] दाहपाकरागवेदनावान् A. ६ स्तब्ध०] स्तब्धः A. ८-७ ०वृत्तस्नावः शोफवान्] ०वृत्तरक्ते श्यावशोफवान् A. ७ क्षीणाल्प०] क्षीणोऽल्प० A. ८ inserted passage] आमतैलेन त्रिरात्रं परिषेचयेत्तिरात्राच्च पिचुं परिवर्तयेत्। A. ८ रुद्धो] सुरुद्धो A. ८ कर्णो] सर्वर्णो A. ८ अन्यथा] अतोऽन्यथा A. ८-९ ०पाकवेदनावान्] ०पाकरागवेदनावान् A. १०-९ भवति] om. A. ९ अपि] om. A. १०-९ छिद्येत्] छिद्येते वा A. १० अथाप्र०] अथास्याप्र० A. १० अभ्यङ्गः] add. तद् यथा A. १० ०मज्ञापयस्तैलं०] ०मज्ञानो पयः सर्पिस्तैलं A. ११ ०बलानन्ताऽ०] ०बलानन्तापामार्गश्वगन्धा A. ११ ०विदारीमधुकजलशूक०] ०विदारिगन्धाक्षीरशुक्काजलशूकमधुरवर्गपयस्या० ११ ०प्रतिवापन्] ०प्रतिवापं A. ११ तैलम्] add. वा A. १२ ०गुस्तं] ०गुस्तं A.

<sup>c</sup>Dalhaṇa (1.16.18) noted that some read राजसर्षपजं in the place of गौरसर्षपजं. This reading appears to have been accepted by Cakrapāṇi (1.16.18-20), who glosses राजसर्षपज as श्वेतसर्षप. Cakrapāṇi also said that some read sarpis in the place of पयस्. In the compound beginning with अर्क, Dalhaṇa noted that some read अर्कपुष्टी.

स्वेदितो मर्दितङ्कर्णमनेन म्रक्षयेद्गुधः।  
ततोऽनुपद्रवः सम्यग्बलवांश्च विवर्जते॥ १५॥<sup>९</sup>

ये तु कर्णा न वर्जन्ते स्नेहस्वेदोपपादिताः।  
तेषामपाङ्गे त्वबहिः कुर्यात्प्रछानमेव च ॥ १६॥<sup>१०</sup>

<sup>५</sup> अमिताः कर्णाबन्धा स्तु विज्ञेयाः कुशलैरिह ।  
यो यथा सुनिविष्टः स्यात्तत्था योजयेद्विषक् ॥ १७॥<sup>११</sup>

जातरोमा सुवर्त्मा च श्लिष्टसन्धिः समः स्थिरः ।

१ स्वेदितो ] स्वेदितो N. १ अनेन ] अने X N. २ ततोऽनुपद्रवः ] ततो नुपद्रवः H; ततो नुपद्रवम् N. ४ अवहिः ] अवर्हि N. ४ कुर्यात् ] कुर्यात् N. ४ प्रछानम्] प्रछन्नम् H. ४ तेषाम...॥ १६॥] om. K. ५ ०बन्धास्] ०बन्धो H. ५ तु] स्तु H. ६ योजयेद्] योजये N. ७ सुवर्त्मा] सुपर्मा N; सुवर्मा H. ७ ०सन्धिः] ०सन्धिम् N.

१ स्वेदितो मर्दितङ् ] स्वेदितोन्मर्दितं A. १ अनेन म्रक्षयेद्गुधः] स्नेहनैतेन योजयेत् A. ३ *inserted passage*] यवाश्व-गन्धायष्टाहौस्तिलैश्चोद्वर्तनं हितम्। शतावर्यश्वगन्धाभ्यां पयस्यैरण्डजीवनैः॥ तैलं विपकं सक्षीरमभ्यङ्गात्पालिर्वर्धनम्। A. ३ स्नेहस्वेदोप०] स्वेदस्नेहोप० A. ४ अपाङ्गे त्वबहिः] अपाङ्गदेशे तु A. ४ च] तु A. ५ *inserted passage*] बाह्य-च्छेदं न कुर्वीत व्यापदः स्युस्ततो ध्रुवाः॥ बद्धमात्रं तु यः कर्ण सहसैवामिवर्धयेत्। आमकोशी समाधातः क्षिप्रमेव विमुच्यते॥ A. ६ सुनिविष्टः] सुनिविष्टः A. ६ स्यात्] तं A. ६ योजयेद्विषक्] विनियोजयेत् A. ६ *inserted passage*] (कर्णपाल्यामयान्नाणां पुनर्वक्ष्यामि सुश्रुतं !) कर्णपाल्यां प्रकृपिता वातपित्तकास्थयः॥ १॥ द्विधा वाऽप्य अथ संसृष्टाः कुर्वन्ति विविधा रुजः। विस्फोटः स्तव्यता शोफः पाल्यां दोषे तु वातिके दाहविस्फोटजननं शोफः पाकश् च पैतिके। कण्ठः सश्वयथुः स्तम्भो गुरुत्वं च कफात्मके। ३॥ यथादोषं च संशोध्य कुर्यात्तेषां चिकित्सितम्। स्वेदाभ्यङ्गपरीक्षेः प्रलेपासृग्विमोक्षणैः॥ ४॥ मृद्धीं क्रियां वृंहणीयैर्यथास्वं भोजनैस्तथा। य एवं वेत्ति दोषाणां चिकित्सां कर्तुमहर्ति॥ ५॥ अत ऊर्ध्वं नामलिङ्गवैक्ष्ये पाल्यामुपद्रवान्॥ अत्पाटकश्चोत्पुटकः इयावः कण्ठयुतो भृशम्॥ ६॥ अवमन्थः सकण्ठूको ग्रन्थिको जम्बुलस्तथा॥ स्नावी च दाहवांश् चैव शृणवेषां क्रमशः क्रियाम्॥ ७॥ अपामार्गः सर्जरसः पाटलालकुचत्वचौ॥ उत्पाटके प्रलेपः स्यात्तैलमेभिश् च पाचयेत्॥ ८॥ शम्पाकशिश्युपूतीकान्गोदामेदोऽथ तद्वसाम्॥ वाराहं गव्यमैणेयं पित्तं सर्पिश्च संसृजेत्॥ ९॥ लेपमुत्पुटके दद्यात्तैलम् एभिश्च साधितम्॥ गौरीं सुगन्ध्यां सश्यामामनन्तां तप्तुलीयकम्॥ १०॥ इयावे प्रलेपनं दद्यात्तैलम् एभिश्च साधितम्॥ पाठां रसाङ्गनं क्षौद्रं तथा स्यादुष्णाकाञ्जिकम्॥ ११॥ दद्यात्तैलं सकण्ठूके तैलम् एभिश्च साधितम्॥ व्रणीभूतस्य देवं स्यादिदं तैलं विजानता॥ १२॥ मधुकक्षीरकाकोलीजीवकाद्यैविपाचितम्॥ गोधावराहसर्पाणां वसाः स्युः कृतवृंहणे॥ १३॥ प्रलेपनमिदं दद्यादवसिच्यावमन्थके॥ प्रपोणदरीकं मधुकं समझां ध्वमेव च॥ १४॥ तैलमेभिश्च संपकं शृणु कण्ठूमतः क्रियाम्॥ सहदेवा विश्वदेवा अजाक्षीरं ससैन्ध्यवम् एतैरालेपनं दद्यात्तैलम् एभिश्च साधितम्॥ १५॥ ग्रन्थिके गुटिकां पूर्वं स्नावयेद्वपाठ्य तु॥ ततः सैन्धवचूर्णं तु धृष्टा लेपं प्रदापयेत्॥ १६॥ लिखित्वा तत्सुतं धृष्टा चूर्णैलोभ्रस्य जम्बुले॥ क्षीरेण प्रतिसार्येनं शुद्धं संरोपयेत्ततः॥ १७॥ मधुपर्णीं मधुकं च म मधुकं मधुना सह॥ लेपः स्नाविणि दातव्यस् तैलमेभिश्च साधितम्॥ १८॥ पञ्चवल्कैः समयैकैः पिष्टस्तैश्च घृतान्वितैः॥ जीवकाद्यैः सर्सर्पिञ्चैर्द्युमानं प्रलेपयेत्॥ १९॥) A.

<sup>९</sup>N has a काकपाद after अने, but the missing letter (one would expect 'न') has not been supplied in a margin or elsewhere.

<sup>१०</sup>Dalhana (1.16.23) noted that some read तेषाम् अपाङ्गच्छेदं हि कार्यम् आभ्यन्तरं भवेत्.

<sup>११</sup>Dalhana (1.16.26) stated that some read सुनिविष्टः (the reading of the Nepalese version) instead of सुनिविष्टः.

सुरूढोऽवेदनो यस्तु तं कर्णं वर्द्धयेच्छनैः ॥ १८ ॥

विशेषितायामथ नासिकायां  
वक्ष्यामि सन्धानविधिं यथावत् ।  
नासाप्रमाणं पृथिवीरुहाणां  
पत्रं गृहीत्वा त्ववलम्बि तस्य ॥ १९ ॥ १२

५

तेन प्रमाणेन हि गण्डपार्श्वद्  
उत्कृत्य वधं त्वथ नासिकायम् ।  
विलिख्य चाशु प्रतिसन्दधीत  
तं साधुबद्धमिषगप्रमत्तः ॥ २० ॥

१०

सुसीवितं सम्यगतो यथावन्  
नाडीद्वयेनाभिसमीक्ष्य नह्येत् ।  
उज्ञामयित्वा त्वच्चूर्ण्यीत  
पत्ताङ्गयष्टीमधुकाङ्गनैश्च ॥ २१ ॥

१५

संछाद्य सम्यक्षिप्तचुना व्रणन्तु  
तैलेन सिंचेदसकृत्तिलानाम् ।  
घृतञ्च पाय्यः स नरः सुजीर्णे  
स्त्रिग्नो विरेच्यः स्वयथोपदेशम् ॥ २२ ॥

रूढच्च सन्धानमुपागतं वै

१ तु] em.; तत् N H. २ नासिकायां] नासिकाया N. ४ ०प्रमाणं] ०प्रमाण० N. ४ ०वीरुहाणां] ०वीरुहाणम् N. ५ पत्रं] पत्र N. ७ वधं] वध्य H. ९ ०बद्धम्] ०बद्ध० N. १० सुसीवितं] em.; सुसीवित N; सुशीवितं H. ११-१३ सुसीवितं... ॥ २१ ॥] om. K. १३ पत्ताङ्ग०] em.; पत्ताङ्ग० H; पत्तङ्ग० N. १४ व्रणन्तु] व्रण तुन् N. १७ विरेच्यः] A; विरेच्य N H. १७ ०देशम्] ०देशः N. १८ सन्धानम्] सन्धानम् N. १८ उपागतं] उपागतश् H. १८ वै] चै H.

१ यस्तु] च A. २ विशेषितायाम्] विशेषितायास्त्व A. २ नासिकायां] नासिकाया A. ७ वधं] वधं A. ९ तं] तत् A. ९ ०बद्धम्] ०बन्धेर A. १० सुसीवितं] सुसीहितं A. १२-११ नह्येत्] बद्धा A. १२ उज्ञामयित्वा] प्रोज्ञम्य चैनाम A. १२ अवच्चूर्ण्यीत] अवच्चूर्ण्येत् १३ पत्ताङ्ग०] पत्तङ्ग० A. १४ व्रणन्तु] सितेन A. १७ स्वयथो०] स यथो० A. १८ वै] स्यात् A.

१२ Cakrapāṇidatta said that others read नासासन्धानविधिम् here. Dalhaṇa (1.16.27-31) stated that some read, छिन्नां तु नासिकां द्वावयःस्थस्य शरीरिणः। नासानुरूपं संच्छिद्य पत्रं गण्डे निवेशयेत्॥

तद्विशेषं तु पुनर्निकृन्ते<sup>१</sup>।  
 हीनम्पुनवर्द्धयितुं यतेत  
 समच्च कुर्यादतिवृद्धमांसम्  
 ॥२३॥ इति ओम्॥

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१ शेषं ] ० सेषन् N. २ यतेत ] यतेतः N. ३ ० मांसम् ] ० मान्सम् N. ४ ओम् ] om. N. १९-४ रुद्रज्...ओम् ] om. K.

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१ तद्विशेषं A २ हीनम् ] हीनं A. ३ समज् ] समां A. ३ ० मांसम् ] ० मांसाम् A. ४ ओम् ] om. A. ५ inserted passage ] नाडीयोगं विनौष्ठस्य नासासन्धानवद्विधिम्। य एवमेव जानीयात्स राङ्गः कर्तुमर्हति॥ A.

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- 1 Now we shall expound the method for piercing the ear.<sup>125</sup>
- 2 One may pierce a child's ears for the purpose of preserving and decorating. During the bright fortnight, when the child is in the sixth or seventh month, on renowned days, half days, hours and constellations, the physician, with a calming presence, sits the boy, who has received a benediction and the recitation of a blessing,<sup>126</sup> on the lap of a wet-nurse.<sup>127</sup> Then, he should pull the ear with his left hand and pierce straight through with his right hand at a naturally-occurring cleft.<sup>128</sup>

<sup>125</sup> The topic of piercing the ear (कन्धनव्यध) is not discussed in the *Carakasamhitā* (HIML: IB, 326, n. 175), but it is mentioned in some texts that followed the *Suśrutasamhitā*, such as the *Kaśāpyasamhitā* (HIML: IIA, 30). Also, the instrument for piercing the ear is described in the *Aṣṭāṅgahṛdayasamhitā* 1.26.26 (Ah 1939: 321). In the versions of the text known to Ḏalhaṇa (Su 1938: 76) and Cakrapāṇidatta (Su 1939: 125), the heading of this chapter is “the method of piercing and joining the ear” (कर्णव्यधबन्धविधि), instead of the Nepalese version’s “the method of piercing the ear” (कर्णव्यधविधि). The topic of joining the ear (कर्णबन्ध) is discussed in passages 17–20 of the Nepalese version. However, it appears that only subsequent redactors reflected its importance by including it in chapter headings.

The Nepalese version also omits the opening remark on Dhanvantari that appears in subsequent versions of the text. For a discussion of the frame story in the Nepalese version, see Birch, Wujastyk, Klebanov, Parameswaran, et al. 2021. Ḏalhaṇa (Su 1938: 76) and Cakrapāṇidatta (Su 1939: 125) state that only the ears of healthy people should be pierced, and they quote the lost authority Bhoja to affirm this: “When piercing the ears of children who are free of disease at these times, their ear flaps and apertures, as well as limbs, increase” (for the Sanskrit, see Su 1938: 76). Some texts use the adjective कर्ण-वेधनी rather than व्यधनी.

<sup>126</sup> The causative form व्यधयेत् is known in Classical Sanskrit (Whitney 1885: 166).

The compound कृतमङ्गलस्वास्तिवाचनं “who has received a benediction and the recitation of a blessing” is an emendation based on the similar text at 3.2.25 (Su 1938: 346). Cf. also 3.10.8, 24 (Su 1938: 388, 390) that have slightly different formulations.

<sup>127</sup> The versions of 1.16.3 known to Cakrapāṇidatta (Su 1939: 126) and Ḏalhaṇa (Su 1938: 76) have the additional compound कुमारधराङ्के (“on the lap of one who holds the child”) after धात्र्यङ्के. The gender of कुमारधर is made clear by Ḏalhaṇa’s gloss “a man who holds the child.” Also, both versions add बालक्रीडनकैः प्रलोभ्य (“having enticed with children’s toys”) to indicate that the child should be tempted with toys to stay on the assistant’s lap. According to Ḏalhaṇa on 1.16.3 (Su 1938: 76), the toys include replica elephants, horses, bulls and parrots. Ḏalhaṇa further mentions that others read भक्ष्यविशेषैर् वा (“or by special treats”) before बालक्रीडनकैः, but we see no trace of these small kindnesses in our witnesses.

<sup>128</sup> The versions of 1.16.3 of Cakrapāṇidatta (Su 1939: 126) and Ḏalhaṇa (Su 1938: 76) add

- For a boy, do the right ear first; for a girl, do the left one. Use a needle on a thin ear; an awl on a thick one.<sup>129</sup>
- 3 One may know that it was pierced in the wrong place if there is excess blood or too much pain. The absence of side-effects is a sign that it has been pierced in the right place.<sup>130</sup>
  - 4 In this context, if an ignorant person randomly pierces a duct there will be fever, burning, swelling, pain, lumps, paralysis of the nape of the neck, convulsions, headache or sharp pain in the ear.<sup>131</sup>
  - 5 Having removed the wick (वर्ति) because of the accumulation of humours or an unsatisfactory piercing at that location,<sup>132</sup> he should smear

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that this naturally-occurring cleft is illuminated by a ray of sunshine (आदित्यकरावभासिते).

The syntax of this slightly long sentence is unusual in beginning with the dual object तौ “the two (ears)” at the start of the sentence, which is remote from the main verb. The other singular accusatives referring to the ear being pierced are governed by absolutives.

<sup>129</sup> Dalhaṇa on 1.16.3 ([Su 1938:76](#)) clarifies that the awl is a shoe-maker’s knife for piercing leather. He also cites the authority of “the notes of Lakṣmaṇa” (*Lakṣmaṇatippaṇīka*) on the issue of the thickness of the needle. *The Notes of Lakṣmaṇa* is not known from any earlier or contemporary sources and was presumably a collection of glosses on the *Suśrutasaṃhitā* that was available to Dalhaṇa in twelfth-century Bengal. See Meulenbeld ([HIML: IA, 386](#)).

<sup>130</sup> At this point, MS Kathmandu KL 699 is missing a folio, so the rest of this chapter is constructed on the basis of witnesses MS Kathmandu NAK 5-333 and MS Kathmandu NAK 1-1079.

<sup>131</sup> This passage is significantly augmented in Cakrapāṇidatta’s and Dalhaṇa’s versions, to outline the specific problems caused by piercing three ducts called कालिका, मर्मिका and लोहितिका (1.16.4 ([Su 1939: 126](#)) and 1.16.5 ([Su 1938: 77](#)) respectively). In fact, the order of the problems mentioned in the Nepalese version has been retained in the other versions and divided between each duct. Cakrapāṇidatta’s commentary on 1.16.4 ([Su 1939: 126](#)) cites several verses attributed to Bhoja on the problems caused by piercing these three ducts in the ear flap: ‘लोहितिका, मर्मिका and the black ones are the ducts situated in the earflaps. Listen in due order to the problems that arise when they are pierced. Paralysis of the nape of the neck and convulsions, or sharp pain arise from piercing लोहितिका. Pain and lumps are thought to arise from piercing मर्मिका. Piercing कालिका gives rise to swelling, fever and burning.’

<sup>132</sup> In addition to these reasons, 1.16.6 of Dalhaṇa at 1.16.6 ([Su 1938: 77](#)), added “because of piercing with a painful, crooked and unsatisfactory needle” (क्रृष्टजिह्वाप्रशस्तसूचीव्यधात) and “because of a wick that is too thick” (गाढतरवर्तित्वात). Dalhaṇa was aware of the reading in the Nepalese version because in his commentary on 1.16.6 ([Su 1938: 77](#)) he noted that some read “because of the accumulation of humours” rather than “because of piercing with a painful, crooked and unsatisfactory needle or because of a

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it with barley, liquorice, Indian madder, and the root of the castor oil tree, thickened with honey and ghee. And when it has healed well, he should pierce it again.<sup>133</sup>

- 6 He should treat the properly-pierced ear by sprinkling it with raw sesame oil. After every three days one should make a thicker wick and do the very same sprinkling.
- 7 Once the ear is free from humours or side-effects, one should put in a light dilator (प्रवर्धनक) in order to enlarge it enough.<sup>134</sup>
- 8 *A person's ear enlarged in this way can split in two, either as a result of the humours<sup>135</sup> or a blow.*

*Listen to me about the ways of joining it can have.*

- 9 Here, there are, in brief, fifteen ways of mending the ear flap.<sup>136</sup> They are as follows: Rim-join (नेमीसन्धानक), Lotus-splittable (उत्पलभेद्यक), Dried Flesh (वलूरक), Fastening (आसङ्गिम), Cheek-ear (गण्डकर्ण), Take away (आहार्य), Ready-Split (निर्वेधिम), Multi-joins (व्यायोजिम), Door-hinge (कपाटसन्धिक), Half door-hinge (अर्धकपाटसन्धिक), Compressed (संक्षिप्त), Reduced-ear (हीनकर्ण), Creeper-ear (वलीकर्ण), Stick-ear (यष्टीकर्ण), and Crow's lip (काकौष्ठ).<sup>137</sup>

In this context, among these,

“Rim-join”: both flaps are wide, long, and equal.

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wick that is too thick.” On the concept of humoral accumulation (समुदाय), see the important analysis by Meulenbeld (1992).

<sup>133</sup> The description of the drug is ambiguous: the word “root” could be taken with each plant, or just with the last. The vulgate reads just “castor oil root” so we assume that is the traditional interpretation.

<sup>134</sup> Cakrapāṇidatta on 1.16.6 (*Su* 1939: 127) and Ḏalhaṇa on 1.16.8 (*Su* 1938: 77) pointed out that the dilator can be made of wood, such as that of the prickly chaff flower, the neem tree and the cotton plant. Ḏalhaṇa added that it can also be made of lead and should have the shape of the datura flower. The manuscripts have variant readings for लघुप्रवर्धनकम् आमञ्चेत् at this point that include a scribal emendation, none of which construe plausibly. It is possible that the unusual verb form आ+√मुच् puzzled the scribes and caused the implausible scribal readings and emendations.

<sup>135</sup> Ḏalhaṇa on 1.16.9 (*Su* 1938: 77) notes that the word दोष here can refer to either a humour, such as wind, as we have understood it, or a disease generated from a humour.

<sup>136</sup> The Nepalese version uses the word सन्धान to refer to joining a split in an ear flap, which is consistent with the terminology in the verse cited above (8). However, 1.16.10 of Ḏalhaṇa’s version (*Su* 1938: 77) uses the term बन्ध here and at the very beginning of the chapter (i.e., 1.16.1) to introduce the topic of repairing the ear.

<sup>137</sup> For an artist’s impression of these different kinds of joins in the ear flap, see Majno 1975: 290 (reproduced as Figure 3.2 in Wujastyk 2003: 154).

“Lotus-splittable”: both flaps are round, long, and equal.

“Dried flesh”: both flaps are short, round, and equal.

“Fastening”: one flap is longer on the inside.

“Cheek-ear”: one flap is longer on the outside.<sup>138</sup>

“Take-away”: the flaps are missing, in fact, on both sides.

“Ready-split”: the flaps are like a dais (पीठ).

“Multi-joins”: one flap is small, the other thick, one flap is equal, the other unequal.

“Door-hinge”: the flap on the inside is long, the other is small.

“Half door-hinge”: the flap on the outside is long, the other is small.

These ten options for joins of the ear should be bound. They can mostly be explained as resembling their names.<sup>139</sup> The five from compressed (संक्षिप्त) on are incurable.<sup>140</sup> 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 flesh and the flaps are stretched thin and have stiff ducts. “Crow-lip” has a flap without flesh with compressed tips and little blood. Even when they are bound up, they do not heal because they are hot, inflamed, suppurating, or swollen.<sup>141</sup>

<sup>138</sup> For an artist’s impression of this join, see Majno 1975: 291 (reproduced as Figure 3.3 in Wujastyk 2003: 155).

<sup>139</sup> Cakrapānidatta on 1.16.9–13 (Su 1939: 128–129) and Ḑalhaṇa on 1.16.10 (Su 1938: 77–78) provide examples of how the names of these joins describe their shapes. For example, the rim-join (नेमीसन्धानक) is similar to the join of the rim of a wheel (चक्रधारा).

<sup>140</sup> Ḑalhaṇa on 1.16.10 (Su 1938: 77–78) mentions that some do not read the statement that only five are incurable, and they understand the causes of unsuccessful joins given below (i.e., heat, inflammation, suppuration and swelling) as also pertaining to the first ten when they do heal.

<sup>141</sup> The version of 1.16.11–13 known to Ḑalhaṇa (Su 1938: 78) has four verses (रळोक) at this point that are not in the Nepalese manuscripts. The additional verses iterate the types of joins required for ear flaps that are missing, elongated, thick, wide, etc. All four verses were probably absent in the version of the Suśrutasanhitā known to Cakrapānidatta. He cites the verses separately in his commentary, the Bhānumatī

- 10 A person wishing to perform a join of any of these should therefore have supplies specially prepared according to the recommendations of the “Preparatory Supplies” chapter.<sup>142</sup> And in this regard, he should particularly gather<sup>143</sup> decanted liquor (सुरामण्ड), milk, water, fermented rice-water, and powdered earthenware crockery (कपालचूर्ण).<sup>144</sup> Next, having made the woman or man tie up the ends of their hair, eat lightly and be firmly held by qualified attendants, the physician considers the joins and then applies them by means of cutting, splitting, scarification, or piercing.<sup>145</sup> Next, he should examine the blood of the ear to know whether it is tainted or not. If it is tainted by wind, the ear should be bathed with fermented rice-water and water; if tainted by choler, then cold water and milk should be used; if tainted by phlegm, then decanted liquor and water should be used, and then he should scarify it again.
- After arranging the join in the ear so that it is neither proud, depressed, nor uneven, and observing that the blood has stopped, one should anoint it with honey and ghee, bandage each ear with cotton and gauze (प्लोत), and bind it up with a thread, neither too tightly nor too loosely. Then, the physician should sprinkle earthenware powder on it and provide medical advice (आचारिक). And he should supplement with food as taught in the “Two Wound” chapter.<sup>146</sup>

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(Su 1939: 128–129), introducing each one as ‘some people read’ (के चित् पठन्ति). However, in Trikamajī Ācārya’s edition of the *Sūtrasthāna* of the *Bhānumatī*, the root text is largely identical to the one commented on by Ḏalhaṇa (Su 1938), even in instances like this where Cakrapāṇidatta’s commentary indicates that he was reading a different version of the *Suśrutasan̄hitā*. See further the discussion on p. 7 above.

<sup>142</sup> *Suśrutasan̄hitā* 1.5 (Su 1938: 18–23), probably verse 6 especially that lists the equipment and medications that a surgeon should have ready.

<sup>143</sup> The reading in the Nepalese manuscripts of विशेषतश् चाप्रोपहरणीयात् has been emended to विशेषतश् चाप्रोपहरेत् to make sense of the list of ingredients, which is in the accusative case. Also, the repetition of अप्रोपहरणीयात् in the Nepalese version suggests that its second occurrence, which does not make good sense here, is a dittographic error.

<sup>144</sup> The term कपालचूर्ण is unusual. Ḏalhaṇa (Su 1938: 79) defines it as the powder of fragments of fresh earthen pots and Cakrapāṇidatta (Su 1939: 129) as the powder of earthenware vessels.

<sup>145</sup> There are syntactic difficulties in this sentence. We have adopted the reading in Ḏalhaṇa’s version (Su 1938: 78), which has च कृत्वा following सुपरिगृहीतं. It is likely that a verb, such as कृत्वा, dropped out of the Nepalese transmission.

<sup>146</sup> *Suśrutasan̄hitā* 4.1 (Su 1938: 396–408).

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- 11        *One should avoid rubbing, sleeping during the day, exercise, overeating, sex, getting hot by a fire, or the effort of speaking.*
- 12    One should not make a join when the blood is too pure, too copious, or too thin.<sup>147</sup> For when the ear is tainted by wind, then it is obstructed by blood, unhealed and will peel. When tainted with choler, it becomes pinched (गाढ), septic and red. When tainted by phlegm, it will be stiff and itchy. It has excessively copious suppuration and is swollen. It has a small amount of wasted (क्षीण) flesh and it will not grow.<sup>148</sup>
- 13    When the ear is properly healed and there are no complications, one may very gradually start to expand it. Otherwise, it may be inflamed (संरभ्म), burning, septic or painful. It may even split open again.
- 14    Now, massage for the healthy ear, in order to enlarge it. One should gather as much as one can the following: a monitor lizard, scavenging and seed-eating birds, and creatures that live in marshes or water,<sup>149</sup> fat, marrow, milk, and sesame oil, and white mustard oil.<sup>150</sup> Then cook the oil with an admixture of the following: purple calotropis (अर्क), white calotropis (अलर्क), country mallow (बला), 'strong Indian mallow' (अतिबला), country sarsaparilla (अनन्ता), beggarweed (विदारि), liquorice (मधुक) and hornwort (जलशूक → जलनीलिका<sup>151</sup>).<sup>152</sup> This should

<sup>147</sup> 1.16.17 of Dalhaṇa's version (*Su* 1938: 79) reads "impure" for the Nepalese "too pure," which would appear to make better medical sense. Emending the text to नाशुद्ध- for नातिशुद्ध- in the Nepalese recension would yield the same meaning as the Dalhaṇa's version.

<sup>148</sup> In his edition of *Suśrutasamhitā*, Ācārya (*Su* 1938: 79 n. 1) includes in parentheses the following treatment for these conditions, which according to a footnote is not found in the palm-leaf manuscript he used: 'One should sprinkle it with raw sesame oil for three days and one should renew the cotton bandage after three days' (आमतैलेन त्रिरात्रं परिषेचयेत्तिरात्राञ्च पिचुं परिवर्तयेत्).

<sup>149</sup> For such classifications, see the analyses by Zimmermann (1999) and Smith (1994).

<sup>150</sup> Dalhaṇa's version of 1.16.19 (*Su* 1938: 79) includes ghee. However, Dalhaṇa's remarks on this passage and Cakrapāṇidatta's on 1.16.18 (*Su* 1939: 130) indicate that they knew a version of this recipe, perhaps similar to the Nepalese one, that did not include ghee. Dalhaṇa also noted that others simply read four oils, beginning with fat and without milk, whereas Cakrapāṇidatta said that some say it is made with four oils and milk.

<sup>151</sup> Ceratophyllum demersum, L. This name is not certain. In fact, Dalhaṇa on 1.16.19 (*Su* 1938: 79) notes that some people interpret it as a poisonous, hairy, air-breathing, underwater creature.

<sup>152</sup> The version of 1.16.19 known to Dalhaṇa (*Su* 1938: 79) adds several ingredients to this admixture, including अपामार्ग, अश्वगन्धा, क्षीरशुक्रा, मधुरवर्ग and पयस्या. Also, it has विदारि-

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- then be deposited in a well-protected spot.
- 15      *The wise man who has been sweated should rub the massaged ear with it.*  
*Then it will be free of complications, and will enlarge properly and be strong.<sup>153</sup>*
- 16      *Ears which do not enlarge even when sweated and oiled, should be scarified at the edge of the hole, but not outside it.<sup>154</sup>*
- 17      *In this tradition, experts know countless repairs to ears. So a physician who is very intent on working in this way may repair them.<sup>155</sup>*
- 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.<sup>156</sup>*
- 19      *Now I shall describe the proper method of making a repair when a nose is severed. First, take from the trees a leaf the same size as the man's nose and hang it on him.*
- 20      *Next, having cut a slice of flesh (वध्र),<sup>157</sup> with the same measurements,*

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गन्धा instead of विदारि. When commenting on 1.16.19, Dalhaṇa ([Su 1938:79](#)) notes that some do not read मधुरवर्ग and पयस्या. Therefore, there were probably other versions of this recipe with fewer ingredients, as seen in the Nepalese version.

<sup>153</sup> For these aims (i.e., healing and enlarging the ear), the text known to Dalhaṇa ([Su 1938:79](#)) has an additional verse and a half describing an ointment for rubbing the ear and sesame oil cooked with various medicines for massage. Cakrapāṇidatta ([Su 1939: 131](#)) does not comment on these verses, nor verse 15 of the Nepalese version, and so the version of the *Suśrutasanhitā* known to him may not have included them.

<sup>154</sup> Dalhaṇa's version of 1.16.23 ([Su 1938: 79–80](#)) adds another hemistich that states more explicitly that the scarification should not be done on the outside of hole as it will cause derangement.

<sup>155</sup> After verse 17, the 1938 edition of Ācārya ([Su 1938:80](#)) has in parentheses nineteen verses on diseases of the ear lobes, treatments and complications. It is possible that these verses were in some of the witnesses used by Ācārya to construct the text as they occur in other manuscripts, such as MS Hyderabad Osmania 137-3 (b). However, Cakrapāṇidatta ([Su 1939: 132](#)) and Dalhaṇa ([Su 1938: 80](#)) state that some read about the diseases of the ear lobes in this chapter whereas others read about them in the chapter on various treatments (मिश्रकचिकित्स) (SS 5.25), which does indeed begin with a discussion of the disease परिपोट. Dalhaṇa goes on to say that some believe that these verses were not composed by sages and, therefore, do not read them.

<sup>156</sup> The order of verses 17 and 18 are reversed in Dalhaṇa's version ([Su 1938: 80](#)).

<sup>157</sup> The version of 1.16.28b known to Dalhaṇa ([Su 1938: 81](#)) reads "bound, connected (ब-द्धम्)" instead of "slice of flesh (वध्र)." 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

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*off the cheek, the end of the nose is then scarified.<sup>158</sup> Then the undistracted physician, should quickly put it back together so that it is well joined.*

- 21 *Having carefully observed that it has been sewn up properly, he should then fasten it along with two tubes.<sup>159</sup> Having caused it to be raised,<sup>160</sup> the powder of sappanwood,<sup>161</sup> liquorice and Indian barberry.<sup>162</sup> should be sprinkled on it.*
- 22 *The wound should be covered properly with cotton 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.<sup>163</sup>*
- 23 *And once healed and really come together, what is left of that slice of flesh (वध) should then be trimmed.<sup>164</sup> If it is reduced, however, one should make an effort to stretch it, and one should make its overgrown flesh smooth.<sup>165</sup>*

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operation in Pune in the eighteenth century (see Wujastyk 2003: 67–70).

<sup>158</sup> Or 1.16.20 could be mean, ‘... off the cheek, it is fixed to the end of the nose, which has been scarified.’ Unfortunately, the Sanskrit of the Nepalese version is not unambiguous on the important point of whether or not the flap of grafted skin remains connected to its original site on the cheek. However, Dalhana (Su 1938: 81) clarifies the meaning of the vulgate here by stating that one should supply the word ‘flesh’ when reading ‘connected,’ thus indicating that he understood the flesh to be connected to the face.

<sup>159</sup> Dalhana noted that the two tubes should be made of reed or the stalk of the leaf of castor oil plant (on 1.16.21 (Su 1938: 81)). They should not be made of lead or betel nut because the weight will cause them to slip down.

<sup>160</sup> The Sanskrit term उत्त्रामयित्वा in 1.16.21 is non-Pāṇinian.

<sup>161</sup> Caesalpinia sappan, L. For पत्ताङ्ग there are manuscript variants पत्ताङ्ग (MS Kathmandu NAK 5-333) and पत्तङ्ग (MS Kathmandu NAK 1-1079). Also, MS Kathmandu KL 699 (f. 14r:1) has पत्ताङ्ग in a verse in 1.14 (cf. 1.14.36 (Su 1938: 66)). The text known to Dalhana has पतङ्ग (1.16.29 (Su 1938: 81)) and this term is propagated in modern dictionaries.

<sup>162</sup> Berberis aristata, DC. Dalhana understands it as elixir salve (रसाङ्गन) (Su 1938: 81).

<sup>163</sup> The expression स्वयथोपदेश is ungrammatical but supported in all available witnesses.

<sup>164</sup> The vulgate transmission has lost the word वध and replaced it with अर्ध “half,” which makes little sense in this surgical context.

<sup>165</sup> Dalhana accepted a verse following this, 1.16.32 (Su 1938: 81), which points out that the procedure for joining the nose is similar to that of joining the lips without fusing the ducts. He noted that earlier teachers did not think this statement on the nose and lips was made by sages, but he included it because it was accepted by Jejjaṭa, Gayadāsa and others, although they did not comment on it because it was easy to understand.

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Cakrapāṇidatta also did not comment on this additional verse ([Su 1939: 133](#)).

## ABBREVIATIONS

### Abbreviations

- Ah 1939 Kumṭe, Aṇṇā Moreśvara, Navare, Kṛṣṇāśāstrī, and Parādkar, Hariāśāstrī (1939) (eds.), श्रीमद्भाग्मटविरचितम् अष्टाङ्गहृदयम्, श्रीमद्भुण्डत्विरचितया सर्वाङ्गसुन्दरारब्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदरसायनाहृद्या टीकया च समुलसितम् = *The Astāṅgahṛidaya* (6th edn., Mumbayyām: Nirṇayasāgara Press), [ark:/13960/t3tt6967d](#).
- Anup *Anup Sanskrit Library* (n.d.).
- Anup *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.), *Aṣṭāṅgasāṅgrahaḥ Śrīmad Vṛddhavāgbhaṭaviracitāḥ Induvyākhyāsaḥitaḥ* (Pune: Maheśa Anamta Āṭhavale, Śrīmad Ātreya Prakāśanam), [ark:/13960/t9773bb9z](#).
- Bhela 1921 Mookerjee, Ashutosh and Ananta Krishna Shastri, Vedāntabisharad (1921) (eds.), *The Bhela Samhita. Sanskrit Text* (Calcutta: University of Calcutta), [ark:/13960/t3sv3157j](#); Based on two copies made of the Thanjavur codex unicus (MS Thanjavur TMSSML 10773, Burnell 1880: 63–4, P. P. S. Sastri 1933: #11085).
- Bhela 2000 Krishnamurthy, K. H. (2000), *Bhela-saṃhitā. Text with English Translation, Commentary and Critical Notes* (Haridas Ayurveda Series, 8; Varanasi: Chaukhamba Visvabharati).
- BL *British Library* (n.d.).
- Ca. 1941 Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्बसुनोपदिष्टा, तच्छिष्येणाप्निवेशेन प्रणीता, चरकद्वबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलिता (3rd edn., Mumbayyām: Nirṇaya 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.

## ABBREVIATIONS

IOLR	Eggeling, Julius et al. (1887–1935), <i>Catalogue of the Sanskrit Manuscripts in the Library of the India Office</i> (London: Secretary of State for India).
KL	<i>Kaiser Library</i> (n.d.).
MW	Monier-Williams, Monier, Leumann, E., Cappeller, C., et al. (1899), <i>A Sanskrit–English Dictionary Etymologically and Philosophically Arranged, New Edition</i> (Oxford: Clarendon Press); 1970 reprint.
NAK	<i>National Archives of Kathmandu</i> (n.d.).
NCC	Raghavan, V. et al. (1949–), <i>New Catalogus Catalogorum, an Alphabetical Register of Sanskrit and Allied Works and Authors</i> , 39 vols. (Madras University Sanskrit Series; Madras: University of Madras); v.1: revised edition, 1968.
NGMCP	NGMCP (2014), ‘Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue’, Universität Hamburg and Deutsche Forschungsgemeinschaft, <a href="#">URL</a> .
NK	Nadkarni, K. M. (1982a), <i>Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic &amp; Home Remedies, Appendices &amp; Indexes ... in Two Volumes</i> , ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, <a href="#">URL</a> .
RORI	<i>Rajasthan Oriental Research Institute</i> (n.d.).
Su 1889	Bhaṭṭācāryya, Jīvānanda Vidyāsāgara (1889) (ed.), सुश्रुतः. सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-कल्पित आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सुश्रुतनामधेयेन तच्छिष्येण विरचितः (3rd edn., Calcutta: Saratī Press), <a href="#">ark : / 13960 / t1nh6j09c</a> ; HIML: IB, 311, edition b.
Su 1915	Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहारब्यव्याख्याया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = <i>The Sushrutasamhita of Sushruta, the Nibandhasangraha Commentary</i>

## ABBREVIATIONS

- of Shri Dalhaṇāchārya* (Mumbayyāṁ: Nirṇayasāgaramudrā-yantrālaye), [ark : / 13960 / t3sv0mt50](#), accessed 29/07/2020; [HIML](#): IB, 312 edition \*v.
- Su 1931 Ācārya, Yādavaśarma Trivikrama (1931) (ed.), सुश्रुत-संहिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहारब्धव्याख्यया समुल्लसिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शारीर-चिकित्सा-कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाहेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = *The Sushrutasaṁhitā of Sushruta with the Nibandhasaṅgraha Commentary of Shree Dalhaṇāchārya* (2nd edn., Mumbayyāṁ: Pāṇḍurāṅga Jāvajī at the Nirṇayasāgaramudrā-yantrālaye), [ark : / 13960 / t9j41sg94](#), accessed 09/06/2020; [HIML](#): IB, 312 edition \*v.
- Su 1938 Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहारब्धव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकारब्धपञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press), [ark : / 13960 / t09x0sk1h](#); [HIML](#): IB, 313, edition cc ('the vulgate').
- Su 1938<sup>2</sup> Ācārya, Yādavaśarma Trivikrama and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहारब्धव्याख्यया निदानस्थानस्य श्री-गयदासाचार्यविरचितया न्यायचन्द्रिकारब्धपञ्जिकाव्याख्यया च समुल्लसिता (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition ([Su 1938](#)).
- Su 1939 Ācārya, Yādavaśarma Trivikrama and Śarman, Nandakiśora (1939) (eds.), सुश्रुतसंहितायाः सूत्रस्थानम् श्रीचक्रपाणिदत्तविरचितया भानुमतीव्याख्याया समेतम् = *Sushrut-saṁhitā (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 संवलिता = *the Suśrutasaṁhitā*

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TMSSML	<i>Tanjore Maharaja Serfoji Saraswati Mahal Library</i> (n.d.).
Viṣṇudh.	Śarman, Madhusūdana and Śarman, Mādhavaprasāda (1912) (eds.), <i>विष्णुधर्मोत्तरपुराणम्</i> = [Viṣṇudharmottarapurāṇa] (Mumbai: Khemarāja Śrīkr̥ṣṇadāsa at the Śrīvenkaṭeśvara Steam Press), <a href="#">ark :/ 13960 / t6qz6fr23</a> ; Lithograph format. Edited on the basis of a manuscript belonging to the astrologer Sudhākaraśarman of the Varanasi Sanskrit Pāṭhaśālā.

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## References

- Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकहृष्टबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्या संवलिता (3rd edn., Mumbai: Nirnaya Sagara Press), [URL](#), accessed 01/01/2018.
- Ācārya, Yādavaśarma Trivikramācārya and Ācārya, Nārāyaṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मूलमात्रा). पाठान्तरपरिशिष्टादिभिः संवलिता = *the Suśrutasamhitā of Suśruta with Various Readings, Notes and Appendix etc.* (Mumbāi: Nirṇayasāgarākhyamudraṇālaye), [URL](#).

## REFERENCES

- Adriaensen, Rob, Barkhuis, Roelf, and Ruijters, Jean-Louis (1984), 'An English Translation of Suśrutasamhitā, 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 Suśrutasamhitā, 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](https://doi.org/10.1163/9789004412071_010).
- Barceloux, Donald G. (2008), *Medical Toxicology Ofnatural Substances. Foods, Fungi, Medicinal Herbs, Plants, Andvenomous 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/ZENODO.46784](https://doi.org/10.5281/ZENODO.46784).
- Bendall, Cecil (1883), *Catalogue of the Buddhist Sanskrit, Manuscripts in The, University Library, Cambridge: With Introductory Notices and Illustrations of the Palaeography and Chronology of Nepal and Bengal* (Cambridge: University Press), [ark:/13960/t03x8vz7b](https://ark:/13960/t03x8vz7b).

## REFERENCES

- Bhaṭṭācārya, Candrakānta (1910–7) (ed.), सुश्रुतसंहिता प्रथमखण्डम् सूत्रस्थानात्मकम् हाराणचन्द्रचक्रवर्तिकविराजविरचितसुश्रुतार्थसन्दीपनभाष्य-समेतम्... चन्द्रकान्तभट्टाचार्य-प्रसुखैः संशोधितम् = [The Suśrutasaṃhitā with the Commentary Suśrutārthaśandīpanabhāṣya by Hārāṇacandra Cakravarti] (Kalikātā: Satya Press); Edition "t" in [HML](#): IB, 312.
- Bhattarai, Bidur (2020), *Dividing Texts. Conventions of Visual Text-Organisation in Nepalese and North Indian Manuscripts* (Studies in Manuscript Cultures; Berlin/Boston: de Gruyter), 388.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Parameswaran, Madhu K., et al. (2021), 'Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the Suśrutasaṃhitā', *Academia Letters*. doi: [10.20935/AL2992](https://doi.org/10.20935/AL2992).
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Rimal, Madhusudan, et al. (2021), 'Ḍalhaṇa and the Early 'Nepalese' Version of the Suśruta-saṃhitā'. doi: [10.20935/al3733](https://doi.org/10.20935/al3733).
- 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](https://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](https://doi.org/10.1163/9789004315518).
- (2021), 'Patañjali's Āryāvarta = Śuṅga realm?', *Academia Letters*. doi: [10.20935/al291](https://doi.org/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](https://doi.org/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.

## REFERENCES

- Burnell, Arthur Coke (1880), *A Classified Index to the Sanskrit MSS. in the Palace at Tanjore* (London: Trübner), [ark:/13960/t4xh86j61](#); Bhelāśamhitā described on pp. 67 ff.
- Carpue, J. C. (1816), *An Account of Two Successful Operations for Restoring a Lost Nose from the Integuments 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 Roșu 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](https://doi.org/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](https://doi.org/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](#).

## REFERENCES

- 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.
- Edgerton, Franklin (1939), 'The Epic Triṣṭubh and Its Hypermetric Varieties', *Journal of the American Oriental Society*, 59/2: 159–74. doi: [10.2307/594060](https://doi.org/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](https://doi.org/10.1080/02666030.1991.9628430).
- Fan, Ka Wai (2005), 'Couching for Cataract and Sino-indian Medical Exchange Fromthe Sixth to the Twelfth Century Ad', *Clinical and Experimental Ophthalmology*: 188–90. doi: [10.1111/j.1442-9071.2005.00978.x](https://doi.org/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.
- Ganapatiśāstrī, 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.

## REFERENCES

- 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](https://doi.org/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](https://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 Kenkyū)*, 62/3: 23–29 (1087–1093). doi: [10.4259/ibk.62.3\\_1087](https://doi.org/10.4259/ibk.62.3_1087), [URL](#), accessed 08/09/2019.
- (pre-published), '[Preliminary Edition of the Nepalese MSS of the Suśrutasaṃhitā, 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](https://doi.org/10.18732/h2ht0h).
- Hemarāja Śarman (1938) (ed.), काश्यपसंहिता (वृद्धजीवकीयं तन्त्रं वा) महर्षिणा मारीचकश्यपेनोपदिष्टा ... हेमराजशर्मणा लिखितेन विस्तरेन उपोद्धातेन सहिता ... सत्यपाल भिषग्ना कृतया विद्योतिनी हिन्दीव्याख्या ... समुलसिता (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](https://ark:/13960/t05z1bg4q).

## REFERENCES

- Hoernle, A. F. Rudolf (1897), *Suśrutasamhitā = The Suśruta-Saṃhitā or the Hindū System of Medicine According to Suśruta 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 Suśruta', *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 283–302, [URL](#), accessed 26/06/2019.
- (1906b), '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.
- (1907a), '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 Mahākoṣāḥ arthāt Āyurvedīya Śabdakoṣāḥ Saṃskṛta–Saṃskṛta* (Mum̄baī: Mahārāṣṭra Rājya Sāhitya āṇi Saṃskṛti Mamḍala), [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.

## REFERENCES

- 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 Suśrutasamhitā and Its Interrelation with Buddhism and the Buddhists', MA thesis (Hamburg: Hamburg University, Sept.), [URL](#), accessed 08/09/2019.
- (2021a), 'On the Textual History of the Suśrutasamhitā (1): A Study of Three Nepalese Manuscripts', *eJIM: Electronic Journal of Indian Medicine*, 12/1: 1–64. doi: [10.21827/ejim.12.1.37385](https://doi.org/10.21827/ejim.12.1.37385).
- (2021b), 'On the Textual History of the Suśrutasamhitā, (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](https://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-rcc-04](https://doi.org/10.21037/atm-2019-rcc-04), [URL](#), accessed 02/11/2020.
- Lienhard, Siegfried (1978), 'On the Meaning and Use of the Word Indragopa', *Indologica taurinensis*, 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.

## REFERENCES

- 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/script.1950.2294](https://doi.org/10.3406/script.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.
- (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.

## REFERENCES

- Meulenbeld, Gerrit Jan (2008), *The Mādhavanidāna with "Madhukośa," the Commentary by Vijayarakṣita and Śrīkanṭhadatta* (Ch. 1-10). *Introduction, Translation, and Notes* (Delhi: Motilal Banarsi Dass); Meulenbeld provided a supplement to his 1974 listing of plant identities as an appendix in Das 2003.
- (2011), 'The Relationships between Dosas and Dūsyas: 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 European (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, 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](#).
- (1982b), *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](#).

## REFERENCES

- 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](https://doi.org/10.1515/9783110899344).
- Olivelle, Patrick (2005), *Manu's Code of Law: A Critical Edition and Translation of the Manava-dharmaśastra*, 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: Kautilya's Arthaśāstra. a New Annotated Translation* (New York: Oxford University Press), ISBN: 9780199891825. doi: [10.1093/acprof:osobl/9780199891825.003.0001](https://doi.org/10.1093/acprof:osobl/9780199891825.003.0001).
- Osbaldiston, 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. (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](https://doi.org/10.1093/med/9780199204854.003.090302).
- (2013), *Modern Medical Toxicology* (New Delhi: Jaypee Brothers Pvt. Ltd), ISBN: 9789350259658.

## REFERENCES

- 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](https://doi.org/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.), *Pramāṇakīrtih. 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](https://doi.org/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](https://doi.org/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](#).
- Râya, Priyadarjan, Gupta, Hirendra Nath, and Roy, Mira (1980), *Suśruta Saṃhita (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](#).
- Roșu, 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.

## REFERENCES

- 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, Kamasutra, Vaidya & Jyotisa, nos. 10650 – 11737* (Srirangam: Sri Vani Vilas Press), ark : /13960/t3nw8bc12.
- Śāstri, Vardhamāna Pārvanātha (1940) (ed.), उग्रादित्याचार्यकृत कल्याणकारक (राष्ट्रभाषानुवादसहित) = *The Kalyāṇa-kārakam of Ugrādityacharya, Edited with Introduction, Translation, Notes, Indexes and Dictionary* (Sakhārāma Nemacāmḍa Gramthamālā, 129; Solāpura: Seṭha Govīḍajī 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.
- Sena, Gaṅgāprasād et al. (1886–93) (eds.), सुश्रुतसंहिता...दल्लनाचार्य-कृत-निवन्ध-संग्रह, चक्रपाणिदत्त-कृत-भानुमती-टीका...वङ्गानुवाद...इरेजि प्रतिशब्द (Calcutta: Mañirāma 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).

## REFERENCES

- Sharma, Priya Vrat (1999–2001b), *Suśruta-Saṃhitā, with English Translation of Text and Dalhaṇa's Commentary Alongwith (sic) Critical Notes*, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhamba Visvabharati).
- Shastri, R. Shama (1920) (ed.), बोधायनगृह्णसूत्रम् *The Bodhāyana Grihyasutra* (Mysore: University of Mysore), [ark:/13960/t2t492622](http://ark:/13960/t2t492622).
- Singh, Thakur Balwant and Chunekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhattrayī* (Varanasi: Chowkhamba Sanskrit Series Office).
- Singhal, G. D. et al. (1972–82), *Diagnostic [and Other] Considerations in Ancient Indian Surgery* (Varanasi: Singhal Publications); A translation of the *Suśrutasaṃhitā* in 10v.
- Sircar, Dinesh Chandra (1987), '6. Rākshashkāli (Sundarban) Plate; Śaka 1118', *Epigraphia Indica* (1953–54), 30: 42–3.
- Sivarajan, V. V. and Balachandran, Indira (1994), *Ayurvedic Drugs and Their Plant Sources* (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
- Sleeman, W. H. (1893), *Rambles and Recollections of an Indian Official* (London: Constable), [ark:/13960/t22c4bx7w](http://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: Chaukhamba 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).
- 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.

## REFERENCES

- Suveđī, K. S. and Tīvārī, N. (2000) (eds.), *Sauśrutanighaṇṭuh: granthādau vistr̥tena granthavaiśiṣṭyaprakāśakenopodghātena avasāne ca dravyāṇām anekabhāṣānām āvalī- paryāyasaṅgrahābhyaṁ samalaṅkṛtaḥ Suśrutas- amṛhitāyām prayuktānām auśadhadravyāṇām paryāya-guṇakarmavarṇātma ko pūrvagranthah* (Belajhunḍī, Dān: Mahendrasaṃskṛtaviśvavidyālayah).
- 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, Ne- waRange: 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 Sanskrta and Prākṛta Manuscripts in the Library of the Bombay Branch of the Royal Asiatic Society* (Bombay: Royal Asiatic Society, Bombay), [ark:/13960/t53g00h0n](#); Biswas #0115.
- Warrier, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–6) (eds.), *Indian Medicinal Plants: A Compendium of 500 Species. Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal* (Madras: Orient Longman).
- Watt, George (1889–96), *A Dictionary of the Economic Products of India* (Calcutta: Dept. Revenue and Agriculture, Government of India), [URL](#), accessed 28/04/2021.
- (1908), *The Commercial Products of India, Being an Abridgement of “the Dictionary of the Economic Products of India”* (London: John Murray), [ark:/13960/t9t14xh3x](#).
- Whitney, William Dwight (1885), *The Roots, Verb-forms, and Primary Derivatives of the Sanskrit Language. A Supplement to his Sanskrit Grammar* (Leipzig: Breitkopf and Härtel), [ark:/13960/t3qv3p906](#).

## REFERENCES

- 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:oso/9780199856268.001.0001](#).
- (2019), 'Iron Tonics: Tracing the Development from Classical to Iatror-chemical 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), '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), 'Suśrutasamhitā', PanditProject (6 Oct.), [URL](#), accessed 14/09/2022.

## REFERENCES

- Yano, Michio (1986), 'A Comparative Study of *Sūtrasthānas*: Caraka, Su-  
śruta, and Vāgbhaṭa', in Teizo Ogawa (ed.), *History of Traditional Medi-  
cine: Proceedings of the 1st and 2nd International Symposia on the Compar-  
ative History of Medicine—East and West* (Osaka: Division of Medical His-  
tory, the Taniguchi Foundation), 325–44.
- Zimmermann, F. (1983), 'Suśrutasamhita. Essay review.', *Bulletin of the His-  
tory of Medicine*, 57/2: 291–3, ISSN: 00075140, [URL](#).
- Zimmermann, Francis (1999), *The Jungle and the Aroma of Meats* (2nd edn.,  
Delhi: Motilal Banarsi-dass), 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 Amer-  
ican Oriental Society*, 106: 687–705. doi: [10.2307/603532](https://doi.org/10.2307/603532).
- (2000), *Asceticism and Healing in Ancient India: Medicine in the Buddhist  
Monastery* (Indian Medical Tradition; 2nd edn., Delhi: Motilal Banarsi-  
dass); First published 1991. Reprint of 1998 edition.

Glossary of Medical Substances [work in progress]

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myrobalan abhayā. Terminalia chebula, 214., 3  
Retz. See ADPS 172, NK #2451, Potter