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

Dominik Wujastyk   Jason Birch   Andrey Klebanov
Madhu Parameswaran   Madhusudan Rimal
Deepro Chakraborty   Harshal Bhatt   Vandana Lele
Paras Mehta

Draft of 2022-09-22
© The authors.

Contents

CONTENTS

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.[1] Meulenbeld listed forty-four editions of the work since the first edition of 1835 by **gupt-1835** in Calcutta, and eight translations, starting from the Latin translation of 1844 by **hess-1855**.[2] 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.[3]

In January 2007, a manuscript of the *Suśrutasaṃhitā*, previously unknown to contemporary scholarship, was brought to international attention.[4] 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.[5] The manuscript has been declared by UNESCO to be part of the Memory of the World.[6]

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. **kleb-2010**; **kleb-2021b** 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 Ḍalhaṇa (*fl.* twelfth century). The version of the *Suśrutasaṃhitā* commented on by Ḍalhaṇa has formed the basis of modern

---

1   A selection of prominent contributions includes: **hoer-1897**; **hoer-1906a**; **hoer-1906b**; **hoer-1907a**; **hoer-1907**; **stra-1934**; **sing-1972a**; **shar-1975**; **ray-1980**; **adri-1984**; **yano-1986**; **meul-hist**; **shar-1999**; **vali-2007**.

2   **meul-hist**.

3   **meul-hist**.

4   **dimi-kais**.

5   **hari-2011**.

6   **unes-2013**.

printed editions, such as those of Yadavaśarman Trivikramātmaja Ācārya and others.[7] Some of the changes in the text between the Nepalese version and what we might call the Ḍalhaṇa 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 *Uttaratantra* or last part of the work. **lari-2003** 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 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.[8]

In the case of the *Suśrutasaṃhitā*, 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 *Uttaratantra*, and before the text was fixed as a result of the authority of the major commentators, Cakrapāṇidatta and Ḍalhaṇa.[9] It is in this sense that we use the expression, "Ḍalhaṇa's version," when referring to the vulgate text of the *Suśrutasaṃhitā*.

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 *Suśrutasaṃhitā*.[10] This chapter is important in the history of Indian medicine because of its discussion of surgical methods for repairing

---

7 **susr-trikamji1**; **vulgate**; **shar-susr**.
8 **lari-2003**, cited with agreement by **oliv-manu** in the context of legal literature and by **bron-how** in the context of epic literature. See the latter citation for further discussion of Sanskrit text formation between the empires.
9 The roles of earlier commentators including Jejjaṭa, Gayadāsa and Candraṭa in closing the text and influencing Cakrapāṇidatta and Ḍalhaṇa remains an open research problem.
10 This book is called the *Sūtrasthāna* in later versions of the *Suśrutasaṃhitā*. Note that the *Suśrutasaṃhitā* itself used the name *Ślokasthāna* at several places, e.g., 6.42.61 (**vulgate**), 6.65.30 and 31 (**vulgate**), 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.

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 *Suśrutasaṃhitā* 1.16 and the text as known to Cakrapāṇidatta and Ḍalhaṇa. 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 Ḍalhaṇa'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 *Suśrutasaṃhitā*.

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.[11] 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.[12] 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.[13] 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 **keit-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 *Suśrutasaṃhitā* we find ourselves in the presence of something quite different and more medically developed, in which the body was studied specifically for medical and surgical purposes.[14] The text gives us a historical window onto a school of

---

11   **zysk-1985**.
12   Translation by **hoer-1907**. Further bibliography: **meul-hist**.
13   **mala-1996**; **saha-2015**.
14   **zysk-1986**. The *Carakasaṃhitā* too has brief descriptions of surgical techniques, but the *Suśrutasaṃhitā* goes into greater detail.

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 *Suśrutasaṃhitā* 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.[15] The author of the *Suśrutasaṃhitā* claimed that surgery is the most ancient and most efficacious of the eight branches of medical knowledge.[16] 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.[17] **majn-1975**, 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".[18] The different types of mutilated ear lobe which the *Suśrutasaṃhitā* describes are not always easy to understand from the Sanskrit: the illustrations supplied in Majno's text help visualization.[19]

Rhinoplasty

One of the best-known surgical techniques associated with *Suśrutasaṃhitā* is rhinoplasty, the repair or rebuilding of a severed nose. The history of this operation was discussed by **wuja-2003**, and a translation of the Sanskrit

---

15 **mukh-1913**; **desh-2000**; **nara-2011**; **wuja-2003**; **wils-1823**; **vali-2007** and many other studies.

16 *Suśrutasaṃhitā* 1.1.15–19 (**vulgate**).

17 The comprehensive study of ears in the history of Indian culture by **boll-2010** oddly omits reference to *Suśrutasaṃhitā*'s surgery, although it mentions the text's description of ear diseases.

18 **majn-1975**.

19 **majn-1975wuja-2003**.

passage from the vulgate edition of the *Suśrutasaṃhitā* was given.[20] This fascinating technique is certainly old in South Asia, having been witnessed by travellers from Marco Polo in the seventeenth century onwards.[21] Many witnesses, including the most famous, Cruso and Findlay,[22] described an operation that differs from *Suśrutasaṃhitā* in that it takes the grafting skin from the forehead, not the cheek. But the nineteenth-century account of **thor-bann** is especially interesting, since the technique follows *Suśrutasaṃhitā* exactly in taking flesh from the cheek, not the forehead.[23]

As noted by **meul-hist**, none of the extant commentators – Jejjaṭa, Gayadāsa, Cakrapāṇi or Ḍalhaṇa – explained the technique in any detail beyond short lexical glosses.[24] 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.[25] 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, Ḍalhaṇa clarified the meaning of the vulgate here by stating that when reading the expression "connected," one should understand "connected flesh".[26] He thus indicated that he understood the flesh to be connected to the face.[27] Thus, we cannot know definitively at present whether the connection of the flap was known to the redactors of the Nepalese version, although it

---

20 See also **meul-hist**, for further literature and reflections.

21 **manu-stor**.

22 **cowasjee**.

23 **thor-bann**.

24 **meul-hist**. Ḍalhaṇa 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 (**vulgate**)). Ḍalhaṇa's variant bears a resemblance to the description of the operation given in printed editions of the *Aṣṭāṅgahṛdayasaṃhitā* (Utt.18.59–65 (**kunt-1939**)).

25 **wuja-2003**.

26 *Suśrutasaṃhitā* 1.16.28 (**vulgate**).

27 See p. 56 below.

seems likely. It was probably known to the redactors of the vulgate, and was certainly known to Ḍalhaṇa 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.[28] 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.[29]

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

> "Living" [flesh] means "together with blood".[30]

Thus, Ḍalhaṇa's comment gives us uniquivocal 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 Ḍalhaṇa 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 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 (**vaidya**) to that of barber-surgeons (**ambaṣṭha**s and others)? Or perhaps the influence was in the other direction, and a technique known to practitioners elsewhere

---

28 1.16.11–14 (**vulgate**).

29 1.16.14 (**vulgate**): gaṇḍādutpāṭya māṃsena sānubandhena jīvatā | karṇapālī-māpālestu kuryānnirlikhya śāstravit/ Cf. the translation of the whole passage by **wuja-2003**.

30 1.16.14 (**vulgate**): jīveti śoṇitasahitenetyarthaḥ/

Introduction

in South Asia in the first millennium was integrated into the text of *Suśrutasaṃhitā*. 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.

The Transmission of the Work

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 *Suśrutasaṃhitā*. The primary rationale behind using this designation was outlined in **kleb-2021b**, 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 *Suśrutasaṃhitā* 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 in **kleb-2010** and reiterated in **kleb-2021a** 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 *Suśrutasaṃhitā* transmitted in the Nepalese manuscripts. On the one hand, these studies highlight 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, **kleb-2010**; **kleb-2021a** systematically compared the concerned textual excerpts with four printed editions, alternative readings (**pāṭha**s) reported by several commentators, parallel passages in other texts, and with a limited number of additional manuscripts of the *Suśrutasaṃhitā*. This analysis 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,[31] 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.[32] 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 Ḍalhaṇa and recorded in the widely-used **vulgate**. The present study of SS.1.16 also considers the readings found in **acar-1939** and incorporates various observations made by both medieval commentators, Cakrapāṇidatta and Ḍalhaṇa, 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.[33] 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 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

---

31 **rima-2022**.

32 For a list of most of these manuscript copies of the *Suśrutasaṃhitā*, see **ncc** and **wuja-2020**.

33 Earlier publications include, for example, **hari-2011**; **wuja-2013**; **birc-2021**; **birc-2021a**.

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 *Suśrutasaṃhitā*. Rather, the Nepalese MSS are witnesses to a hyparchetype, not the archetype, of the *Suśrutasaṃhitā*. 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 Ḍalhaṇa in the twelfth century and is reproduced in printed editions of the *Suśrutasaṃhitā*. 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 Uttaratantra, 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 *Suśrutasaṃhitā* and that, due to its regional character, has suffered relatively little contamination. We term this hyparchetype the "Nepalese version."

The Versions of Cakrapāṇidatta and Ḍalhaṇa

The commentaries of Cakrapāṇidatta and Ḍalhaṇa, titled *Bhānumatī* and *Nibandhasaṅgraha* respectively, are based on similar but not identical versions of the *Suśrutasaṃhitā*, both of which are significantly different to the Nepalese version.[34] Ḍalhaṇa was aware of Cakrapāṇidatta's work and reiterated many of his predecessor's remarks, so the interpretation of the root text by these two commentators is, broadly speaking, consistent.[35] Ḍalhaṇa

---

34 See **meul-hist** on these authors. Meulenbeld already noted that "the text of the *Suśrutasaṃhitā* 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* (**meul-hist**).

35 **meul-hist**.

evidently also had several manuscripts of the *Suśrutasaṃhitā* available to him, since he frequently recorded their variant readings.[36]

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 **acar-1939**'s text of the *Sūtrasthāna* commented on by Cakrapāṇidatta (**acar-1939**) simply duplicated the text of that section from **vulgate**'s edition of Ḍalhaṇa's commentary (**vulgate**).[37] 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, Ḍalhaṇa commented on four verses, 1.16.11–14 (**vulgate**), as part of his root text, that Cakrapāṇidatta cited separately only in his commentary (**acar-1939**). Cakrapāṇidatta introduced each verse with "some people say" (**kecit paṭhanti**). 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 Ḍalhaṇa. But **acar-1939** 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 Ḍalhaṇa. Although it is possible that a commentator may not have remarked on a verse because its 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 *Suśruta-*

---

36 Cf. **meul-hist**. Meulenbeld drew attention to Ḍalhaṇa's commentary on 5.8.24cd–25ab (**vulgate**) as a particularly striking example of such awareness (**meul-hist**). In this passage, Ḍalhaṇa noted that certain readings known to the earlier commentators Jejjaṭa and Gayadāsa were, "not to be found in current manuscripts" (**sa ca vartamānapustakeṣu na dṛśyate**).

37 There are a few exceptions where Cakrapāṇidatta glossed a word or compound that is different to the one glossed by Ḍalhaṇa. For example, in SS.1.16.18, Cakrapāṇidatta glossed **rājasarṣapa** whereas Ḍalhaṇa glossed **gaurasarṣapa**, and the editors reflected this in the root texts of the *Bhānumatī* (**acar-1939**) and *Nibandhasaṅgraha* (**vulgate**) respectively.

Figure 1: The text as it appears in Cakrapāṇi (left) and Ḍalhaṇa (right) (**acar-1939**, **vulgate**).

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

saṃhitā that Cakrapāṇidatta commented on in his *Bhānumatī* (Fig. 1, left).[38] It is followed by several verses also in the main text of the *Suśrutasaṃhitā* that elaborate on the content of the prose passage.[39] Ḍalhaṇa commented on these explanatory verses (Fig. 1, right), citing keywords that show they all formed part of the main text of the *Suśrutasaṃhitā* that was before him.[40] However, Cakrapāṇidatta's older commentary showed no awareness of the first few verses in this group, Su.1.16.19–21ab.[41] Apparently, they were not part of the text of the *Suśrutasaṃhitā* 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 *Suśrutasaṃhitā* known to to him.[42]

A similar instance of this occurs in the edition of the *Bhānumatī* at *Suśrutasaṃhitā* 1.16.31 where the editors of the 1939 printed edition included a verse in parenthesis that was commented on by Ḍalhaṇa but not by Cakrapāṇidatta (see Fig. 2).[43] 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*.[44] Therefore, it requires a detailed reading of the commentary itself to infer what its author, Cakrapāṇidatta, was seeing

---

38 **acar-1939**, i.e., **athāpraduṣṭasyābhivardhanārtham ... nidadhyāt/**. It is numbered Su.1.16.19 in Ḍalhaṇa's *Nibandhasaṅgraha* (**vulgate**).

39 Su.1.16.19–23 in **acar-1939**, i.e., svedito ..., yavāśva ..., tailaṃ ..., teṣām ..., vaddha ....

40 1.16.19–23 (**vulgate**).

41 **acar-1939**.

42 The editors remarked in a footnote that verses 20–21a were not in the Nepalese manuscript that they consulted (**acar-1939**).

43 The verse begins **nāḍiyogaṃ vinauṣthasya**. It is printed in the vulgate as 1.16.32 (**vulgate**), with Ḍalhaṇa's commentary. It is printed in parentheses as 1.16.31 in the edition of the Bhānumatī (**acar-1939**).

44 The MS is described in **egge-1887**. The section on p. 27 below describes the sources that the editors used for the 1939 edition.

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 **acar-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 Ḍalhaṇa's. For example, *Suśrutasaṃhitā* 1.16.5 of the Nepalese version begins with the compound **doṣasamudayāt**.[45] Ḍalhaṇa's version, on the other hand, inserted two compounds, **kliṣṭajihmāpraśastasūcīvyadhāt** and **gāḍhataravartitvāt**, before this.[46] Cakrapāṇidatta began his comment on this passage by glossing **doṣasamudayāt**, which suggests that he was not aware of the compounds that Ḍalhaṇa saw.[47]

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 Ḍalhaṇa mentions it as an alternative that is, "read by others." For example, *Suśrutasaṃhitā* 1.1.28 of the Nepalese version has **tatrāsmiñ chāstre**, which is also the reading commented on by Cakrapāṇidatta.[48] However, Ḍalhaṇa comments on **asmiñ chāstre** and states that "others read **tatrāsmiñ chāstre**".[49] Another example is the reading of **ṣaṣṭyā vidhānaiḥ** in Ḍalhaṇa's commentary on 1.1.8.1 (**vulgate**) that is not in his main text but that he ascribes to "some others." This reading is likely to be derived from the expression **ṣaṣṭyābhidhānaiḥ** in the main text of the Nepalese version, and to have been rewritten before Ḍalhaṇa's time because it was hard to understand.[50]

---

45 **acar-1939**.
46 *Suśrutasaṃhitā* 1.16.6 (**vulgate**).
47 *Suśrutasaṃhitā* 1.16.5 (**acar-1939**).
48 **acar-1939**.
49 *Suśrutasaṃhitā* 1.1.22 (**vulgate**).
50 See the discussion by **birc-2021a**.

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. **kleb-2021b** 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.[51] **kleb-2021b** 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.[52]

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.

hari-2011 provided an exemplary investigation of textual variants in the Nepalese version. His study looked at the classification of snakes in *Suśrutasaṃhitā* 5.4 and revealed that the Nepalese MSS preserve a text that is internally more consistent and coherent than the versions of the *Suśrutasaṃhitā* 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.[53] The first case study dealt with the list of skin lesions associated with urinary disease (**pramehapiṭakā** in the Nepalese spelling). Their signs and pathogenesis are described in the Nidānasthāna and their treatment in the *cikitsāsthāna*.[54] This list of skin lesions exemplifies a case where the text of the *Suśrutasaṃhitā* transmitted in the Nepalese MSS is internally more coherent than that commented on by Ḍalhaṇa. The incoherence of Ḍalhaṇa'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.[55]

---

51 **wuja-2013kleb-2021bbirc-2021birc-2021a**.
52 **kleb-2021b**.
53 **kleb-2021b**.
54 2.6 (**vulgate**) and 4.12 (**vulgate**) respectively.
55 MS Kathmandu KL 699 was copied a century or more before Gayadāsa's time, so its

The second case study by **kleb-2021b** focussed on the variation in another list, that of the bodily winds (**prāṇas**, *Suśrutasaṃhitā* 3.4). This discussion too relied upon Gayadāsa's learned remarks. He commented on a version of the *Suśrutasaṃhitā* 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 *Suśrutasaṃhitā* 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 *Carakasaṃhitā*.

On the whole, these observations indicate that many features of the Nepalese version of the *Suśrutasaṃhitā* 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 Ḍalhaṇa's version of the text also included extremely early readings and variants, suggesting that some of the readings accepted by Ḍalhaṇa were ancient, if not original. Each case has to be weighed.

The following detailed comparison of 1.16 of the Nepalese version with Ḍalhaṇa'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 Ḍalhaṇa. 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* (**vulgate**) was known by Ḍalhaṇa. These

---

version cannot have been influenced by Gayadāsa's innovations or suggestions.

Nepalese version	Ḍalhaṇa'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 Ḍalhaṇa's versions.

verses cover additional diseases of the ear lobes, with their treatment and complications. Although Ḍalhaṇa 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 Ḍalhaṇa's comments prompted him to place them in parentheses.[56] 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 Ḍalhaṇa'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

---

56 Ācārya (**vulgate**) 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).

the redaction of other chapters of the *Suśrutasaṃhitā*.

Apart from the addition of verses, the redacting of the version known to Ḍalhaṇa involved many small, yet sometimes significant, changes that are summarised below.[57]

Changing Spelling, Sandhi and Syntax

Later commentators like Ḍalhaṇa often made efforts to standardise, simplify or improve the language of the Nepalese version. Such changes include the standardising of spelling,[58] sandhi,[59] and verbal forms,[60] as well as interventions to simplify and clarify syntax.[61] These efforts often involved splitting compounds.[62] In some instances, these changes improved the grammar,[63] or altered the meaning.[64] However, some prefixes of verbal forms,[65] case endings,[66] and indeclinables were changed for less apparent reasons.[67] There is also a tendency to replace uncommon words with

---

57 The present study focusses on the commentary of Ḍalhaṇa, but many of the same investigations could be made with regard to the surviving parts of the other early commentaries. See the discussion below, p. 30.

58 For example, pattāṅga (SS.1.16.21) → pataṅga (1.16.29, **vulgate**). For more information on this, see the relevant footnote to the translation.

59 or example, °hastena rju (SS.1.16.2) → °hastena rju (1.16.3, **vulgate**).

60 For example, unnāmayitvā (SS.1.16.21) → prānnamya (1.16.29, **vulgate**); avacūrṇa-yīta (SS.1.16.21) → upaharet (1.16.29, **vulgate**).

61 For example, śoṇitabahutvanivedanāyāṃ cānyadeśaviddham iti jānīyāt | nirupa-dravatā taddeśaviddhaliṅgam | (SS.1.16.3) → śoṇitabahutvena vedanayā cānya-deśaviddham iti jānīyāt | nirupadravatayā taddeśaviddham iti | (1.16.4, **vulgate**); āmatailapariṣekeṇopacaret (SS.1.16.6) → āmatailena pariṣecayet (1.16.7, **vulgate**); suparigṛhītaṃ (SS.1.16.10) → suparigṛhītaṃ ca kṛtvā (1.16.15, **vulgate**); anena (SS.1.16.15) → snehenaitena (1.16.20, **vulgate**).

62 For example, yadṛcchāviddhāyāṃ sirāyām (SS.1.16.4) → yadṛcchayā viddhāsu si-rāsu (1.16.5, **vulgate**); dhānyāmlakapālacūrṇam (SS.1.16.10) → dhānyāmlaṃ kapā-lacūrṇam (1.16.20, **vulgate**).

63 For example, surāmaṇḍakṣiram (SS.1.16.10) → surāmaṇḍaṃ kṣiram (1.16.15, **vulgate**).

64 For example, kṣīṇālpamāṃsaḥ (SS.1.16.12) → kṣīṇo 'lpamāṃsaḥ (1.16.17, **vulgate**).

65 For example, samvarddhitaḥ (SS.1.16.8) → vivarddhitaḥ (1.16.9, **vulgate**); niveśya (SS.1.16.10) → sanniveśya (1.16.15, **vulgate**); avabadhya (SS.1.16.10) → ca baddhvā (1.16.15, **vulgate**).

66 For example, māse (SS.1.16.2) → māsi (1.16.3, **vulgate**).

67 For example, api (SS.1.16.13) → vā (1.16.18, **vulgate**); ca (SS.1.16.16) → tu (1.16.23, **vulgate**); tu (SS.1.16.18) → ca (1.16.25, **vulgate**).

generic ones,[68] add indeclinables,[69] omit the verb to be at the end of sentences,[70] and introduce verses after a prose passage with the phrase **bhavati cātra**.[71]

Changing Technical Terms

There is evidence of standardising and altering technical terminology in versions of the *Suśrutasaṃhitā* subsequent the Nepalese one. Two examples of this in *Suśrutasaṃhitā* 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 **sandhāna** and **sandhi** with **bandha** in prose passages.[72] However, the use of the term **sandhāna** was retained in verses, perhaps because of the metrical challenges of making such a change. Also, the names of joins which incorporate **sandhāna** and **sandhi** remained the same.[73]

The Nepalese version contains the rather obscure term **vadhra** 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 **vadhra** as a leathern strap or a slice of bacon,[74] the latter of which is more indicative of its meaning in the Nepalese version. This word was written out of subsequent versions,[75] and it was not mentioned as an alternative reading by either Cakrapāṇidatta or Ḍalhaṇa, which suggests that its use and meaning may not have been known to them. However, **vadhra** was used by the author

---

68 For example, **mrakṣayet** (SS.1.16.15) → **yojayet** (1.16.20, **vulgate**); **nahyet** (SS.1.16.21) → **baddhvā** (1.16.29, **vulgate**).

69 For example, [absent] (SS.1.16.6) → **ca** (1.16.7, **vulgate**); [absent] (SS.1.16.10) → **tatra** (1.16.15, **vulgate**); [absent] (SS.1.16.12) → **api** (1.16.17, **vulgate**).

70 The words **bhavati** or **bhavanti** are omitted four times in Ḍalhaṇa's version (1.16.10 (twice), 1.16.17 and 1.16.18, **vulgate**).

71 For example, [absent] (SS.1.16.11) → **bhavati cātra** (1.16.16, **vulgate**).

72 For example, **pañcadaśasandhānākṛtayaḥ** (SS.1.16.9) → **pañcadaśabandhākṛtayaḥ**, (cf. 1.16.10 (**vulgate**)); **daśakarṇasandhivikalpāḥ** (SS.1.16.9) → **karṇabandhavikalpāḥ** (cf. 1.16.10 (**vulgate**))

73 These names are **nemīsandhānaka**, **kapāṭasandhika**, and **ardhakapāṭasandhika** in SS.1.16.9 (cf. 1.16.10 (**vulgate**)).

74 **apte-pracmoni-sans**.

75 vadhram (SS.1.16.20) → baddham (SS.1.16.28, **vulgate**) and tadvadhraśeṣaṃ (SS.1.16.23) → tad ardhaśeṣaṃ (SS.1.16.31, **vulgate**).

of the *Aṣṭāṅgahṛdayasaṃhitā* in the context of rhinoplasty, so it likely to be the correct reading in the Nepalese version.[76]

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,[77] and phrases added to elaborate on diseases and treatments.[78] 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 Ḍalhaṇa (1.16.6 (**vulgate**)) 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 Ḍalhaṇa's version have additional characteristics,[79] and a list of four symptoms associated with incurable joins in the Nepalese version (SS.1.16.19) was increased to six in Ḍalhaṇa's version (1.16.10 (**vulgate**)). 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 Ḍalhaṇa (1.16.5, **vulgate**) classifies these symptoms according to three ducts called **kālikā**, **marmarikā** and **lohitikā**, which results in some repetition of the symptoms mentioned.[80]

---

76 Utt.18.62 (**kunt-1939**). The word is old, occurring, also in the form **vardhra**, from the *Atharvaveda* onwards (**mayr-1986**).

77 For example, **chidre** (1.16.2, **vulgate**) → **chidra ādityakarāvabhāsite** (1.16.3, **vulgate**); [absent] (1.16.2) → **śanaiḥ śanaiḥ** (1.16.3); [absent] (SS.1.16.3) → **āśu** (1.16.5, **vulgate**).

78 For example, **dhātryaṅke** (SS.1.16.2) → **dhātryaṅke kumāradharāṅke vā** (1.16.3); [absent] (SS.1.16.2) → **bālakrīḍanakaiḥ pralobhya** (1.16.3); [absent] (SS.1.16.3) → **picuvartiṃ praveśayet** (1.16.5).

79 For example, **pīṭhopamapālir nirvedhimaḥ** (1.16.9, **vulgate**) → **pīṭhopamapālir ubhayataḥ kṣīṇaputrikāśrito nirvedhimaḥ** (1.16.10, **vulgate**); **itarālpapāliḥ saṃkṣiptaḥ** (SS.1.16.9) → **utsannapālir itarālpapāliḥ saṃkṣiptaḥ** (1.16.10); **tanuviṣamapāliḥ** (SS.1.16.9) → **tanuviṣamālpapāliḥ** (1.16.10).

80 In Ḍalhaṇa's version (1.16.5, **vulgate**), the symptoms of fever (*jvara*) and pain (*vedanā*) are repeated. This repetition does not occur in the Nepalese version. It is possible that

The Transmission of the Work

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.[81] 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 Ḍalhaṇa'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.

Redacting Recipes and Elaborating on Treatments

Some of the additional text in subsequent versions of the *Suśrutasaṃhitā* 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 Ḍalhaṇa's version (**vulgate**), which contains a statement that the physician should insert a wick of cotton after the ear has been pierced.[82] This statement anticipates the instructions in the 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 Ḍalhaṇa's version elucidates the role of the wick in the procedure of piercing the ear.

---

this classification was not in the version of the *Suśrutasaṃhitā* known to Cakrapāṇidatta (1.16.4, **acar-1939**) because he mentions that some read classifications of ducts at this point in the text and he cites verses from Bhoja on **kālikā**, **marmarikā** and **lohitikā**, but he does not gloss or comment on the passage known to Ḍalhaṇa.

81 For example, aṇusthūla° (SS.1.16.9) → sthūlāṇu° (1.16.10, **vulgate**); tatraite daśakarṇa° (SS.1.16.9) → tatra daśaite karṇa° (1.16.10, **vulgate**); nātigāḍhan nātiśithilaṃ sūtreṇāvabadhya (SS.1.16.9) → sūtreṇānavagāḍhaman atiśithilaṃ ca baddhvā (1.16.10, **vulgate**); pūrvan dakṣiṇaṃ kumārasya vāmaṅ kanyāyāḥ | pratanuṃ sūcyā bahalam ārayā (SS.1.16.2) → pratanukaṃ sūcyā bahalam ārayā | pūrvaṃ dakṣiṇaṃ kumārasya vāmaṅ kanyāyāḥ (1.16.3, **vulgate**).

82 For example, [absent] (SS.1.16.2) → picuvartiṃ praveśayet (1.16.3, **vulgate**).

A similar clarification occurs in 1.16.18 of Ḍalhaṇa's version (**vulgate**), 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, **vulgate** = 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 Ḍalhaṇa's version, the treatment is reiterated at 1.16.18.

In Ḍalhaṇa'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 Ḍalhaṇa's version (1.16.7, **vulgate**) the recipe was re-written to include sesame seeds.[83] 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. Ḍalhaṇa's version (1.16.7, **vulgate**) of the admixture has five additional ingredients, namely, prickly chaff-flower (*apāmārga*), Withania (*aśvagandhā*), giant potato (*kṣīraśuklā*), the 'sweet' savour (*madhuravarga*)[84] and 'milk flower' (**payasyā** → **vidāri**[85]). It also has beggarweed (*vidārigandhā*) instead of milk flower (*vidāri*).[86] 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.

---

83 yavamadhukamañjiṣṭhāgandharvahastamūlair madhughṛtapragāḍhair ālepayet (SS.1.16.5) → madhukairaṇḍamūlamañjiṣṭhāyavatilakalkair madhughṛtapragā-ḍhair ālepayet (1.16.7, **vulgate**).

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

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

86 arkālarkabalātibalānantāvidārīmadhukajalaśūkaprativāpan tailam pācayitvā (SS.1.16.14) → arkālarkabalātibalānantāpāmārgāśvagandhāvidārigandhākṣira-śuklājalaśūkamadhuravargapayasyāprativāpaṃ tailam vā pācayitvā (1.16.19, **vulgate**).

The Printed Editions

The careful survey of printed editions of the *Suśrutasaṃhitā* by Meulenbeld lists no fewer than 44 entries.[87] These range from the first edition by Madhusūdana Gupta (**gupt-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 **hess-1855** and continue up to the present in scores of publications in many languages.[88]

The vulgate

The great ayurvedic scholar Yādavaśarman Trivikrama Ācārya produced three successive editions of the *Suśrutasaṃhitā* with the commentary of Ḍalhaṇa, 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.[89] 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.[90] 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 sthāna*s.
2. Jaipur, Pandit Gaṅgādharabhaṭṭaśarman, lecturer at the Royal Sanskrit University. Covers the *cikitsāsthāna* and the *uttaratantra*.
3. Bundi, my great friend the royal physician Paṃ. Śrīprasādaśarman Covers the *uttaratantra*.

---

87 **meul-hist**.
88 **zysk-1984meul-hist**.
89 See also the studies of these editions by **kleb-2021bwuja-2013**.
90 The following account is paraphrased from **vulgate**'s own account of their sources (**vulgate**).

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 Raṇachoḍalāla Motīlālaśarman. With the *Nibandhasaṅgraha*. Covers the *śārīrasthāna*.
3 From the personal library of my great friend Sva. Vā. Vaidya Murārajīśarman. Extremely old. No commentary. Covers the *śārīrasthāna*.
4 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Covers the *śārīrasthāna*.[91]
5 Puṇe, BORI library. With the *Nibandhasaṅgraha*. Complete. With some damaged folia.
6 Bombay, Asiatic Society. Incomplete.[92]
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 *Suśrutasandīpanabhāṣya* by Professor Hārāṇacandra Cakravārtti. Complete work. This is the 1910 Calcutta edition numbered "t" by **meul-hist**.[93]
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 **meul-hist**.[94]

The sources of the 1938 edition

1 Gwalior, from the library of my great friend Paṃ. Rāmeśvaraśāstrin Śukla. Covers the *sūtra, nidāna, śārīra, cikitsā and kalpasthāna*s.
2 Bikaner, from the library of the Royal Palace, supplied by

---

91 Not one of the three MSS of the *śārīrasthāna* described in **shar-vaid**.
92 Possibly MS Mumbai AS B.I.3 or MS Mumbai AS B.D.109 (**vela-1930**). But both these have the *Nibandhasaṅgraha*. The first covers only the *śārīrasthāna*; the second may be complete, but Velankar calls it only "disorderly."
93 **bhat-1917**.
94 **sena-1886**.

The Printed Editions

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

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

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

> Paṃ. Candraśekharaśāstrin.   Contains the commentary *Nyāy-acandrikāpañjikāvyākhyā* by Gayadāsa. Covers the *nidānasthāna*. This is almost certainly MS Bikaner Anup 4390.[95]

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 Paṃ Nityānandaśarman Jośī 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 **tā** for **tālapatrapustake**.

Evaluation

Estimates show that there are approximately 230 extant manuscript witnesses for the *Suśrutasaṃhitā*.[96] 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.

While the descriptions provided by Ācārya of his source materials

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

96 This figure is arrived at by summing the MSS mentioned in **ncc** and in the **ngmcp**. The real figure could be many scores higher.

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 *Suśrutasaṃhitā*, no. 5 of the 1931 edition. Manuscript 1 of 1938 is the next most complete, but it omits the *uttaratantra*, 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 *Kāśyapasaṃhitā* allow us to identify this manuscript as MS Kathmandu NAK 5-333.[97] The editors of the vulgate, **vulgate**, stated that this manuscript covered up to the ninth chapter of the *cikitsāsthāna*, but in fact it covers the whole work.[98] 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.

The 1939 edition

In 1939, Yādavaśarman Trivikrama Ācārya and Nandakiśora Śarman co-edited an edition of the *sūtrasthāna* of the *Suśrutasaṃhitā* that was published by the Swami Laxmi Ram ayurvedic centre in Jaipur, and printed at the

---

97 **vulgatehema-1938**. Discussed by **kleb-2021b**. See also **meul-histwuja-2003**.
98 **vulgate**.

famous Nirṇayasāgara Press in Mumbai (see Fig. 4).[99] 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 **mu** for **mudrita**.[100]
2. A manuscript in the India Office Library library provided through the Bhandarkar Oriental Research Institute in Pune.[101] This manuscript covered the *Bhānumatī* b up to the end of the *sūtrasthāna*. The siglum was **ha** for **hastalikhita**.[102]

For the Suśrutasaṃhitā

1. A palm leaf manuscript from Hemarājaśarman's personal library.[103] The siglum was **tā** for **tāḍapatra**.
2. His own published edition. The siglum was **ḍa** for **ḍalhaṇasaṃmataḥ pāṭhaḥ**.[104]
3. Hārāṇacandra Cakravarti's published edition with his own commentary.[105] The siglum was **hā**.

Evaluation

The main innovation of this publication was to present the only surviving part of the commentary on the *Suśrutasaṃhitā* by the great eleventh-

---

99 **acar-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 **kleb-2021a**. On the Swami Laxmi Ram centre, see **hofe-2007**

100 **sena-1886**. The manuscript on which this edition was based is probably in the library of the Calcutta Sanskrit College, and described in **sast-1917**, which is not available to me. See also **meul-hist** for mention of this manuscript. The reference at **rao-sans** to CSCL accession number 97 in Bengali script may be this manuscript.

101 At this time, manuscripts from Britain were routinely lent to scholars in India and vice versa.

102 **PP109978**; MS London BL H. T. Colebrooke 908 (PanditProject #109978, consulted on July 03, 2021).

103 I.e., MS Kathmandu NAK 5-333.

104 **vulgate**. It is noteworthy that Ācārya refers to his 1938 edition as representing "the Ḍalhaṇa recension."

105 **bhat-1917**.

चरके—"लाभोपायो हि शस्तानां रसादीनां रसायनम्" (च. चि. अ. १ पा. १)।
पारिशेष्याद्वाजीकरणत्वम् । अवाजिनं वाजीकुर्वन्ति येन तद्वाजीकरणम् । 'अन्येषामपि
दृश्यते' (पा. अ. ६।३।१३७) इति दीर्घत्वम् । येन बाऽर्थं स्त्रीषु व्यज्यते तद्वाजी-
करणम् । तदुक्तं चरके–"येन नारीषु सामर्थ्यं वाजिवल्लभते नरः । व्रजेच्याप्यधिकं येन
वाजीकरणमेव तत्" (च. चि. अ. २, पा. ४) इति ॥ ५ ॥

अथास्य प्रत्येकाङ्गलक्षणसमासः—तत्र, शल्यं नाम विविधतृणकाष्ठ-
पाषाणपांशुलोहलोष्ट्रास्थिबालनखपूयास्त्रावदुष्टव्रणान्तर्गर्भंशल्योद्धरणा-
र्थं षष्ठ्या विधानैः, यन्त्रशस्त्रक्षाराग्निप्रणिधानव्रणविनिश्चयार्थं च; शा-
लाक्यं नामोर्ध्वजत्रुगतानां श्रवणनयनवदनघ्राणादिसंश्रितानां व्याधी-
नामुपशमनार्थं; कायचिकित्सा नाम सर्वाङ्गसंश्रितानां व्याधीनां ज्वर-
रक्तपित्तशोषोन्मादापस्मारकुष्ठमेहातिसारादीनामुपशमनार्थं;　　भूत-
विद्या नाम देवासुरगन्धर्वयक्षरक्षःपितृपिशाचनागग्रहाद्युपसृष्टचेतसां
शान्तिकर्मबलिहरणादिग्रहोपशमनार्थं; कौमारभृत्यं नाम कुमारभर-
णधात्रीक्षीरदोषसंशोधनार्थं दुष्टस्तन्यग्रहसमुत्थितानां च व्याधीनामुप-
शमनार्थम्; अगदतन्त्रं नाम सर्पकीटलूतामूषकादिदष्टविषव्यञ्जनार्थं
विविधविषसंयोगोपशमनार्थं च; रसायनतन्त्रं नाम वयःस्थापनमायुर्मे-
धाबलकरणं रोगापहरणसमर्थं च; वाजीकरणतन्त्रं नामाल्पदुष्टक्षीणशु-
ष्करेतसामाप्यायनप्रसादोपचयजननिमित्तं प्रहर्षजननार्थं च ॥ ६ ॥

शल्याङ्गविशेषात् ज्ञातुं प्रतिलक्षणं संक्षेपेणाह—अथास्येत्यादि । एकमेकमां प्रति लक्ष-
णानां समासः संक्षेपः प्रत्येकाङ्गलक्षणसमासः । तृणादीनां, तथा दुष्टव्रणस्य, तथाऽन्त-
र्गत(भैदास्य)स्य उद्धरणार्थमिति प्रत्येकमुद्धरणशब्दः संबध्यते । दुष्टव्रणस्यान्तस्तृणाद्या-
हरणार्थमिलन्ये। षष्ठ्या विधानैरिति द्विव्रणीयोक्तैरपतर्पणादौ रक्षाविधानान्तैः; इत्थंभूतलक्षणे
तृतीया। जन्तु श्रीवामूलं, जन्तुणं ऊर्ध्वमूर्ध्वेजत्रु । प्राणादीलादिग्रहणाच्चिरःकपालादिग्रह-
णम् । उत्तरतन्त्रे प्रतिपादितक्रमप्राप्या ज्वरानन्तरमतीसारः पठितः, तस्यान्ते पाठोऽतिसा-
रस्य सर्वाङ्गीणदोषारब्धत्वात्, अन्येषामपि तन्मध्यपाठेन सर्वाङ्गीणदोषारब्धलप्रतिपादना-
ल्यतिक्रमं वदन्ति । शान्तिकर्मं बलिहरणादिना ग्रहाणां देवादीनामुपशमो यस्तदर्थं; यदि
वा ग्रहणं ग्रहो देवानामावेशस्तदुपशमार्थम् । दुष्टस्तन्यग्रहसमुत्थितानामिति दुष्टस्तन्येन

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

century medical scholar Cakrapāṇidatta, namely the *Bhānumatī*.[106] 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 Ḍalhaṇa. 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 Ḍalhaṇa's commentary all came together with the root-text of the *Suśrutasaṃhitā*, and thus the main *Suśrutasaṃhitā* text reflected the readings chosen by Ḍalhaṇa. 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 Ḍalhaṇa. 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.[107]

There is compelling evidence that Cakrapāṇidattas's *Bhānumatī* commentary once covered the whole text of the *Suśrutasaṃhitā*.[108] 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.[109]

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. **kleb-2021b** 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

---

106 **meul-hist**.
107 **acar-1939**. See discussion by **kleb-2021a**.
108 **meul-hist**.
109 **cord-1903**.

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

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.[110] The MS comprises 152 palm-leaf folios that originally belonged to several different codicological units written by different scribes.[111] 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.[112] The MS is incomplete and contains a large part of the *Suśrutasaṃhitā* as well as the *Sauśrutanighaṇṭu*.[113] 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 concluding remarks, someone called Śrī Harṣacandra and Vaidya Vasuvarman. **kleb-2021b** 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

---

110 See   http://catalogue-old.ngmcp.uni-hamburg.de/mediawiki/index.php/C_80-7_Suśrutasaṃhitā (accessed on October 22, 2021).

111 **bhat-2020** and **kleb-2021b** agree that four to five scribes were involved in the manuscript's production.

112 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 **bhat-2020**.

113 See **kleb-2021b** for a detailed description of the content.

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

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

> pawn. If the manuscript sat unused, it should be returned to Śrī Harṣacandra.[114]

Siglum N (Fig. 6) This MS is kept at the National Archives Kathmandu (NAK), under accession number 1-1079 **ka**. It was microfilmed twice by the NGMPP as A 45-5(1) and A 1267-11(2).[115] 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 *Suśrutasaṃhitā* and breaks off abruptly in the second chapter of the *śārīrasthāna*, the actual MS, as a codico-logical 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.

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.[116] 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 *Suśrutasaṃhitā* as well as the *Sauśrutanighaṇṭu*.

---

114 See **kleb-2021b** for a translation and a study of the colophon, as well as an exposition of different positions related to its interpretation.

115 See http://ngmcp.fdm.uni-hamburg.de/mediawiki/index.php/A_45-5_ (Suśrutasaṃhitā) (accessed on October 22, 2021)/

116 See http://ngmcp.fdm.uni-hamburg.de/mediawiki/index.php/B_29-19_ Suśrutasaṃhitā (accessed on October 22, 2021).

The final colophon identifies the scribe of the MS as Vaidya Amarasiṃhaka, 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. **kleb-2021b** 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.

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.[117] 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 *Suśrutasaṃhitā*, 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.[118]

Saktumiva's collation function standardises punctuation and orthographic variants according to filters which can be turned off or on. These

---

117 These guidelines are at https://saktumiva.org/wiki/tei, accessed 20/10/2021.

118 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.

filters enable the editors to ignore **daṇḍa**, numbers and **puṣpikā** in the transcripts, as well as orthographic variants, such as **ba** and **va**, certain germinated consonants, and **visarga** 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 Ḍalhaṇa were read, and variant readings reported by these commentators were included in notes to the edition. Also, various reference books were consulted, such as **josi-maha**; **nadk-1954** and **meul-hist**, 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 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.[119]

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.[120] 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.[121] 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

---

119 http://sushrutaproject.org, consulted 15 September 2022.

120 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.

121 See section 'Features of the Manuscript Transmission' for further discussion of this.

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 *Suśrutasaṃhitā* were familiar with Pāṇinian Sanskrit and, although there are some 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, °**vācanan dhātry**°), although the *anusvāra* is sometimes used (1.16.15, **udakaṃ dhānyāmla**°). In most cases, the consonant following a **repha** is doubled, but this is not always the case.[122] 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 **daṇḍa** at the end of a sentence or verse. Whether these *anusvāra*s should be changed to the consonant **m** 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 (*saṃhitā*). However, it is reasonable to assume that at the end of a verse, paragraph or sentence the speakers would have paused for

---

122 Examples of the germination of consonants are **karṇṇa** (1.16.1 ff), **muhūrtta** (1.16.2), **pūrvva** (1.16.2), **gandharvva** (1.16.5), °**mūlair mmadhu**° (1.16.5), **vartti** (1.16.6) and **punar vvidhyet** (1.16.6). Examples where it does not occur in 1.16 are °**ārtham** (1.16.8,19), **kuryāt** (1.16.16, 32), °**pālir vallūra**° (1.16.10); °**pālir vyāyojimaḥ** (1.16.10) and **dīrghaika**° (1.16.10).

breath or thought, so *sandhi* should be applied, in which case a final *anus-vāra* or class nasal of the following consonant is changed to **m**. Nonetheless, this remains an assumption about how the text would be pronounced. Therefore, in a critical edition, inserting *daṇḍa*s and changing *anusvāra*s to **m** before them are subjective decisions by the editors. The scribal use of *daṇḍa*s and *anusvāra*s in the Nepalese manuscripts can be seen in the digital edition if one switches off the filters for ignoring *daṇḍa*s 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, 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 *Suśrutasaṃhitā*. 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.

> 1–7 **athātaḥ** – °**viddhaliṅgam**] MSS K, H, and N

The above entry means that a textual passage beginning with **athātaḥ** on line 1 and ending with °**viddhaliṅgam** 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:

5 pratanuṃ] pratanū N H

This entry means that on line five of the edition the editors have chosen to read **pratanuṃ**, instead of **pratanū**, which is attested by witnesses N and H. The reader can infer that **pratanuṃ** 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 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 Ḍalhaṇa. Those known to Gayadāsa may be added in future publications. The notes include the brief comments on emendations and some 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 Saktumiva. 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 *pratanuṃ sūcyā bahalam ārayā* is on the right side of the display. This entry means that

pratanuṃ sūcyā bahalam ārayā ||2|| *

{ A: tataḥ   N, H: pratanū }   A: [ADD] picuva-
rtiṃ   A: [OM]   A: praveśayet ||

Figure 8: The digital edition of SS.1.16.3

the editors have chosen to read *pratanuṃ*, which the reader must infer is at-tested by K, whereas A has *tataḥ* and N and H *pratanū*. Witness A has added the word *picuvartiṃ* after *tataḥ*, omitted *sūcyā bahalam* ,[123] and has *praveśayet* instead of *ārayā*, which is attested by all of the Nepalese witnesses.

A positive apparatus is available if you highlight with the cursor one or more words, and even entire passages or verses, and click on the collapsed menu icon. As seen in Figure 9, the positive apparatus of *pratanuṃ sūcyā bahalam ārayā* appears in a pop-up window in which the lemma and vari-ants are aligned according to letters, and the variations are highlighted in yellow.

SP: pratanuṃ   sūcyā bahalam ārayā

A: tataḥ [ADD] picuvartiṃ [OM]   praveśayet ||

K: pratanuṃ   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

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 dis-played.

---

123 The omitted words are displayed by hovering the cursor over [OM] adjacent to A in the apparatus.

Critical Edition of Sūtrasthāna 16

athātaḥ karṇṇavyadhavidhiṃ vyākhyāsyāmaḥ ||1||

rakṣābhūṣaṇanimittam bālasya karṇṇau vyadhayet | tau
ṣaṣṭhe māse saptame vā śuklapakṣe praśasteṣu
tithikaraṇamuhūrttanakṣatreṣu kṛtamaṅgalasvastivācanaṃ[1]
dhātryaṅke kumāram upaveśyābhisantvayamāno[2] bhiṣag
vāmahastenākṛṣya karṇṇan daivakṛte chidre dakṣiṇahastena
ṛju vidhyet | dakṣiṇaṃ kumārasya vāmaṅ kanyāyaḥ |
pratanuṃ sūcyā bahalam ārayā ||2||

śoṇitabahutve 'tivedanāyāṃ cānyadeśaviddham iti jānīyāt |
nirupadravatā taddeśaviddhaliṅgam ||3||

1--9 athātaḥ--°viddhaliṅgam] MSS K, H, and N

---

1 vyākhyāsyāmaḥ] vyā K.   3 saptame] *om.* N.   4 °maṅgalasvastivācanaṃ] A; °ma-
ṅgalaṃ svastivācanaṃ K, H, N.   5 dhātryaṅke] dhātryaṅko K.   5 kumāram] kumā-
rakam N.   7 ṛju] rjum N H.   8 pratanuṃ] pratanū N H.

---

1 karṇṇavyadhavidhiṃ] karṇavyadhabandhavidhim adhyāyaṃ A.   1 vyākhyāsyāmaḥ]
add. yathovāca bhagavān dhanvantariḥ || A.   2 vyadhayet] vidhyete A.   3 māse] māsi
A.   5 dhātryaṅke] *add.* kumāradharāṅke vā A.   5 upaveśyābhisantvayamāno] upa-
veśya bālakṛḍanakaiḥ pralobhyābhisantvayan A.   6 karṇṇan] karṇaṃ A.   6 chidre]
chidra A.   6 chidre] *add.* ādityakarāvabhāsite śanaiḥ śanair A.   7 ṛju] rju A   7 vid-
hyet] *add.* pratanukaṃ sūcyā bahalam ārayā A.   7 kanyāyaḥ] kumāryaḥ A.   8 ārayā]
add. tataḥ picuvartiṃ praveśayet || A.   9 bahutve] bahutvena A.   9 'tivedanāyāṃ]
vedanāya A.   10 °dravatā] °dravatayā A.   9--10 °viddhaliṅgam] °viddham iti A.

---

[1]The compound kṛtamaṅgalasvastivācanaṃ is an emendation based on the similar text at
Su.śā.3.2.25.

[2]The *ātmanepada* participle is a permitted form, although the vulgate has the *parasmaipada*.
Ḍalhaṇa records the alternative reading bhakṣyaviśeṣair vā before bālakṛḍanakaiḥ pra-
lobhya in the vulgate.

tatra yadṛcchāviddhā̆yaṃ sirāyam ajñena
jvaradāhaśvayathuvedanāgra-
nthimanyāstambhapātanakaśirograhakarṇṇaśūlāni bhavanti
||4||

doṣasamudayād apraśastavyadhād vā tatra varttim apahṛtya
yavamadhukamañjiṣṭhāgandharvvahastamūlair

5   mmadhughṛtapragāḍhair ālepayet | surūḍhañ cainam punar
vvidhyet ||5||[3]

samyagviddham āmatailapariṣekeṇopacaret | tryahāt
tryahād varttiṃ sthūlatariṅ[4] kurvvita pariṣekañ ca tam eva
||6||

10   atha vyapagatadoṣopadrave karṇṇe 'laṃpravarddhanārthaṃ
laghupravarddhanakam āmuñcet ||7||

---

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

---

12 °śvayathu° em.] °śvayathur̠ N ; °śvayathur H.   4 °gandharvvahastamūlair] °ganda-
rvahastamūlai N.   5--7 °pariṣekeṇopa°] °pariṣekaṇopa° H.   8 °tariṅ] °tariṃ N   11
laghupravarddhanakam] la̠ pravardhanakāṃo N ; pravardhanakāma`mai' H.   8--11 ā-
muñcet] em.; muñcet N H.

---

11 tatra] tatrājñena A.   11 yadṛcchāviddhā̆yaṃ] yadṛcchaya̍ viddhā̍su A.   11 sira̍-
ya̍m] sirā̍su A.   11 sirāyam] add. kālikāmarmarikālohitikāsūpadravā bhavanti | tatra
kālikāyāṃ A.   12 jvara°] jvaro   12 °dā̍ha°] dā̍haḥ   12 °śvayathu° em.] śvayathur A.
12 °vedanā̍°] add. ca bhavati marmarikā̍yāṃ vedanā̍ jvaro A.   39.12--40.1 °granthi°]
granthayaś A.   39.12--40.1 °granthi°] add. ca lohitikā̍yāṃ A.   1 bhavanti] add. teṣu ya-
thā̍svaṃ pratikurvita || kliṣṭajihmāpraśastasūcivyadhād gāḍhataravartitvā̍d A.   3 vā̍]
add. yatra saṃrambho vedanā̍ vā̍ bhavati A.   3 apahṛtya] upahṛtyāśu A.   4 yavama-
dhuka°] madhukairaṇḍamūla° A.   4 °mañjiṣṭhāgandharvvahastamūlair] °mañjiṣṭhā-
yavatilakalkair A.   5 ālepayet] add. tā̍vad yā̍vat surūḍha iti || A.   6 vvidhyet] add.
vidhā̍naṃ tu pūrvoktam eva || A.   7 samyag°] tatra samyag° A.   5--7 ā̍matailapari-
ṣekeṇopacaret] ā̍matailena pariṣecayet A   8 tryahā̍d] add. ca A.   8 °tariṅ] °taraṃ A
8 kurvvita] dadyā̍t A.   10 'laṃpravarddhanā̍rthaṃ] om. A.   11 laghupravarddhana-
kam] laghuva° A   8--11 ā̍muñcet] kuryā̍t || A

---

[3]Ḍalhaṇa (1.16.6) stated that some do not read surūḍhañ cainam punar vidhyet.
[4]The unusual form sthūlatariṃ is supported by both manuscripts and we have retained it
in spite of only meagre evidence for the form in epic Sanskrit.

evaṃ samvarddhitaḥ karṇṇaś chidyate tu dvidhā
          nṛṇām |
          doṣato vābhighātād vā sandhānan tasya me śṛṇu
          ||8||

tatra samāsena pañcadaśasandhānākṛtayo bhavanti |[5] tad
yathā | nemisandhānakaḥ | utpalabhedyakaḥ | vallūrakaḥ |
asaṅgimaḥ | gaṇḍakarṇṇaḥ | āharyaḥ | nirvvedhimaḥ |
vyāyojimaḥ | kapaṭasandhikaḥ | arddhakapaṭasandhikaḥ |
saṅkṣiptaḥ | hīnakarṇṇaḥ | vallīkarṇṇaḥ | yaṣṭikarṇṇaḥ |
kākauṣṭhaḥ | iti | teṣu tatra pṛthulāyatasamobhayapālir
nemisandhānakaḥ | vṛttāyatasamobhayapālir
utpalabhedyakaḥ | hrasvavṛttasamobhayapālir
vallūrakarṇṇakaḥ| abhyantaradīrghaikapālir asaṅgimaḥ |
bāhyadīrghaikapālir ggaṇḍakarṇṇakaḥ | apālir ubhayato 'py
āharyaḥ | piṭhopamapālir nirvvedhimaḥ |
aṇusthulasamaviṣamapālir vyāyojimaḥ |
abhyantaradīrghaikapālir itarālpapāliḥ kapaṭasandhikaḥ |
bāhyadīrghaikapālir itarālpapāliś carddhakapaṭasandhikaḥ |
tatraite daśakarṇṇasandhivikalpa bandhyā bhavanti | teṣān
nāmabhir evākṛtayaḥ prāyeṇa vyākhyātaḥ | saṃkṣiptādayaḥ
pañcasādhyāḥ | tatra śuṣkaśaṣkulir itarālpapāliḥ saṃkṣiptaḥ
| anadhiṣṭhānapāliḥ paryantayoś ca kṣiṇamaṃso
hīnakarṇṇaḥ | tanuviṣamapālir vallīkarṇṇaḥ |
granthitamaṃsaḥ stabdhasirātatasūkṣmapālir yaṣṭikarṇṇaḥ |

9--1 nṛṇām] nṛṇā N.   2] A; doṣaṭo N H.

11 samvarddhitaḥ] vivardhitaḥ A.   2 sandhānan] sandhānaṃ A.

nirmmaṃsasaṃkṣiptāgralpaśoṇitapāliḥ kākauṣṭha iti |
baddheṣv api dāhapākasravaśophayuktā na siddhim
upayānti ||9||[6]

5 ato 'nyatamasya bandhañ cikīrṣuḥ
agropaharaṇiyoktopasambhṛtasambhāraḥ viśeṣataś

4 °sandhāna°] °sandhā° N.   7 arddhakapāṭasandhikaḥ] *om.* N.   9 kākauṣṭhaḥ] kākauṣṭhabhaḥ
H.   9 iti] ti H.   9 °yatasamo°] A; °yasamo° H; °tasamo N.   11 °bhedyakaḥ] °bhe-
dyaḥ N; °bhedakaḥ H.   12 vallūra°] valūra° N.   13 bāhya] A; bāhyaika N H.   13
ubhayato 'py] ubhayato py N.   15 aṇusthula°] aśusthula° H   16 kapāṭa°] kavāṭa° H.
17 cārddhakapāṭa° em.] vārddhakavāṭa° H; cārddhakavāpa° N.   21 paryantayoś ca]
om. N.   23 granthitamaṃsaḥ] °granthitamansaḥ N H.   1 nirmaṃsa°] A; nimāsa° N;
nirmmānsa° H.   2 °srava°] °śrava° H.   2 °śopha°] °sopha° N.

4 °daśasandhānākṛtayo] °daśakarṇabandhākṛtayaḥ A.   11--4 bhavanti] *om.* A.   12--5
nemi°] nemi° A.   7 °sandhikaḥ | arddha°] °sandhiko 'rddha°A   8 yaṣṭi°] yaṣṭi° A.   9
kākauṣṭhaḥ] kākauṣṭhaka A.   9 tatra] *om.* A.   10 nemi°] nemi° A.   12 vallūra°] va-
llūrakaḥ A.   14 piṭhopamapālir] *add.* ubhayataḥ kṣiṇaputrikāśrito A.   15 aṇusthula°]
sthulāṇu° A.   17 cārddha°] ardha° A.   18 tatraite] tatra A.   18 daśakarṇṇasandhivi-
kalpa] daśaite karṇabandhavikalpaḥ A.   18 bandhyā bhavanti] sādhyāḥ A.   18 teṣān]
teṣaṃ A.   19 nāmabhir] svanāmabhir A.   20 śuṣkaśaṣkulir] *add.* utsannapālir A.   21
ca] *om.* A.   22 °ṣamapālir] °ṣamālpapālir A.   23 granthitamaṃsaḥ] grathitamaṃsa°
A.   23 °siratatasūkṣma°] °sirasaṃtatasūkṣma° A.   1 kākauṣṭha] kākauṣṭhaka A.   2
api] *add.* tu śopha A.   2 °dāha°] *add.* °rāga° A.   2 °pāka°] *add.* °piḍaka° A.   2 °śo-
pha°] *om.* A.   4 **inserted passage**] bhavanti cātra | yasya pālidvayam api karṇasya na
bhaved iha | karṇapiṭhaṃ same madhye tasya viddhvā vivardhayet || bāhyāyām iha
dīrghāyām sandhir ābhyantaro bhavet | ābhyantarāyaṃ dīrghāyāṃ bāhyasandhir udā-
hṛtaḥ || ekaiva tu bhavet pāliḥ sthulā pṛthvī sthira ca yā | tam dvidhā pāṭayitvā tu chittvā
copari sandhayet || gaṇḍād utpāṭya maṃsena sānubandhena jīvatā | karṇapālim apāles
tu kuryān nirlikhya śāstravit || A.

[5]Cakrapāṇi (1.16.9–13) and Ḍalhaṇa (1.16.10) pointed out that others read pañcadaśaka-
rṇakṛtayaḥ (instead of pañcadaśasandhānākṛtayaḥ). Ḍalhaṇa (1.16.10) also mentioned
that some read samunnatasamobhayapāliḥ (instead of vṛttāyatasamobhayapālir) and oth-
ers do not read saṃkṣiptādayaḥ pañcasādhyaḥ.

[6]The vulgate passage inserted between 9 and 10 (from bhavanti cātra to śāstravit) was
probably also absent in the version of the *Suśrutasaṃhitā* commented on by Cakrapāṇi,
who cited it in his commentary as being "read by some" in regard to the joins (sandhāna)
that they describe.

cātropaharet[7] surāmaṇḍakṣiram udakaṃ
dhānyāmlakapālacūrṇṇañ ceti | tato 'ṅganaṃ puruṣam vā
grathitakeśāntaṃ laghubhuktavantam āptaiḥ suparigṛhitaṃ
ca kṛtvā bandhān upadhārya

5 chedyabhedyalekhyavyadhanair upapādya karṇṇaśoṇitam
avekṣyaitad duṣṭam aduṣṭam veti tato vātaduṣṭe
dhānyāmlodakābhyāṃ pittaduṣṭe śītodakapayobhyāṃ
śleṣmaduṣṭe surāmaṇḍodakābhyāṃ prakṣālya karṇṇam
punar avalikhet | anunnatam ahīnam aviṣamañ ca

10 karṇṇasandhin niveśya sthitaraktaṃ sandarśya
madhughṛtenābhyajya picuplotayor anyatareṇāvaguṇṭhya
nātigāḍhan nātiśithilaṃ sūtreṇāvabadhya
kapālacūrṇṇenāvakīryācarikam upadiśet | dvivraṇiyoktena
cānnenopacaret ||10||

5 ato] tato N.   6 °paharaṇiyo°] °pasaṃharaṇiyo° N.   1 cātropaharet] A; cāgropaha-
raṇiyāt N H.   2 puruṣam] puruṣañ N.   4 ca kṛtvā] A; *om.* N H.   4 upadhārya] upa-
pādya H.   3--6 °śoṇitam avekṣyaitad] °śoṇitata avekṣyetad N.   6 aduṣṭam] aduṣṭaś N.
6 veti] A; ceti N H.   7 dhānyāmlo°] dhānyāvlo° N   7 śītodaka°] śītodako° N.   5--9
avalikhet] avalikheta N.   10 °sandhin] °sandhiṃ N   11 °guṇṭhya] °guṇṭhyo H.   12
°gāḍhan] °gāḍham N.   12 °badhya] °baddha N.   9--14 cānnenopacaret] upapocaret
N.

5 'nyatamasya] 'nyatamaṃ A.   6 °sambhāraḥ] °sambhāraṃ A.   1 surāmaṇḍakṣiram]
surāmaṇḍaṃ kṣiram A.   2 dhānyāmlakapāla°] dhānyāmlaṃ kapāla° A.   4 bandhān]
bandham A.   5 °vyadhanair] *add.* upapannair A.   3--6 avekṣyaitad] avekṣya A.   6
tato] tatra A.   7 dhānyāmlodaka°] dhānyāmloṣṇodaka° A.   8 °maṇḍodaka°] °ma-
ṇḍoṣṇodaka° A.   8 karṇṇam] karṇau A.   5--9 avalikhet | anunnatam] avalikhyānu-
nnatam A.   10 °sandhin] °sandhiṃ A   10 niveśya] sanniveśya A.   10 sandarśya]
sandadhyāt A.   10 sandarśya] *add.* tato A.   12 nātigāḍhan] sūtreṇānavagāḍhaman A.
12 nāti°] ati° A.   12 sūtreṇāvabadhya] ca baddhvā A.   9--14 cānnenopacaret] ca vi-
dhānenopacaret A.

[7]viśeṣataś cāgropaharaṇiyāt of the MSS has been emended to viśeṣataś cātropaharet to
make sense of the list of ingredients, which is in the accusative case. Also, the repetition
of agropaharaṇiyāt in the Nepalese version suggests that its second occurrence, which
does not make good sense here, is a dittographic error.

vighaṭṭanan divāsvapnaṃ vyāyamam atibhojanam |

    vyavāyam agnisantāpam vakśramañ ca vivarjjayet ||11||

nātiśuddharaktam atipravṛttaraktaṃ kṣiṇaraktaṃ vā sandadhyāt | sa hi vātaduṣṭe raktabaddho 'rūḍho pariputanavān bhavati | pittaduṣṭe gāḍhapākarāgavān | śleṣmaduṣṭe stabdhakarṇṇaḥ kaṇḍumān atipravṛttasravaḥ śophavān kṣiṇalpamaṃso na vṛddhim upaiti ||12||

sa yadā rūḍho nirupadravaḥ karṇṇo bhavati tadainaṃ śanaiḥ śanair abhivarddhayet | anyathā saṃrambhadāhapākavedanāvān bhavati | punar api chidyeta ||13||

athāpraduṣṭasyābhivarddhanārtham abhyaṅgaḥ | godhāpratudaviṣkirānupaudakavasāmajjapayastailaṃ

14 **inserted passage**] *add.* || bha || N.   14 vighaṭṭanan] vighaṭṭanaṃ N.   2 agnisantāpam] agnisantāpa N.   11--2 vivarjjayet] varjayet N.   4 °śuddha°] °suddha° N.   4 °vṛttaraktaṃ] °vṛttaṃ raktaṃ N.   5 raktabaddho 'rūḍho em.] raktavaddho ruḍho N ; raktabaddho rūḍho H.   6 °puṭanavān] °puṭavāṃ N ; °puṭanavāṃ H.   6 °duṣṭe] °duṣṭai N.   7 śleṣma°] śleṣa° N.   7 °karṇṇaḥ] °varṇṇaḥ N.   7 °sravaḥ] °śravaḥ H.   8 kṣiṇalpa°] kṣiṇo lpa° N.   9 rūḍho] ruḍho N.   11 °pākavedanāvān] °pākarāgavedanāvān N ; °pākavedanāvāṃ H.

14 **inserted passage**] bhavati cātra | A.   14 vighaṭṭanan] vighaṭṭanaṃ A.   4 nāti°] na caśu° A.   5 raktabaddho 'rūḍho em.] rakte rūḍho 'pi A.   13--6 bhavati] *om.* A. 14--6 gāḍhapākarāgavān] dāhapākarāgavedanāvān A.   7 stabdha°] stabdhaḥ A.   1--8 °vṛttasravaḥ śophavān] °vṛttarakte śyāvaśophavān A.   8 kṣiṇalpa°] kṣiṇo 'lpa° A. 9 **inserted passage**] āmatailena trirātraṃ pariṣecayet trirātrāc ca picuṃ parivartayet | A.   9 rūḍho] surūḍho A.   9 karṇṇo] savarṇo A.   10 anyathā] ato 'nyathā A.   11 °pākavedanāvān] °pākarāgavedanāvān A.   3--11 bhavati] *om.* A.   11 api] *om.* A.   4--12 chidyeta] chidyate vā A.

gaurasarṣapajañ ca yathālābhaṃ saṃbhṛtyārkālarkabalātiba-
lānantāvidārimadhukajalaśukaprativāpan tailam pācayitvā
svanuguptan nidadhyāt ||14||[8]

svedito marditaṅ karṇṇam anena mrakṣayed

budhaḥ |
tato 'nupadravaḥ samyag balavaṃś ca vivarddhate
||15||[9]

ye tu karṇṇā na varddhante snehasvedopapāditaḥ |
teṣām apāṅge tv abahiḥ kuryāt prachānam eva ca
||16||[10]

---

13 athāpra°] athāsyaḥ pra° H.   13 °duṣṭasyābhivarddhanārtham] °duṣṭasyāvivardha-
nārtham N.   1--2 °arkālarkabalāti°] °arkālakavalāti° N.   1--2 °prativāpan] °prativā-
paṃ N.   3 °guptan] °guptaṃ N.   9--3 nidadhyāt] nidadyāt N.   3 svedito] svadito
N.   3 anena] ane 𝒳 N.   5 tato 'nupadravaḥ] tato nupadravaḥ H; tato nupadravam
N.   2--8 abahiḥ] avarhi N.   8 kuryāt] kuyāt N.   8 prachānam] prachannam H.   2--8
teṣām…||16||] *om.* K.

---

13 athāpra°] athāsyāpra° A.   13 abhyaṅgaḥ] *add.* tad yathā A.   14 °majjāpayastai-
laṃ] °majjānau payaḥ sarpis tailaṃ A.   1--2 °balānanta°] °balānantāpamārgaśvaga-
ndhā A.   1--2 °vidārimadhukajalaśuka°] °vidārigandhākṣiraśuklājalaśukamadhurava-
rgapayasyā°   1--2 °prativāpan] °prativāpaṃ A.   2 tailam] *add.* vā A.   3 °guptan]
°guptaṃ A.   10--3 svedito marditaṅ] sveditonmarditaṃ A.   10--4 anena mrakṣayed
budhaḥ] snehenaitena yojayet A.   7 **inserted passage**] yavāśvagandhāyaṣṭyāhvais ti-
laiś codvartanaṃ hitam | śatāvaryaśvagandhābhyāṃ payasyair aṇḍajivanaiḥ || tailaṃ vi-
pakvaṃ sakṣīram abhyaṅgāt pālivardhanam | A.   1--7 snehasvedopa°] svedasnehopa°
A.   2--8 apāṅge tv abahiḥ] apāṅgadeśe tu A.   2--8 ca] tu A.

---

[8]Ḍalhaṇa (1.16.18) noted that some read rājasarṣapajaṃ in the place of gaurasarṣapajaṃ.
This reading appears to have been accepted by Cakrapāṇi (1.16.18–20), who glosses rāja-
sarṣapaja as śvetasarṣapa. Cakrapāṇi also said that some read sarpis in the place of payas.
In the compound beginning with arka, Ḍalhaṇa noted that some read arkapuṣpi.

[9]N has a kākapāda after ane, but the missing letter (one would expect `na') has not been
supplied in a margin or elsewhere.

[10]Ḍalhaṇa (1.16.23) noted that some read teṣām apāṅgacchedyaṃ hi kāryam ābhyantaraṃ
bhavet.

45

amitāḥ karṇṇabandhās tu vijñeyāḥ kuśalair iha |
yo yathā suniviṣṭaḥ syāt tat tathā yojayed bhiṣak
||17||[11]

jataromā suvartmā ca śliṣṭasandhiḥ samaḥ sthiraḥ |
surūḍho 'vedano yas tu taṃ karṇṇaṃ varddhayec
chanaiḥ ||18||

1 °bandhās] °bandho H.   1 tu] stu H.   2 yojayed] yojaye N.   4 suvartmā] suparmā
N ; suvarmmā H.   4 °sandhiḥ] °sandhim N.   5 tu em.] tat N H.

1 **inserted passage**] bāhyacchedaṃ na kurvīta vyāpadaḥ syus tato dhruvāḥ || baddha-
mātraṃ tu yaḥ karṇaṃ sahasaivābhivardhayet | āmakośī samādhmātaḥ kṣipram eva vi-
mucyate || A.   2 suniviṣṭaḥ] suviśiṣṭaḥ A.   2 syāt] taṃ A.   2 yojayed bhiṣak] vi-
niyojayet A.   2 **inserted passage**] (karṇapālyamayan nṛṇaṃ punar vakṣyami suśruta
! || karṇapālyaṃ prakupita vātapittakaphas trayaḥ || 1 || dvidha vā 'py atha saṃsṛṣṭaḥ
kurvanti vividha rujaḥ | visphoṭaḥ stabdhatā śophaḥ pālyaṃ doṣe tu vātike dāhavispho-
ṭajananaṃ śophaḥ pākaś ca paittike | kaṇḍuḥ saśvayathuḥ stambho gurutvaṃ ca kaphā-
tmake || 3 || yathādoṣaṃ ca saṃśodhya kuryāt teṣaṃ cikitsitam | svedābhyaṅgapariṣe-
kaiḥ pralepāsrgvimokṣaṇaiḥ || 4 || mṛdviṃ kriyaṃ brṃhaṇiyair yathāsvaṃ bhojanais
tathā | ya evaṃ vetti doṣaṇaṃ cikitsaṃ kartum arhati || 5 || ata ūrdhvaṃ nāmaliṅgair
vakṣye pālyaṃ upadravān || atpaṭakaś cotpuṭakaḥ śyavaḥ kaṇḍuyuto bhṛśam || 6 || ava-
manthaḥ sakaṇḍuko granthiko jambulas tathā || sravi ca dāhavaṃś caiva śṛṇv eṣaṃ kra-
maśaḥ kriyaṃ || 7 || apāmārgaḥ sarjarasaḥ paṭalālakucatvacau || utpaṭake pralepaḥ syāt
tailam ebhiś ca pācayet || 8 || śampākaśigruputikan godāmedo 'tha tadvasam || varāhaṃ
gavyam aiṇeyaṃ pittaṃ sarpiś ca saṃsṛjet || 9 || lepam utpuṭake dadyāt tailam ebhiś ca
sādhitam || gauriṃ sugandhāṃ saśyamam anantaṃ taṇḍuliyakam 10 śyave pralepanaṃ
dadyāt tailam ebhiś ca sādhitam || pāṭhaṃ rasañjanaṃ kṣaudraṃ tathā syād uṣṇaka-
ñjikam 11 dadyāl lepaṃ sakaṇḍuke tailam ebhiś ca sādhitam || vraṇibhūtasya deyaṃ
syād idaṃ tailaṃ vijānatā || 12 || madhukakṣirakākolijivakādyair vipācitam || godhā-
varāhasarpaṇāṃ vasaḥ syuḥ kṛtabṛṃhaṇe || 13 || pralepanam idaṃ dadyād avasicyava-
manthake || prapauṇḍarikaṃ madhukaṃ samaṅgaṃ dhavam eva ca || 14 || tailam ebhiś
ca saṃpakvaṃ śṛṇu kaṇḍumataḥ kriyaṃ || sahadeva viśvadeva ajākṣiraṃ sasaindhavam
etair ālepanaṃ dadyāt tailam ebhiś ca sādhitam || 15 || granthike guṭikaṃ pūrvaṃ srava-
yed avapāṭya tu || tataḥ saindhavacūrṇaṃ tu ghṛṣṭvā lepaṃ pradāpayet || 16 || likhitvā
tatsrutaṃ ghṛṣṭvā cūrṇair lodhrasya jambule || kṣireṇa pratisāryainaṃ śuddhaṃ saṃro-
payet tataḥ || 17 || madhuparṇi madhūkaṃ ca ma madhukaṃ madhunā saha || lepaḥ
sraviṇi dātavyas tailam ebhiś ca sādhitam 18 pañcavalkaiḥ samadhukaiḥ piṣṭais taiś ca
ghṛtānvitaiḥ || jivakādyaiḥ sasarpiṣkair dahyamānaṃ pralepayet || 19 ||) A.   5 yas] ca
A.

[11]Ḍalhaṇa (1.16.26) stated that some read suniviṣṭaḥ (the reading of the Nepalese version)
instead of suviśiṣṭaḥ.

viśleṣitāyām atha nāsikāyaṃ
vakṣyāmi sandhānavidhiṃ yathāvat |
nāsāpramāṇaṃ pṛthivīruhaṇaṃ
patraṃ gṛhitvā tv avalambi tasya ||19||[12]

tena pramāṇena hi gaṇḍapārśvād
utkṛtya vadhraṃ tv atha nāsikāgram |
vilikhya cāśu pratisandadhīta
taṃ sādhubaddham bhiṣag apramattaḥ ||20||

suṣivitaṃ samyag ato yathāvan
nāḍidvayenābhisamīkṣya nahyet |
unnāmayitvā tv avacūrṇṇayīta
pattaṅgayaṣṭimadhukāñjanaiś ca ||21||

saṃchādya samyak picunā vraṇan tu
tailena siñced asakṛt tilānam |
ghṛtañ ca pāyyaḥ sa naraḥ sujīrṇṇe
snigdho virecyaḥ svayathopadeśam ||22||

1 nāsikāyaṃ] nāsikāya N.   3 °pramāṇaṃ] °pramāṇa° N.   3 °vīruhaṇaṃ] °vīruha-
ṇam N.   4 patraṃ] patra N.   6 vadhraṃ] vandhra H.   8 °baddham] °vaddha° N.   9
suṣivitaṃ em.] suṣivita N ; suśivitaṃ H.   12 suṣivitaṃ…||21||] *om.* K.   12 pattaṅga°
em.] pattraṅga° H ; pattaṅga° N.   13 vraṇan tu] vraṇa tun N.   16 virecyaḥ] A ; virecya
N H.   16 °deśam] °deśaḥ N.

1 viśleṣitāyām] viśleṣitāyas tv A.   1 nāsikāyaṃ] nāsikāya A.   6 vadhraṃ] baddhaṃ
A.   8 taṃ] tat A.   8 °baddham] °bandhair A.   9 suṣivitaṃ em.] susaṃhitaṃ A.   13--
10 nahyet] baddhvā A.   11 unnāmayitvā] pronnamya cainam A.   11 avacūrṇṇayīta]
avacūrṇayet tu   12 pattaṅga° em.] pataṅga° A.   13 vraṇan tu] sitena A.   16 svayatho°]
sa yatho° A.

[12]Cakrapāṇidatta said that others read nāsāsandhānavidhim here. Ḍalhaṇa (1.16.27–31)
stated that some read, chinnaṃ tu nāsikāṃ dṛṣṭvā vayaḥsthasya śaririṇaḥ | nāsānurūpaṃ
saṃcchidya patraṃ gaṇḍe niveśayet ||

rūḍhañ ca sandhānam upāgataṃ vai
tadvadhraśeṣaṃ tu punar nikṛntet |
hīnam punar varddhayituṃ yateta
samañ ca kuryād ativṛddhamaṃsam
||23|| iti om ||

5

1 sandhānam] sandhām N.   1 upāgataṃ] upāgataś H.   1 vai] cai H.   2 °śeṣaṃ]
°seṣan N.   3 yateta] yatetaḥ N.   4 °maṃsam] °mānsam N.   4 om] *om.* N.   20--4
rūḍhañ…om] *om.* K.

1 vai] syāt A.   2 tadvadhra°] tad ardha° A   3 hīnam] hīnāṃ A.   4 samañ] samāṃ
A.   4 °maṃsam] °maṃsam A.   4 om] *om.* A.   6 **inserted passage**] nāḍiyogaṃ vi-
nauṣṭhasya nāsāsandhānavad vidhim | ya evam eva jānīyāt sa rājñaḥ kartum arhati ||
A.

Translation of Sūtrasthāna 16

1   Now we shall expound the method for piercing the ear.[124]
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,[125] on the lap of a wet-nurse.[126] Then, he should pull the ear with his left hand and pierce straight through with his right hand at a naturally-occurring cleft.[127]

---

124   The topic of piercing the ear (*kaṛnavyadha*) is not discussed in the *Carakasaṃhitā* (**meul-hist**), but it is mentioned in some texts that followed the *Suśrutasaṃhitā*, such as the *Kaśāpyasaṃhitā* (**meul-hist**). Also, the instrument for piercing the ear is described in the *Aṣṭāṅgahṛdayasaṃhitā* 1.26.26 (**kunt-1939**). In the versions of the text known to Ḍalhaṇa (**vulgate**) and Cakrapāṇidatta (**acar-1939**), the heading of this chapter is "the method of piercing and joining the ear" (**karṇavyadhabandhavidhi**), instead of the Nepalese version's "the method of piercing the ear" (**karṇavyadhavidhi**). The topic of joining the ear (**karṇabandha**) 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 **birc-2021**. Ḍalhaṇa (**vulgate**) and Cakrapāṇidatta (**acar-1939**) 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 **vulgate**).
      Some texts use the adjective **karṇa-vedhanī** rather than °**vyadhanī**.
125   The causative form **vyadhayet** is known in Classical Sanskrit (**whit-root**).
      The compound **kṛtamaṅgalasvastivācanaṃ** "who has received a benediction and the recitation of a blessing" is an emendation based on the similar text at 3.2.25 (**vulgate**). Cf. also 3.10.8, 24 (**vulgate**) that have slightly different formulations.
126   The versions of 1.16.3 known to Cakrapāṇidatta (**acar-1939**) and Ḍalhaṇa (**vulgate**) have the additional compound **kumāradharāṅke** ("on the lap of one who holds the child") after **dhātryaṅke**. The gender of **kumāradhara** is made clear by Ḍalhaṇa's gloss "a man who holds the child." Also, both versions add **bālakrīḍanakaiḥ pralobhya** ("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 Ḍalhaṇa on 1.16.3 (**vulgate**), the toys include replica elephants, horses, bulls and parrots. Ḍalhaṇa further mentions that others read **bhakṣyaviśeṣair vā** ("or by special treats") before **bālakrīḍanakaiḥ**, but we see no trace of these small kindnesses in our witnesses.
127   The versions of 1.16.3 of Cakrapāṇidatta (**acar-1939**) and Ḍalhaṇa (**vulgate**) add that this naturally-occurring cleft is illuminated by a ray of sunshine (**ādityakarāvabhā-**

For a boy, do the right ear first; for a girl, do the left one. Use a needle on a thin ear; an awl (*ārā*) on a thick one.[128]

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.[129]

4 In this context, if an ignorant person randomly pierces a duct (*sirā*) there will be fever, burning, swelling (*śvayathu*), pain, lumps (*granthi*), paralysis of the nape of the neck (*manyāstambhā*), convulsions (*apatānaka*), headache or sharp pain in the ear.[130]

5 Having removed the wick (*vartti*) because of the accumulation of humours or an unsatisfactory piercing at that location,[131] he should smear

---

site).

The syntax of this slightly long sentence is unusual in beginning with the dual object **tau** "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.

128 Ḍalhaṇa on 1.16.3 (**vulgate**) clarifies that the awl is a shoe-maker's knife for piercing leather. He also cites the authority of "the notes of Lakṣmaṇa" (*Lakṣmaṇaṭippaṇaka*) 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 Ḍalhaṇa in twelfth-century Bengal. See **meul-hist**.

129 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.

130 This passage is significantly augmented in Cakrapāṇidatta's and Ḍalhaṇa's versions, to outline the specific problems caused by piercing three ducts called **kālikā**, **marmikā** and **lohitikā** (1.16.4 (**acar-1939**) and 1.16.5 (**vulgate**) 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 (**acar-1939**) cites several verses attributed to Bhoja on the problems caused by piercing these three ducts in the ear flap: 'lohitikā, marmikā 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 **lohitikā**. Pain and lumps are thought to arise from piercing **marmikā**. Piercing **kālikā** gives rise to swelling, fever and burning.'

131 In addition to these reasons, 1.16.6 of Ḍalhaṇa at 1.16.6 (**vulgate**), added "because of piercing with a painful, crooked and unsatisfactory needle" (kliṣṭajihmāpraśastasūcīvyadhāt) and "because of a wick that is too thick" (gāḍhataravartitvāt). Ḍalhaṇa was aware of the reading in the Nepalese version because in his commentary on 1.16.6 (**vulgate**) he noted that some read "because of the accummulation of humours" rather than "because of piercing with a painful, crooked and unsatisfactory needle or because of a wick that is too thick." On the concept of humoral accumulation (*samu-*

it with barley, liquorice, Indian madder (*mañjiṣṭhā*), and the root of the castor oil tree (*gandharvahasta*), thickened with honey and ghee. And when it has healed well, he should pierce it again.[132]

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 (*varti*) and do the very same sprinkling.

7 Once the ear is free from humours or side-effects, one should put in a light dilator (*pravardhanaka*) in order to enlarge it enough.[133]

8 *A person's ear enlarged in this way can split in two, either as a result of the humours[134] or a blow.*

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

9 Here, there are, in brief, fifteen ways of mending the ear flap.[135] They are as follows: Rim-join (*nemīsandhānakaḥ*), Lotus-splittable (*utpalabhedyaka*), Dried Flesh (*vallūraka*), Fastening (*āsaṅgima*), Cheek-ear (*gaṇḍakarṇa*), Take away (*āhārya*), Ready-Split (*nirvedhima*), Multi-joins (*vyāyojima*), Door-hinge (*kapāṭasandhika*), Half door-hinge (*ardhakapāṭasandhika*), Compressed (*saṃkṣipta*), Reduced-ear (*hīnakarṇa*), Creeper-ear (*vallīkarṇa*), Stick-ear (*yaṣṭīkarṇa*), and Crow's lip (*kākauṣṭha*).[136]

In this context, among these,

---

dāya), see the important analysis by **meul-1992**.

132 The description of the drug is ambigious: 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.

133 Cakrapāṇidatta on 1.16.6 (**acar-1939**) and Ḍalhaṇa on 1.16.8 (**vulgate**) pointed out that the dilator can be made of wood, such as that of the prickly chaff flower (*apāmarga*), the neem tree (*nimba*) and the cotton plant (*kārpāsa*). Ḍalhaṇa added that it can also be made of lead (*sīsaka*) and should have the shape of the datura flower (*dhattūrapuṣpa*). The manuscripts have variant readings for **laghupravardhanakam āmuñcet** at this point that include a scribal emendation, none of which construe plausibly. It is possible that the unusual verb form ā+√**muc** puzzled the scribes and caused the implausible scribal readings and emendations.

134 Ḍalhaṇa on 1.16.9 (**vulgate**) notes that the word **doṣa** here can refer to either a humour, such as wind (*vāta*), as we have understood it, or a disease generated from a humour.

135 The Nepalese version uses the word **sandhāna** 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 Ḍalhaṇa's version (**vulgate**) uses the term **bandha** here and at the very beginning of the chapter (i.e., 1.16.1) to introduce the topic of repairing the ear.

136 For an artist's impression of these different kinds of joins in the ear flap, see **majn-1975** (reproduced as Figure 3.2 in **wuja-2003**).

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

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

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

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

"Cheek-ear" (**gaṇḍakarṇa**):   one flap is longer on the outside.[137]

"Take-away" (**āhārya**):   the flaps are missing, in fact, on both sides.

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

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

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

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

'These ten options (*vikalpa*) for joins (*sandhi*) of the ear should be bound. They can mostly be explained as resembling their names.[138] The five from compressed (*saṃkṣipta*) on are incurable.[139] Among these, "compressed" has a dry ear canal and the other flap is small. "Reduced ear" has flaps that have no base and have wasted flesh on their edges. "Creeper-ear" has flaps that are thin and uneven. "Stick-ear" has lumpy (*granthita*) flesh and the flaps are stretched thin and have stiff (*stabdha*) ducts (*sirā*). "Crow-lip" has a flap without flesh with compressed (*saṃkṣipta*) tips and little blood. Even when they are bound up, they do not heal because they are hot, inflamed, suppurating (*srāva*), or swollen.[140]

---

137 For an artist's impression of this join, see **majn-1975** (reproduced as Figure 3.3 in **wuja-2003**).

138 Cakrapāṇidatta on 1.16.9–13 (**acar-1939**) and Ḍalhaṇa on 1.16.10 (**vulgate**) provide examples of how the names of these joins describe their shapes. For example, the rim-join (*nemīsandhānaka*) is similar to the join of the rim of a wheel (*cakradhārā*).

139 Ḍalhaṇa on 1.16.10 (**vulgate**) 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.

140 The version of 1.16.11–13 known to Ḍalhaṇa (**vulgate**) has four verses (*śloka*) at this

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.[141]　And in this regard, he should particularly gather[142] decanted liquor (*surāmaṇḍa*), milk, water, fermented rice-water (*dhānyāmla*), and powdered earthenware crockery (*kapālacūrṇa*).[143]

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 (*bandha*) and then applies them by means of cutting (*chedya*), splitting (*bhedya*), scarification (*lekhya*), or piercing (*vyadhana*).[144]

Next, he should examine the blood of the ear to know whether it is tainted (*duṣṭa*) or not. If it is tainted by wind, the ear should be bathed with fermented rice-water (*dhānyāmla*) and water; if tainted by choler, then cold water and milk should be used; if tainted by phlegm, then decanted liquor (*surāmaṇḍa*) and water should be used, and then he should scarify it again.

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 (*picu*)

---

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 *Suśrutasaṃhitā* known to Cakrapāṇidatta. He cites the verses separately in his commentary, the *Bhānumatī* (**acar-1939**), introducing each one as 'some people read' (**ke cit paṭhanti**). However, in Trikamajī Ācārya's edition of the *Sūtrasthāna* of the *Bhānumatī*, the root text is largely identical to the one commented on by Ḍalhaṇa (**vulgate**), even in instances like this where Cakrapāṇidatta's commentary indicates that he was reading a different version of the *Suśrutasaṃhitā*. See further the discussion on p. 7 above.

141 *Suśrutasaṃhitā* 1.5 (**vulgate**), probably verse 6 especially that lists the equipment and medications that a surgeon should have ready.

142 The reading in the Nepalese manuscripts of **viśeṣataś cāgropaharaṇīyāt** has been emended to **viśeṣataś cātropaharet** to make sense of the list of ingredients, which is in the accusative case. Also, the repetition of **agropaharaṇīyāt** in the Nepalese version suggests that its second occurrence, which does not make good sense here, is a dittographic error.

143 The term **kapālacūrṇa** is unusual. Ḍalhaṇa (**vulgate**) defines it as the powder of fragments of fresh earthen pots and Cakrapāṇidatta (**acar-1939**) as the powder of earthenware vessels.

144 There are syntactic difficulties in this sentence. We have adopted the reading in Ḍalhaṇa's version (**vulgate**), which has **ca kṛtvā** following **suparigṛhītam**. It is likely that a verb, such as **kṛtvā**, dropped out of the Nepalese transmission.

and gauze (*plota*), 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 (*ācārika*). And he should supplement with food as taught in the "Two Wound" chapter.[145]

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.[146] For when the ear is tainted by wind, then it is obstructed by blood (*raktabaddha*), unhealed and will peel. When tainted with choler, is becomes pinched (*gāḍha*), septic (*pāka*) and red. When tainted by phlegm, it will be stiff (*stabdha*) and itchy. It has excessively copious suppuration (*srāva*) and is śopha (*puffed up*). It has it has a small amount of wasted (*kṣīṇa*) flesh and it will not grow.[147]

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 (*saṃrambha*), 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 (*godhā*), scavenging (*pratuda*) and seed-eating (*viṣkira*) birds, and creatures that live in marshes or water,[148] fat, marrow, milk, and sesame oil, and white mustard oil.[149] Then cook the oil with an admixture (*prativāpa*) of the following: purple calotropis (*arka*), white calotropis

---

145 *Suśrutasaṃhitā* 4.1 (**vulgate**).

146 1.16.17 of Ḍalhaṇa's version (**vulgate**) reads "impure" for the Nepalese "too pure," which would appear to make better medical sense. Emending the text to **nāśuddha-** for **nātiśuddha-** in the Nepalese recension would yield the same meaning as the Ḍalhaṇa's version.

147 In his edition of *Suśrutasaṃhitā*, Ācārya (**vulgate**) 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' (**āmatailena trirātraṃ pariṣecayet trirātrāc ca picuṃ parivartayet**).

148 For such classifications, see **zimm-1999** and **smit-1994**.

149 Ḍalhaṇa's version of 1.16.19 (**vulgate**)ncludes ghee (*sarpis*). However, Ḍalhaṇa's remarks on this passage and Cakrapāṇidatta's on 1.16.18 (**acar-1939**) indicate that they knew a version of this recipe, perhaps similar to the Nepalese one, that did not include ghee (). Ḍalhaṇa 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.

(*alarka*), country mallow (*balā*), 'strong Indian mallow' (*atibalā*), country sarsaparilla (*anantā*), beggarweed (*vidāri*), liquorice (*madhuka*) and hornwort (**jalaśūka → jalanīlikā**[150]).[151] This should then be deposited in a well-protected spot.

15   *The wise man who has been sweated should rub the massaged* (mardita*) ear with it.*

    Then it will be free of complications, and will enlarge properly and be strong.[152]

16   *Ears which do not enlarge even when sweated and oiled, should be scarified at the edge of the hole (*apāṅga*), but not outside it.*[153]

17   *In this tradition, experts know countless repairs to ears. So a physician who is very intent (*suniviṣṭa*) on working in this way may repair (*yojayed*) them.*[154]

18   *If an ear has grown hair, has a nice hole, a firm join, and is strong*

---

150 Ceratophyllum demersum, L. This name is not certain. In fact, Ḍalhaṇa on 1.16.19 (**vulgate**) notes that some people interpret it as a poisonous, hairy, air-breathing, underwater creature.

151 The version of 1.16.19 known to Ḍalhaṇa (**vulgate**) adds several ingredients to this admixture, including **apāmārga**, **aśvagandhā**, **kṣiraśuklā**, **madhuravarga** and **payasyā**. Also, it has **vidārigandhā** instead of **vidāri**. When commenting on 1.16.19, Ḍalhaṇa (**vulgate**) notes that some do not read **madhuravarga** and **payasyā**. Therefore, there were probably other versions of this recipe with fewer ingredients, as seen in the Nepalese version.

152 For these aims (i.e., healing and enlarging the ear), the text known to Ḍalhaṇa (**vulgate**) has an additional verse and a half describing an ointment for rubbing the ear (*udvartana*) and sesame oil (*taila*) cooked with various medicines for massage. Cakrapāṇidatta (**acar-1939**) does not comment on these verses, nor verse 15 of the Nepalese version, and so the version of the *Suśrutasaṃhitā* known to him may not have included them.

153 Ḍalhaṇa's version of 1.16.23 (**vulgate**) adds another hemistich that states more explicitly that the scarification should not be done on the outside of hole as it will cause derangement.

154 After verse 17, the 1938 edition of Ācārya (**vulgate**) 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 (**acar-1939**) and Ḍalhaṇa (**vulgate**) 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 (*miśrakacikitsa*) (SS 5.25), which does indeed begin with a discussion of the disease **paripoṭa**. Ḍalhaṇa goes on to say that some believe that these verses were not composed by sages and, therefore, do not read them.

and even, well-healed, and free from pain, then one can enlarge it slowly.[155]

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 (*vadhra*)[156] with the same measurements off the cheek, the end of the nose is then scarified.[157] Then the undistracted (*apramatta*) physician, should quickly put it back together so that it is well joined (*sādhubaddha*).*

21 *Having carefully observed that it has been sewn up properly, he should then fasten it along with two tubes.[158] Having caused it to be raised,[159] the powder of sappanwood (*pattāṅga*),[160] liquorice and Indian barberry.[161] should be sprinkled on it.*

22 *The wound should be covered properly with cotton (*picu*) and should be moistened repeatedly with sesame oil. Ghee should be given to the man to drink. His digestion being complete, he should be oiled and purged in accordance with the instructions specific to him.[162]*

---

155 The order of verses 17 and 18 are reversed in Ḍalhaṇa's version (**vulgate**).

156 The version of 1.16.28b known to Ḍalhaṇa (**vulgate**) reads "bound, connected (*baddham*)" instead of "slice of flesh (*vadhra*)." This is a critical variant from the surgical point of view. If the slice remains connected, it will have a continuing blood supply. This is one of the effective techniques that so astonished surgeons witnessing a similar operation in Pune in the eighteenth century (**wuja-2003**).

157 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, Ḍalhaṇa (**vulgate**) 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.

158 Ḍalhaṇa noted that the two tubes should be made of reed (*nala*) or the stalk of the leaf of castor oil plant (*eraṇḍapatranāla*) (on 1.16.21 (**vulgate**)). They should not be made of lead or betel nut because the weight will cause them to slip down.

159 The Sanskrit term **unnāmayitvā** in 1.16.21 is non-Pāṇinian.

160 Caesalpinia sappan, L. For **pattāṅga** there are manuscript variants **pattrāṅga** (MS Kathmandu NAK 5-333) and **pattaṅga** (MS Kathmandu NAK 1-1079). Also, MS Kathmandu KL 699 (f. 14r:1) has **pattrāṅga** in a verse in 1.14 (cf. 1.14.36 (**vulgate**)). The text known to Ḍalhaṇa has **pataṅga** (1.16.29 (**vulgate**)) and this term is propagated in modern dictionaries.

161 Berberis aristata, DC. Ḍalhaṇa understands it as elixir salve (*rasāñjana*) (**vulgate**).

162 The expression **svayathopadeśa** is ungrammatical but supported in all available wit-

23   *And once healed and really come together, what is left of that slice of*
       *flesh (*vadhra*) should then be trimmed.*[163] *If it is reduced (*hīna*),*
       however, one should make an effort to stretch it, and one should
       make its overgrown flesh smooth.[164]

---

nesses.

163 The vulgate transmission has lost the word **vadhra** and replaced it with **ardha** "half,"
which makes little sense in this surgical context.

164 Ḍalhaṇa accepted a verse following this, 1.16.32 (**vulgate**), 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.
Cakrapāṇidatta also did not comment on this additional verse (**acar-1939**).