

# History of Science in South Asia

## Special issue:

# Transmutations: Rejuvenation, Longevity, and Immortality Practices in South and Inner Asia

Edited by Dagmar Wujastyk, Suzanne Newcombe,  
and Christèle Barois

# Rasāyana in Classical Yoga and Ayurveda

Philipp A. Maas

University of Leipzig

MLA style citation form: Philipp A. Maas. "*Rasāyana* in Classical Yoga and Ayurveda." *History of Science in South Asia*, 5.2 (2017): 66–84. DOI: 10.18732/hssa.v5i2.32.

Online version available at: <http://hssa-journal.org>

## HISTORY OF SCIENCE IN SOUTH ASIA

A journal for the history of all forms of scientific thought and action, ancient and modern, in all regions of South Asia, published online at <http://hssa-journal.org>

ISSN 2369-775X

### *Editorial Board:*

- Dominik Wujastyk, University of Alberta, Edmonton, Canada
- Kim Plofker, Union College, Schenectady, United States
- Dhruv Raina, Jawaharlal Nehru University, New Delhi, India
- Sreeramula Rajeswara Sarma, formerly Aligarh Muslim University, Düsseldorf, Germany
- Fabrizio Speziale, Université Sorbonne Nouvelle – CNRS, Paris, France
- Michio Yano, Kyoto Sangyo University, Kyoto, Japan

### *Publisher:*

History of Science in South Asia

### *Principal Contact:*

Dominik Wujastyk, Editor, University of Alberta

Email: [wujastyk@ualberta.ca](mailto:wujastyk@ualberta.ca)

### *Mailing Address:*

History of Science in South Asia,  
Department of History and Classics,  
2–81 HM Tory Building,  
University of Alberta,  
Edmonton, AB, T6G 2H4  
Canada

This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge.

Copyrights of all the articles rest with the respective authors and published under the provisions of [Creative Commons Attribution-ShareAlike 4.0 License](#).

The electronic versions were generated from sources marked up in  $\text{\LaTeX}$  in a computer running GNU/LINUX operating system. PDF was typeset using  $\text{\XeTeX}$  from  $\text{\TeX Live}$ . The base font used for Latin script and oldstyle numerals was  $\text{\TeX Gyre Pagella}$  developed by [gust](#), the Polish  $\text{\TeX}$  Users Group.

# Rasāyana in Classical Yoga and Ayurveda

Philipp A. Maas

University of Leipzig

## INTRODUCTION

THE *PĀTANJALAYOGASĀSTRA* is the oldest surviving systematic Sanskrit exposition of yoga from a brahmanical perspective. It was probably partly compiled and partly composed at the end of the fourth or the beginning of the fifth century CE by an author-redactor with the name Patañjali.<sup>1</sup> In the second and third chapter of his work, Patañjali discussed various superhuman powers or abilities (*aiśvarya* or *siddhi*) that a yogi obtains during his progress towards spiritual liberation.<sup>2</sup> These superpowers arise in consequence of practicing the eight ancillaries or means (*aṅga*) of yoga. Already at an early stage on the way to liberation, the yogi acquires a whole range of extraordinary abilities by keeping ascetic commitments (*yama*) and observances (*niyama*).<sup>3</sup> Additional superpowers and paranormal insights arise through the sequential application of three forms of object-related meditations, i.e., fixation (*dharaṇā*), meditation or visualization (*dhyāna*), and absorption (*samādhi*).<sup>4</sup> These specifically yogic practices are, however, not the only way of reaching paranormal abilities. Patañjali also recognized four additional non-yogic means to superpowers, of which he provides a list at the very beginning of the fourth chapter (*pāda*) of his *Pātañjalayogaśāstra*:

Birth, herbs, mantras, ascetic practice, and absorption generate superpowers (*siddhi*) (*sūtra* 4.1). A superpower [generated] by birth is innate to the body. “By herbs” [means] from *rasāyana* in the mansions of Asuras, and the like. “By mantras” [means] attaining the power of levitation, to become minute, etc. Ascetic practice [generates] the superpower of reaching whatever one wants, e.g., one goes wherever

1 See Maas 2013: 57–68.

2 On yogic powers in different South Asian traditions, see Jacobsen 2012.

3 See *Pātañjalayogaśāstra* 2.35–2.45.

4 See *Pātañjalayogaśāstra* 3.16–3.55.

one wants to go, in any form one desires, and the like. Absorption generates the superpowers that have been explained [in the previous section of the *Pātañjalayogaśāstra*].<sup>5</sup>

This brief passage provides a window to a detail of the religious world view of Patañjali and his contemporaries, in which the belief in the possibility of overcoming the limitations of human existence played a prominent role.<sup>6</sup> From the perspective of yoga, the most important method leading to superpowers is the last-mentioned absorption (*samādhi*), which Patañjali portrayed comprehensively in the preceding part of his *yogaśāstra*.<sup>7</sup> The remaining four means for the generation of *siddhis* are (1) birth (*janman*), i.e., according to the commentaries of Vācaspatimiśra I and of Śaṅkara, rebirth as a divine being with innate extraordinary powers, (3) *mantras*, i.e., magical formula, and (4) ascetic practices that apparently differ from the specifically yogic form of asceticism that Patañjali referred to as the result of religious observances (*niyama*) in *Pātañjalayogaśāstra* 2.34–44.<sup>8</sup> The present article is focused on the second mentioned cause of superpowers, i.e., “herbs” (*oṣadhi*), because Patañjali related this cause to *rasāyana*.

Patañjali’s reference to *rasāyana* is brief and quite obscure. It is not at all obvious what exactly he had in mind when he explained that the generation of superpowers “‘by herbs’ [means] from *rasāyana* in the mansions of Asuras, and the like.” In attempting to elucidate this difficult passage, the following part of this chapter analyses the explanations of this passage by the three commentators Vācaspatimiśra I, Bhoja and Śaṅkara, which finally leads to a discussion of the meaning of *rasāyana* in Ayurveda.

## 1. VĀCASPATIMIŚRA’S TATTVAVAIŚĀRADĪ ON RASĀYANA

VĀCASPATIMIŚRA I COMMENTED ON Patañjali’s reference to *rasāyana* in his tenth-century *Tattvavaiśāradī* as follows:

5 *Pātañjalayogaśāstra* 4.1 (Āgāṣe 1904:176, lines 1–5): जन्मौषधिमन्त्रतपःसमाधिजाः सिद्धयः (sūtra 4.1)। देहान्तरिता जन्मना सिद्धिः। ओषधिभिरसुरभवनेषु रसायनेनेत्येवमादिः। मन्त्रैराकाशगमनाणिमादिलाभः। तपसा संकल्पसिद्धिः, कामरूपी यत्र तत्र कामग इत्येवमादि। समाधिजाः सिद्धयो व्याख्याताः।

6 Vasubandhu provided a very similar account of superpowers from a Buddhist perspective in his *Abhidharmakośabhāṣya* 7.53. Whether *Pātañjalayogaśāstra* 4.1 is a refor-

mulation of *Abhidharmakośabhāṣya* 7.53 or whether both accounts of superpowers are derived from a common source, which at the present stage of research is unknown, cannot be decided with certainty.

7 See above, note 4.

8 On the power-generating effect of non-yogic ascetic practices as depicted in the *Mahābhārata*, see Shee 1986:196–200 196–200.

He (i.e., the author of the *bhāṣya*-part of the *Pātañjalayogaśāstra*) explains superpowers generated by herbs: “In the mansions of Asuras.” It is well-known that if a human being reaches for some reason or other a mansion of Asuras and applies the *rasāyana* that lovely Asura maidens present to him, he attains freedom from old age and death and other superpowers. Or by using *rasāyana* in this very world [one may obtain superpowers], like the sage Māṇḍavya, who inhabited the Vindhya mountains after (or: because) he had used *rasa*.<sup>9</sup>

In this brief explanation, Vācaspati differentiated two kinds of *rasāyana* that are supposedly available in different parts of the cosmos, i.e., either “in the mansions of Asuras” or “in this very world.” In both cases *rasāyana* generates the extraordinary capacity of overcoming old age and death as well as other superpowers. In order to exemplify how humans may use *rasāyana*, Vācaspati referred to the sage (*muni*) Māṇḍavya. This sage is a well-known character in several narratives. The large majority of these narrate how the sage survived impalement that he suffered as a punishment for a crime of which he was innocent.<sup>10</sup> Quite surprisingly, neither of these mythological accounts of Māṇḍavya’s life contains the motif of *rasāyana*. Nor does any story mention the residence of its protagonist in the Vindhya mountains. It therefore appears that Vācaspati alluded here to an altogether different narrative of the sage Māṇḍavya than the ones that have survived to the present day,<sup>11</sup> and, accordingly, it remains unclear which conception of *rasāyana* in the world of humans Vācaspati expected to share with his audience. The only specific information that he provides is that the word *rasa* in *rasāyana* refers to a substance that may be used or consumed (*upa+√yuj*). Due to the semantic polyvalence of the term *rasa*,<sup>12</sup> the substance that Vācaspati may have referred to defies identification.

Vācaspati’s reference to *rasāyana* in a different realm of the cosmos is also obscure. The only information that the commentator added to Patañjali’s original remark is that *rasāyana* is applied by lovely Asura maidens, i.e., by the girls of a special class of demonic beings. What may have been Vācaspati’s source of this

9 *Tatvavaiśārādī* on *Pātañjalayogaśāstra* 4.1. (Āgāṣe 1904:176, lines 17–20): ओषधिसिद्धिमाह – असुरभवेनेष्विति। मनुष्यो हि कुतश्चिन्मितादसुरभवनमुपसंप्राप्तः कमनीयाभिरसुरकन्याभिरुपनीतं रसायनमुपयुज्याजरामरणत्वमन्याश्च सिद्धीरासादयति। इहैव वा रसायनोपयोगेन यथा माण्डव्यो मुनी रसोपयोगाद्विन्ध्यवासीति।

10 *Mahābhārata* 1.101 (Sukthankar, Belvalkar, et al. 1933–1959). The different

versions of the narrative are analysed in Utgikar 1923.

11 Wezler (1997:535, n.12) argues, however, that Vācaspati mentioned Māṇḍavya in the context of *Pātañjalayogaśāstra* 4.1 as an example for miraculously achieved longevity.

12 Dagmar Wujastyk 2017:1 (in this volume).

specification? Did he expect his readers to share with him mythological knowledge that is, again, lost today? Or did Vācaspati provide an *ad hoc* explanation of Patañjali's reference to the mansions of Asuras that he himself did not fully understand?

It is possible that Vācaspati's explanation of *Pātañjalayogaśāstra* 4.1 was influenced by a further mention of *rasāyana* that occurs in *Pātañjalayogaśāstra* 3.51. There, Patañjali introduces a fourfold classification of yogis according to their respective spiritual progress towards liberation.<sup>13</sup> The yogi on the second level, who is called a yogi "at the honey stage," is spiritually advanced to such a degree that he becomes attractive to heavenly beings or gods. The gods may then tempt him to abandon his spiritual aspirations in favor of heavenly pleasures. Patañjali describes this as follows:

If heavenly beings, i.e., the gods, notice in this regard the purity of the mind of a Brāhmaṇa who realizes the stage [of spiritual progress called] "Full of Honey," they invite him to their heavenly places: "Hello there, please stay here, please enjoy yourself here. This enjoyment is lovely. This girl is lovely. This *rasāyana* prevents old age and death ...".<sup>14</sup>

The gods offer the yogi sexual pleasure (*bhoga*) along with a means to overcome its innate transience, i.e., a *rasāyana* that "prevents old age and death." This purpose of *rasāyana*, i.e., longevity, agrees with the one that Vācaspati specifies in his commentary on *Pātañjalayogaśāstra* 4.1 in order to supplement the sparse information that Patañjali had provided.

Patañjali's two references to *rasāyana* in *Pātañjalayogaśāstra* 3.51 and 4.1 differ from each other mainly in two respects. First, the account of *rasāyana* in 3.51 does not mention mansions or Asuras, and, second, the reference in 4.1 does not contain the motif of sexual pleasure. Since a reference to the purpose of *rasāyana* as well as the motif of lovely girls occur in 3.51 as well as in Vācaspati's commentary on 4.1, Vācaspati's comment on 4.1 may result from the combination of both references to *rasāyana*.

Vācaspati may have been acquainted with the well-known mythological account of Naciketas' encounter with the god of death in the *Kaṭha Upaniṣad*. This narrative is not located in an Asura mansion but in the house of Death in the next world. There, Death offers three boons to Naciketas, who finally chooses an answer to a question concerning the nature of the afterlife of humans. Death

<sup>13</sup> See Maas 2014: 78–85.

<sup>14</sup> *Pātañjalayogaśāstra* 3.51 (Āgāṣe 1904: 169, lines 7–10): तत्र मधुमती भूमि साक्षात्कुर्वतो ब्राह्मण-

स्य स्थानिनो देवाः सत्त्वविशुद्धिमनुपश्यन्तः स्थानैरुपनि-  
मन्त्रयन्ते "भो इहास्यतामिह रम्यतां कमनीयोऽयं भोगः  
कमनीयेयं कन्या रसायनमिदं जरामृत्युं बाधते ..." इति।

is initially reluctant to answer this question and tries to persuade Naciketas to relinquish this wish by offering various alternatives in the following way:

<sup>24</sup>And if you would think this an equal wish – You may choose wealth together with a long life; Achieve prominence, Naciketas, in this wide world; And I will make you enjoy your desires at will. <sup>25</sup>You may ask freely for all those desires, Hard to obtain in this mortal world; Look at these lovely girls, with chariots and lutes, girls of this sort are unobtainable by men.<sup>15</sup>

This passage from the *Kaṭha Upaniṣad* shares with Vācaspati's explanation of *Pātañjalayogaśāstra* 4.1 the motifs of longevity and sexual pleasures in a different realm of the cosmos as an alternative to a spiritual or philosophical aspiration. Whether or not the *Kaṭha Upaniṣad* actually may have influenced Vācaspati remains, however, an open question.

In any case, Vācaspati's explanation of *rasāyana* does not fully elucidate its base text, partly because Vācaspati's reference to Māṇḍavya remains incomprehensible due to historical contingencies and partly because Vācaspati did not have much to say on the specifics of *rasāyana* treatments in Asura mansions. Even on the basis of this limited information it is, however, possible to conclude that the commentator thought of *rasāyana* as a magically potent herbal elixir of life. This elixir is unavailable for humans under normal conditions. In this respect, Vācaspati follows his base text, i.e., *Pātañjalayogaśāstra* 4.1, closely.

## 2. BHOJA'S RĀJAMĀRTAṆḌA ON RASĀYANA

APPROXIMATELY ONE-HUNDRED YEARS AFTER VĀCASPATI, i.e., around 1040 CE,<sup>16</sup> king Bhoja of Mālava composed a commentary exclusively on the *sūtra* part of the *Pātañjalayogaśāstra* with the title *Rājamārtanḍa*.<sup>17</sup> This commentary is indebted to the *bhāṣya* part of the *Pātañjalayogaśāstra* to such a degree that it can hardly count as an independent work in its own right. In some instances, however, Bhoja's commentary expands the *bhāṣya*. This is also the case in the *Rājamārtanḍa* on *Yoga Sūtra* 4.1. There, Bhoja provides the following explanations how "herbs" (*oṣadhi*) function as a source of superpowers:

<sup>15</sup> *Kaṭha Upaniṣad* 1.24 f. (ed. and tr. Olivelle 1998: 378 f.): एतत्तुल्यं यदि मन्यसे वरं वृणीष्व वित्तं चिरजीविकां च। महाभूमौ नचिकेतस्त्वमेधि कामानां त्वा कामभाजं करोमि॥ २४॥ ये ये कामा दुर्लभा मर्त्यलोके सर्वान्कामांश्छन्दतः प्रार्थयस्व। इमा रामाः सरथाः सतूर्या न हीदृशा लम्भनीया मनुष्यैः।

<sup>16</sup> For Bhoja's date, see Pingree 1970–1994: A4, 337.

<sup>17</sup> Bhoja did not consider the *sūtra* part of the *Pātañjalayogaśāstra* a work in its own right, see Maas 2013: 61.

Superpowers from herbs” are those caused by the application of *rasāyana* and so on that involves mercury and so on.<sup>18</sup>

In this succinct explanation, Bhoja explains the word “herbs” in agreement with the *bhāṣya* as a reference to *rasāyana*. Bhoja replaces, however, Patañjali’s obscure reference to the mansions of Asuras with a reference to mercury (*pārada*). This explanation is at odds with *sūtra* 4.1, because mercury cannot count as an herbal ingredient. Bhoja’s explanation is nevertheless informative. It indicates that he, in contrast to Patañjali and Vācaspati, identified *rasāyana* as an alchemical practice.<sup>19</sup> In this regard, his commentary is committed to the intellectual climate of his own time rather than to that of the composition of the *Pātañjalayogaśāstra*, from which no literary references to alchemical practices in South Asia exist.<sup>20</sup>

### 3. ŚAṆKARA’S PĀTAÑJALAYOGAŚĀSTRAVIVARAṆA ON RASĀYANA

PROBABLY THE EARLIEST, but definitely the most informative commentary on the *Pātañjalayogaśāstra*, the *Pātañjalayogaśāstravivaraṇa* (8th century?) by a certain Śaṅkara, provides a further interesting explanation of the passage under discussion:<sup>21</sup>

[Superpowers generated] “by herbs” [means] from *rasāyana* in the mansions of Asuras by eating [plants] like *soma* and *āmalaka*, without abandoning a previous body.<sup>22</sup>

Śaṅkara did not consider it necessary to specify which superpower(s) *rasāyana* brings about, because he apparently took this knowledge for granted among

18 *Rājamārtanḍa* on *Yoga Sūtra* 4.1 (Āgāśe 1904: second pagination 48, l. 8): औषधिसिद्धयो यथा –पारदादिरसायनाद्युपयोगात्।

19 Mercury plays a central role in alchemical practices. The earliest known instance of an ayurvedic recipe containing mercury occurs in the ca. seventh-century *Aṣṭāṅgahṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*, but mercury never plays a central role in medical *rasāyana*; see Dagmar Wujastyk 2017: 20 (in this volume).

20 The oldest alchemical work that has survived to the present date is the *Rasahṛdayatantra*, which, according to David G. White (1996: 146), can probably be dated to the tenth or eleventh century.

21 Whether Śaṅkara, the author of the *Pātañjalayogaśāstravivaraṇa*, is identical with the author of the *Brahmasūtrabhāṣya* with the same name is still under scholarly discussion. It is, however, probable that the *Vivaraṇa* is an early commentary on the *Pātañjalayogaśāstra*, because it comments upon an archaic text version of the *Pātañjalayogaśāstra*, and because the seventh-century philosopher “Kumārila is the latest author explicitly referred to” in the *Vivaraṇa* (Halbfass 1991: 221).

22 *Vivaraṇa* 4.1 (Rama Sastri and Krishnamurthi Sastri 1952: 317 f.): ओषधिभिरसुरभव-  
नेषु रसायनेन सोमामलकादिभक्षणेन पूर्वदेहानपनयेनैव।



his readers. He confined himself to stating that the acquisition of superpowers from herbs does not require abandoning a previous body. In this regard, *rasāyana*-induced paranormal powers differ from innate superpowers, which result from a rebirth as a specifically powerful divine or semi-divine being, which obviously presupposes that a previous body was abandoned. In addition, Śaṅkara mentions that *rasāyana* involves the consumption of two plants, i.e., *soma* and *āmalaka*. This specification indicates that Śaṅkara interpreted the word *rasāyana* in *Pātāñjalayogaśāstra* 4.1 as a reference to Ayurveda, since the two plants *soma* and *āmalaka* are frequently mentioned as ingredients of *rasāyana* treatments already in the early ayurvedic Sanskrit compendia.

As will be shown in more detail below, Śaṅkara's view, according to which ayurvedic *rasāyana* is a means to paranormal abilities, agrees with the evidence from the *rasāyana* sections in the compendia of Caraka and Suśruta. Quite obviously, Śaṅkara was well acquainted with the concept of ayurvedic *rasāyana* as it appears in earlier sources.<sup>23</sup> Although Śaṅkara was definitely a learned commentator, who was well acquainted with the different *śāstras* that were current at his time, he had nothing to relate about the mansions of Asuras as the place of *rasāyana* treatment.<sup>24</sup>

#### AYURVEDIC RASĀYANA AND SUPERPOWERS

The *Carakasamhitā*, which was probably composed in the first century CE,<sup>25</sup> repeatedly mentions *āmalaka* in its account of *rasāyana* in *Cikitsāsthāna* 1. This plant is usually identified with the Indian gooseberry (*Embllica officinalis* Gaertn.). The *Suśrutasaṃhitā*, which may be dated to the second century CE,<sup>26</sup> contains a quite comprehensive account of the application of *rasāyana* treatments based on *soma*. Any identification of this plant is unclear and maybe impossible, because several unidentifiable plants were called *soma* in South Asian religions from the earliest times onwards.<sup>27</sup>

<sup>23</sup> According to Dagmar Wujastyk (2017: 13, in this volume): "[l]ater medical works no longer describe the use of soma and divine herbs in *rasāyana* and generally describe less spectacular effects of treatment." Śaṅkara's reference to superpowers as a result of ayurvedic *rasāyana* based on *soma* and *āmalaka* indicates that the commentator was well acquainted with the earlier works of Ayurveda.

<sup>24</sup> For more detail, see section 4, p. 79 below.

<sup>25</sup> Meulenbeld 1999–2002: IA, 114 dates the *Carakasamhitā*, which has a quite diverse redactorial and transmissional history (on which see Maas 2010), to the time span of 100 BCE–200 CE. It appears, however, that a date in the middle of the first century is the best educated guess.

<sup>26</sup> For different dates assigned to the *Suśrutasaṃhitā*, see Meulenbeld 1999–2002: IA, 342–44.

<sup>27</sup> See Wezler 2001: 198.

The main benefit of ayurvedic *rasāyana* according to the *Carakasamhitā* and the *Suśrutasaṃhitā* is the same as the one mentioned in *Pātañjalayogaśāstra* 3.51, namely the generation of longevity and anti-aging. In addition, the ancient compendia mention the generation of health, cognitive powers, virility, and superpowers as purposes of *rasāyana*.<sup>28</sup> Suśruta, for example, explicitly refers to eight superpowers (*aiśvarya*) that are generated in the course of a *rasāyana* treatment according to his *Cikitsāsthāna* 29.13.<sup>29</sup> The twelfth-century commentator Ḍalhana identifies these extraordinary capacities with the eight *aiśvaryas* mentioned in *Pātañjalayogaśāstra* 3.45 as resulting from yogic absorption. In an alternative gloss, Ḍalhana explains the word *aiśvarya* to refer to the set of eight paranormal capacities mentioned in *Carakasamhitā*, *Śārīrasthāna* 1.<sup>30</sup>

In the subsequent section of his work, Suśruta concluded his account of *rasāyana* involving the use of *soma* by stating that,

[t]he visionary man who makes use of the king of plants, Soma, ... truly knows all sacred knowledge, ... . He moves like a god through the whole world, with infallible willpower.<sup>31</sup>

The application of a *soma*-related *rasāyana* leads to the extraordinary mental capacity of possessing all sacred knowledge and to the physical superpower to roam the whole world like a god with “infallible willpower.” This effect of *rasāyana* is identical with the result of ascetic practices mentioned in *Pātañjalayogaśāstra* 4.1, namely “the superpower of reaching whatever one wants” (*saṃkalpasiddhi*).<sup>32</sup>

<sup>28</sup> See Dagmar Wujastyk 2017: 7 f. (in this volume).

<sup>29</sup> *Suśrutasaṃhitā*, *Cikitsāsthāna* 29.13 (Ācārya and Acharya 2003: 504, line 2, tr. Dominik Wujastyk 2003: 129): “Using these two [kinds of *soma*], man achieves eightfold lordship.” तावुपयुज्याष्टगुणमैश्वर्यमवाप्य ... ।

<sup>30</sup> [*Carakasamhitā*, *Śārīrasthāna* 1.140 a–141b] (*Nibandhasaṃgraha* on *Suśrutasaṃhitā*, *Cikitsāsthāna* 29.13 (Ācārya and Acharya 2003: 504ab): “Eightfold power” [means] minuteness, levitation, extension, irresistible will, greatness, sovereignty, mastery and the inevitable fulfillment of desires. This eightfold power may either be obtained by yoga or from a *rasāyana* involving *soma*. The *Carakasamhitā*, however, explains [the eightfold power] differently: “Entering the mind of other persons, knowledge of objects, acting according to one’s will,

vision, hearing, mindfulness, beauty and invisibility according to one’s wish, this is the eightfold power, the capacity of yogis” (अष्टविधैश्वर्यं यथा — अणिमा लघिमा प्राप्ति प्राकाम्यं महिमा तथा । ईशित्वं च वशित्वं च तथा कामावसायिता इति, एतदष्टगुणमैश्वर्यं योगलभ्यमपि सोमरसायनाल्लभ्यते चरके पुनरन्यथोक्तम् — आवेश-श्वेतसो ज्ञानमर्थानां छन्दतः क्रिया ॥ दृष्टिः श्रोत्रं स्मृतिः कान्तिरिष्टतश्चाप्यदर्शनम् । इत्यष्टविधमाख्यातं योगिनां बलमैश्वरम् ।)

<sup>31</sup> *Suśrutasaṃhitā*, *Cikitsāsthāna* 29.14–19 (Ācārya and Acharya 2003: 504b, lines 9–20, tr. Dominik Wujastyk 2003: 130): ओषधीनां पतिं सोममुपयुज्य विचक्षणः । ... निखिलान्वेदान्विन्दति तत्त्वतः । चरत्यमोघसङ्कल्पो देववचाखिलं जगत् ॥ See also Dagmar Wujastyk 2017: 13 (in this volume).

<sup>32</sup> See above, note 5.

The acquisition of paranormal powers by means of *rasāyana* is not only prominently mentioned in the *Suśrutasasaṃhitā*. It also occurs in two stanzas that are part of the *rasāyana* section of the *Carakasamhitā*. From there, the famous Ayurveda author Vāgbhaṭa incorporated the stanzas into his seventh-century *Aṣṭāṅgahrdayasaṃhitā*.<sup>33</sup> The stanza also occurs in the *Aṣṭāṅgasamgraha*, *Uttara-sthāna* 49.2.<sup>34</sup> In Caraka's compendium, this early and very prominent account of the effects of *rasāyana* has the following wording:

दीर्घमायुः स्मृतिं मेधामारोग्यं तरुणं वयः ।  
 प्रभावर्णस्वरौदार्यं देहेन्द्रियबलं परम् ॥ ७ ॥  
 वाक्सिद्धिं प्रणतिं कान्तिं लभते ना रसायनात् ।  
 लाभोपायो हि शस्तानां रसादीनां रसायनम् ॥ ८ ॥<sup>35</sup>

Most of the assets of *rasāyana* that Caraka mentioned in *Cikitsāsthāna* 1.1.7–8, i.e., mindfulness (*smṛti*), intelligence (*medhā*), health (*ārogya*), youthfulness (*taruṇaṃ vayas*), excellence of strength, complexion and voice (*prabhāvarṇasvaraudāryam*) as well as respect (*praṇati*) and beauty (*kānti*), are desirable mental or physical qualities that almost entirely lack any paranormal connotation. The case is less clear for one of the last mentioned assets, i.e., “perfection of speech” (*vāksiddhi*), which may either consist in the ordinary human ability to speak in a perfect way, as for example, in a debate, or in the specifically yogic superpower of being able to determine the course of any future event by merely mentioning its outcome. Cakra-pāṇidatta evidently interpreted *vāksiddhi* in the latter way when he provided the explanation that,

“the superpower of speech” [means] whatever one says, necessarily comes about.<sup>36</sup>

The first-mentioned and most important result of *rasāyana*, i.e., a “long life,” may or may not refer to a paranormal phenomenon, depending on the interpretation of the words *dīrgham āyus*. This expression may either refer to the fulfillment of the normal life expectancy, which according to Ayurveda is one hundred years, or it may refer to paranormal longevity. The account of *brāhmarasāyana* in the *Carakasamhitā* clearly indicates that Caraka at least in this special context had the second alternative in mind, when he related that several groups of ascetics

<sup>33</sup> Meulenbeld 1999–2002: IA, 391–474.

<sup>34</sup> For a list of further occurrences of the stanza in ayurvedic and alchemical literature, see Dagmar Wujastyk 2017: 6, n. 13 (in this volume).

<sup>35</sup> *Carakasamhitā*, *Cikitsāsthāna* 1.1.7–8

(Ācārya 1941: 376b).

<sup>36</sup> *Āyurvedadīpikā* on *Carakasamhitā*, *Cikitsāsthāna* 1.1.7 (Ācārya 1941: 376b): वाक्सिद्धिः यदुच्यते तदवश्यं भवतीति. See also Dagmar Wujastyk 2015: 57.

acquired an “immeasurably long life” (*amitāyus*) after rejuvenating their bodies by consuming a *rasāyana*.<sup>37</sup>

#### THE MEANING OF RASĀYANA IN AYURVEDA

The final two *pādas* of the stanza *Carakasamhitā*, *Cikitsāsthāna* 1.1.8 contain an etymological explanation of the word *rasāyana* that already in pre-modern South Asia was interpreted in various ways.<sup>38</sup> The different interpretations agree in taking the first word of stanza 8a *lābhopāya*, i.e., “a means to obtain”, to be a paraphrase of the second part of the compound *rasāyana*, i.e., “way” (*ayana*). *Rasāyana* is thus a way or a means to obtain a *rasa*. The specific meaning of the semantically multivalent term *rasa* within the compound *rasāyana* is, however, unclear.<sup>39</sup> A clue to determining its meaning is the paraphrase of *rasa* as *śastānām rasādīnām* “the proclaimed *rasa* and so on.” The usage of the word *ādi* “and so on” suggests that the word *rasa* in *rasāyana* is not a single item, but the first item in a list of several others.

Several pre-modern commentators identified these items in different ways. Aruṇadatta, for example, in his commentary on *Aṣṭāṅgahrdayasamhitā*, *Uttarasthāna* 39.2, explained *rasādi* in the late twelfth century, i.e., more than a thousand years after Caraka and ca. six-hundred years after Dṛḍhabala’s final redaction of the *Carakasamhitā*, as follows:<sup>40</sup>

Because it is a means to obtain the best [bodily elements] chyle, blood and so on, it is called *rasāyana*.<sup>41</sup>

Aruṇadatta identified *rasa* in *rasāyana* with the initial item chyle of the well-known list of the seven bodily elements (*dhātu*) of (1) chyle (*rasa*), (2) blood, (3)

<sup>37</sup> *Carakasamhitā*, *Cikitsāsthāna* 1.54–56 (Ācārya 1941: 378b): “The Vaikhānasas, the Vālakhilyas and also other great ascetics consumed this *rasāyana* and acquired an immeasurable life span. They gave up their old bodies and obtained an excellent young age, no longer sighed from exhaustion and weariness, were healthy and composed. These great ascetics, furnished with intelligence, mindfulness and power, practiced foremost asceticism and chastity for the sake of the highest state.” (वैखानसा वालखिल्यास्तथा चान्ये तपोधनाः। रसायनमिदं प्राश्य बभूवुरमितायुषः॥ मुक्त्वा जीर्णं वपुश्चाग्र्यमवापुस्तरुणं वयः। वीततन्द्राक्लमश्वासा निरातङ्गाः समाहिताः॥ मेधास्मृतिबलोपेताश्चिरात्रं तपोधनाः। ब्राह्मं तपो ब्रह्मचर्यं

चेरुश्चात्यन्तनिष्ठया॥) For further references to supranormal longevity in ayurvedic accounts of *rasāyana*, see Dagmar Wujastyk 2017: 8 (in this volume).

<sup>38</sup> For a summary of modern scholarly interpretations of the term *rasāyana*, see Dagmar Wujastyk 2017: 1, (in this volume).

<sup>39</sup> Gode, Karve, et al. (1957–1959: 1331) records thirty-three different meanings for the noun *rasa*.

<sup>40</sup> See Meulenbeld 1999–2002: 1A, 663.

<sup>41</sup> *Sarvāṅgasundarā* on *Aṣṭāṅgahrdayasamhitā*, *Uttarasthāna* 39.2 (Kumṭe, Navare, and Parādkar 1939: 923a): यस्मात् श्रेष्ठाणां रसरुधिरादीनां यो लाभोपायः, स रसायनमुच्यते।

flesh, (4) fat, (5) bones, (6) marrow, and (7) semen. This list figures prominently in ayurvedic sources from early medieval times onwards, i.e., after Vāgbhaṭa had composed his *Aṣṭāṅgahrdayasaṃhitā* in the seventh century.<sup>42</sup> In the earlier compendia of Caraka and Suśruta, various lists of elements figure side by side in different medical contexts. The *Carakasaṃhitā*, for example, contains twelve different lists of bodily constituents that are expressively labeled as *dhātu*, only two of which are headed by *rasa*.<sup>43</sup> Since a standardized list of bodily elements did not yet exist at Carakas's time, Aruṇadatta's etymological explanation of *rasāyana* cannot be accepted as a historically plausible interpretation of the stanza *Carakasaṃhitā*, *Cikitsāsthāna* 1.1.8. Rather than being a historical etymology of *rasāyana*, the explanation of *rasādi* as meaning "chyle and so on" is a creative innovation for promoting the integration of *rasāyana* into Ayurveda.<sup>44</sup>

A further problematic aspect of the identification of *rasa* in *rasāyana* with "bodily elements" is that it does not fit well with the attribute *śasta* "proclaimed" in the expression *śastānām rasādīnām* of *pāda* 8ab. How should *rasāyana* be a means to obtain "proclaimed" or "praised" bodily elements? To which act of proclamation or praise could the attribute *śasta* refer? Aruṇadatta, who was apparently aware of this semantic problem, evaded it by silently replacing the word *śasta* "proclaimed" from his base text with *śreṣṭha* "best" in his commentary. A similar strategy was applied by an unknown scribe of the *Aṣṭāṅgahrdayasaṃhitā* who changed the original *śastānām* to *saptānām* "seven" in order to emphatically suggest a reference to *seven* bodily elements.<sup>45</sup>

42 Maas 2008: 142.

43 See Maas 2008: 136 f.

44 On the basis of his analysis of textual material from the *Suśrutasamhitā*, Hellwig (2008: 39) arrived at the conclusion that the commentator Ḍalhana also shows the tendency to integrate *rasāyana* into the standard set of ayurvedic remedies. In the same article, Hellwig also argued that in the *Carakasaṃhitā*, *rasāyana* is closely related to the classical theory of *dhātus*. This argument is based on an analysis of two text passages. The first one is the above quoted passage *Cikitsāsthāna* 1.1.7–8, which Hellwig interprets according to Aruṇadatta's anachronistic explanation. The second passage is *Cikitsāsthāna* 1.2.3, which refers to the body parts muscle flesh (*māṃsa*), joints (*sandhi*), blood (*rakta*), fat (*medas*), marrow (*majjan*), semen

(*śukra*) and strength (*ojas*) (but not *rasa*) that are not labeled as *dhātus*. The passage also does not explicitly mention any invigorating effect of *rasāyana* on these bodily constituents. Therefore, *Cikitsāsthāna* 1.2.3 cannot be quoted in support of Aruṇadatta's interpretation of the word *rasādi* in *Cikitsāsthāna* 1.1.8, according to which *rasādi* refers to the classical *dhātu*-theory of seven bodily constituents headed by *rasa*. Rather than reflecting a close conceptual connection between *rasāyana* and Ayurveda, *Cikitsāsthāna* 1.2.3 mirrors the process of integration of *rasāyana* into Ayurveda that at the time of the composition of the *Carakasaṃhitā* may still have been a comparatively recent process.

45 See note 4 in *Aṣṭāṅgahrdayasaṃhitā*, *Uttarasthāna* 39.2 (Kumṭe, Navare, and Parādkar 1939: 923a).

Ḍalhana, the commentator of the *Suśrutasaṃhitā*, who flourished approximately at the same time as Aruṇadatta, provided various etymological explanations of the term *rasāyana* in his *Nibandhasaṅgraha*:

*Rasāyana* [means] the progress, i.e., the thriving, of the bodily elements chyle and so on. Alternatively, *rasāyana* is the way, i.e., the means, for the medication-based obtainment of the tastes (*rasa*), potencies, post digestive flavors, and specific actions that lead to the firmness of power and manliness throughout the life span and prolong a youthful age. Or, it means their increase, stabilization, or generation.<sup>46</sup>

Ḍalhana's first explanation of the term *rasāyana* is basically identical with the etymological analysis of the term by Aruṇadatta, whereas his second explanation draws upon a different list of terms that is also headed by the word *rasa*. This is the general pharmacological concept of Ayurveda, according to which the tastes (*rasa*), potency, post digestive flavors, and specific actions of food (and medicinal substances) influence the ratio of humours or *doṣas* in the human body. A suitable ratio of humours leads to health, an unsuitable one to disease.

If Ḍalhana's alternative explanation were correct, i.e., if the pharmacological concepts of Ayurveda were the key to unravelling Caraka's etymological analysis of the word *rasāyana*, then *rasa* in *rasāyana* would mean "tastes." Ḍalhana's explanation is, however, unconvincing, not only because here again the attribute *śasta* "proclaimed" would not fit, but also because his interpretation does not refer to any peculiar characteristic of *rasāyana*. The pharmacological concept of tastes (*rasa*), potency, etc., are of fundamental importance in several branches of Ayurveda, especially in internal medicine (*kāyacikitsā*).<sup>47</sup> They do not receive any particular attention in the context of *rasāyana*. Therefore, Ḍalhana's attempt to relate the ayurvedic pharmacology to the special effects of *rasāyana*, i.e., to longevity, empowerment, etc. is forced. Apparently, the commentator was as much at a loss to provide a convincing etymological analysis of the term *rasāyana* as his colleague Aruṇadatta. In order to solve their explanatory problem, both commentators took refuge to *ad hoc* explanations by drawing upon well-known technical ayurvedic meanings of the word *rasa*.

<sup>46</sup> *Nibandhasaṅgraha* on *Suśrutasaṃhitā*, *Cikitsāsthāna* 27.1 (Ācārya and Acharya 2003: 498b): रसादिधातूनामयनमाप्यायनम्, अथवा भेषजाश्रितानां रसवीर्यविपाकप्रभावाणामायुर्वलवीर्यद्वर्धनां वयःस्थैर्यकराणामयनं लाभोपाय रसायनम्; वर्धकं

स्थापकमप्राप्तप्रापकं वेत्यर्थः।

<sup>47</sup> *Carakasaṃhitā*, *Vimānasthāna* 1.1.4–8 provides a general outline of the relationship between tastes (*rasa*) and humours (*doṣa*).



In contrast to this approach, the eleventh-century medical author and commentator Cakrapāṇidatta provided a surprisingly elegant and simple interpretation of *Carakasamhitā*, *Cikitsāsthāna* 1.1.8 that is much more convincing than the solutions presented so far. Cakrapāṇidatta simply explains that,

by using the expression “*rasa* and so on” [Caraka] refers also to “mindfulness and so on.”<sup>48</sup>

This brief comment reveals that the commentator understood the compound *rasādi* as a reference to the listed assets of *rasāyana*. The first part of the compound *rasādi*, i.e., *rasa*, refers to the first item in the list of assets, i.e., to *dīrgham āyuh* “a long life.” Accordingly, Cakrapāṇidatta did not take the word *rasa* in *rasāyana* to designate any technical ayurvedic term, but the “principal” of the listed items, or, in other words, the most important result of *rasāyana*, i.e., “a long life.” This understanding is historically unproblematic and in agreement with the well-recorded meaning of the word *rasa* as “the essence, best part” of something.<sup>49</sup> Moreover, it solves the previously mentioned problem of the meaning of the attribute *śasta* “proclaimed.” By interpreting *rasa* to mean the “principle asset” of *rasāyana*, the referent of *śasta* does not have to be sought anywhere in the *Carakasamhitā* but in the stanzas *Carakasamhitā*, *Cikitsāsthāna* 1.1.7a–8b that list the desirable assets of *rasāyana*.

On the basis of this interpretation, the two stanzas *Carakasamhitā*, *Cikitsāsthāna* 1.1.7–8 can be translated as follows:

Through *rasāyana* a man obtains a long life, mindfulness, intelligence, health, youthfulness, excellence of strength, complexion and voice, the greatest capacity of body and senses, perfection of speech, respect and beauty. *Rasāyana* is well-known to be the means for obtaining the proclaimed “principle asset” (*rasa* i.e., longevity) and so on.

Taking seriously into account the elegance of Cakrapāṇidatta’s explanation as well as the forced nature of the previously-discussed interpretations of the word *rasādi*, it is highly unlikely that word *rasa* in *rasāyana* originally, i.e., before the time of Aruṇadatta, meant “chyle” (*rasa*) as the initial item listed in the collocation of bodily elements or “taste” (*rasa*) as an important ayurvedic pharmacological concept before Ḍaḥana. Already Caraka was unable to explain the word *rasāyana* by providing convenient synonyms for the two word stems of which the compound seems to consist. Apparently, the word *rasāyana* defies any easy

<sup>48</sup> *Āyurvedadīpikā* on *Carakasamhitā*, *Cikitsāsthāna* 1.1.8 (Ācārya 1941: 376b): रसादिग्रहणेन स्मृत्यादयोऽपि गृह्यन्ते।

<sup>49</sup> See Gode, Karve, et al. 1957–1959: 1331a, s.v. *rasa*.

etymological explanation. It may even be possible that *rasāyana* originally was not at all a compound consisting of *rasa-* and *-ayana*, but a cultural loanword into Sanskrit, the original source of which remains to be determined.

#### 4. THE MANSIONS OF THE ASURAS

PATAÑJALI'S REFERENCE TO ASURA MANSIONS in *Pātañjalayogaśāstra* 4.1 was apparently enigmatic for his pre-modern commentators, and it continues to be obscure for modern academic scholars. Albrecht Wezler, however, saw Patañjali's reference to Asura mansions as a result of "mythological logic:"

The idea that the elixir-of-life is available "in their palaces" [i.e., in the palaces of Asuras] may be derived from their alleged capacity for outwitting "the gods by recuperating and even reviving themselves after being wounded or slain by the gods" (see E. Washburn Hopkins, *Epic Mythology*, Strasburg, 1915, 49; and J. Bruce Long, "Life Out of Death," in *Hinduism*, ed. Bardwell L. Smith, Leiden 1952, 184). But it is but mythologically logical that the mansions of the demons are regarded as the place where human beings can get one of the elixirs-of-life, because the true ambrosia (produced among other goods by the churning of the milk ocean) was appropriated by the gods.<sup>50</sup>

Wezler's guess that the Asuras' possession of *rasāyana* may result from a mythological demand for a balance of powers between the gods and the Asuras, the so-called anti-gods, appears plausible. Nevertheless, it is quite surprising that not a single literary account of *rasāyana* in Asura mansions besides the *Pātañjalayogaśāstra* and its commentaries appears to have survived in pre-modern South Asian literature. However, references to an Asura mansion that do not mention *rasāyana* are not entirely absent. In contradiction to what may be expected, these references do not occur in brahmanical Sanskrit sources but in Buddhist literature. There, the Asuras inhabit a region of the cosmos located at the bottom of mount Sineru (Skt. Meru) that is called *asurabhavana*. This region became the habitat of the Asuras after the god Indra banned them from mount Sineru on account of their excessive consumption of alcoholic beverages (*sura*).<sup>51</sup>

Asuras and their mansions also figure in Jain cosmology, where they belong to a class of gods called *bhavanavāsin* (i.e., those who live in palaces).<sup>52</sup> In view of these two quite prominent conceptions of Asuras and their palaces, it may appear tempting to speculate that Patañjali used the term *asurabhavana* in *Pātañjalayogaśāstra* 4.1 with a Buddhist or Jain cosmological concept in mind. However,

<sup>50</sup> Wezler 2001: 217, note 105.

*Tāvatiṃsa*.

<sup>51</sup> Malalasekara 1960: v. 1, 1002, s.v.

<sup>52</sup> See Kirfel 1920: 261.



neither the Jain literature, nor the Buddhist Pāli canon contains, as far as I can see, a single reference to *rasāyana*-practicing Asuras. Moreover, the grammatical number of the word *asurabhavana* in *Pātañjalayogaśāstra* 4.1 is plural, which indicates that Patañjali was rather thinking of a plurality of mansions than of a single cosmological region as the typical place for the usage of *rasāyana*. And finally, Patañjali's own comprehensive account of the different regions of the universe in *Pātañjalayogaśāstra* 3.26 does not contain a region called *asurabhavana*, which makes it at least doubtful whether Patañjali was at all acquainted with a cosmological region with this name.

It therefore appears that Patañjali's conceptions of *rasāyana* and its application in different realms of the cosmos is indeterminable at the present stage of research.<sup>53</sup>

## 5. CONCLUSION

IN THE *PĀTAÑJALAYOGAŚĀSTRA*, *rasāyana* is mentioned as an exemplification of the concept that herbs may generate superpowers. *Rasāyana* is thus an unspecified elixir of life prepared from herbal ingredients. In order to specify what *rasāyana* actually is about, Patañjali referred his readers to the application of this elixir in special buildings called "the mansions of Asuras" (*asurabhavana*). This reference is obscure. Already Patañjali's medieval commentators were apparently at a loss to explain the role of Asuras' buildings for *rasāyana*. Śaṅkara, the author of the most informative commentary on the *Pātañjalayogaśāstra*, evaded the problem and supplemented Patañjali's sparse account by relating it to Ayurveda. He took, however, a road that Patañjali had avoided, although the yoga author was clearly acquainted with an early form of Ayurveda.<sup>54</sup> A closer look at ayurvedic *rasāyana* reveals that Śaṅkara's explanation was nevertheless obvious, since obtaining longevity and other superpowers definitely emerges as an important goal of early ayurvedic *rasāyana* accounts involving herbal ingredients. However, *rasāyana* is problematic also in its early ayurvedic coinage. Although this discipline features it as one of the eight established branches of Ayurveda, *rasāyana* appears to be based on theoretical foundations that are at odds with mainstream classical Ayurveda. This tension was clearly felt among pre-modern

<sup>53</sup> Dominik Wujastyk suggested a possible connection between a hut (*kuṭi*) built for ayurvedic *rasāyana* treatments and Patañjali's *asurabhavanas* (Dominik Wujastyk 2014). In view of the semantic difference between the words *kuṭi* "hut" and *bhavana*

"mansion, palace" and due to the lack of any reference to Asuras in ayurvedic *rasāyana* sources, I doubt that Patañjali referred to ayurvedic *rasāyana* when he used the word *asurabhavana*.

<sup>54</sup> See Maas 2008: 152 f.

specialists at least until the twelfth century, when the commentators Ḍalhana and Aruṇadatta tried to fully integrate *rasāyana* into Ayurveda by establishing a relationship between the theories of bodily elements and tastes and the discipline of *rasāyana*. This integration is reflected in the widely accepted etymological derivation of *rasāyana* as a way (*ayana*) of invigorating etymology is based on an anachronistic interpretation of the ancient definition of *rasāyana* in *Caraka-saṃhitā*, *Cikitsāsthāna* 1.1.7–8. A historically valid etymological derivation of the word *rasāyana*, which possibly is a cultural loanword into Sanskrit, remains to be established.

## REFERENCES

- Ācārya, Yādavaśarman Trivikrama, ed. (1941). महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्नि-वेशेन प्रणीता, चरकटडबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददी-पिकाव्याख्यया संवलिता = *The Charakasaṃhitā by Agniveśa Revised by Charaka and Dṛidhabala with the Āyurveda-Dīpikā Commentary of Chakrapāṇidatta*. 3rd ed. Mumbayyām: Nirṇaya Sagara Press. URL: <https://archive.org/details/Caraka1941> (on 1 Jan. 2018).
- Ācārya, Yādavaśarman Trivikrama and Narayan Ram Acharya, eds. (2003). सुश्रुतसंहिता, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचा-र्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता...आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा...संशोधिता = *The Suśrutasaṃhitā of Suśruta with the Nibandhasaṅgrahā commentary of Śrī Dalhaṇāchārya and the Nyāyacandrikā Pañjikā of Śrī Gayadāśchārya on Nīdanasthāna*. Chaukhamba Ayurvijnan Granthamala 42. Varanasi: Chaukhamba Surbharati Prakashan. Reprint of Bombay 1938 edition.
- Āgāṣe, Ve. Śā. Rā. Rā. Kāśīnātha Śāstrī, ed. (1904). वाचस्पतिमिश्रविरचितटीकासंवलि-तव्यासभाष्यसमेतानि पातञ्जलयोगसूत्राणि तथा भोजदेवविरचितराजमार्तण्डाभिधवृत्तिसमेतानि पातञ्जलयोगसूत्राणि. Ānandāśramasamskrtagranthāvaliḥ 47. Puṇyākhyapattana: Ānandāśramamudraṇālaya. URL: <https://archive.org/details/YogasutraAgashe> (on 3 Mar. 2018).
- Gode, P. K., C. G. Karve, et al., eds. (1957–1959). *Revised and Enlarged Edition of Prin. V. S. Apte's the Practical Sanskrit-English Dictionary*. 3 vols. Poona: Prasad Prakashan. URL: <https://archive.org/details/ThePracticalSanskritEnglishDictionaryPart1P>. K. Gode (on 20 Oct. 2017). See also pt. II and pt. III.
- Halbfass, Wilhelm (1991). "Śaṅkara, the Yoga of Patañjali, and the So-called Yogasūtrabhāṣyavivaraṇa". In: *Tradition and Reflection, Explorations in Indian Thought*. 1st ed. Albany, N.Y.: SUNY Press. Chap. 6, pp. 205–242. ISBN: 0791403629.
- Hellwig, Oliver (2008). "Rasāyana und die āyurvedische Krankheitskunde". In: *Traditional South Asian Medicine* 8, pp. 32–64. URL: [https://www.academia.edu/35623137/Rasayana\\_und\\_die\\_ayurvedische\\_Krankheitskunde](https://www.academia.edu/35623137/Rasayana_und_die_ayurvedische_Krankheitskunde) (on 3 Mar. 2018).
- Jacobsen, Knut A. (2012). *Yoga Powers: Extraordinary Capacities Attained through Meditation and Concentration*. Brill's Indological Library 37. Leiden: Brill. ISBN: 9789004212145.
- Kirfel, Willibald (1920). *Die Kosmographie der Inder. Nach Quellen dargestellt*. Bonn und Leipzig: Schröder.
- Kuṃṭe, Anṇa Moreśvara, Kṛṣṇaśāstrī Navare, and Hariśāstrī Parādkar, eds. (1939). श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमदरुणदत्तविरचितया 'सर्वाङ्गसुन्दर्याख्या'

- व्याख्यया हेमाद्रिप्रणीतया 'आयुर्वेदरसायनाह्वया' टीकया च समुल्लसितम् = *The Astāṅgahṛīdaya. A Compendium of the Ayurvedic System Composed by Vāgbhaṭa with the Commentaries (Sarvāṅgasundarā) of Arunadatta and (Āyurvedarasāyana) of Hemādri*. 6th ed. Bombay: Nirnaya Sagara Press. URL: <https://archive.org/details/Ashtanga.Hridaya.of.Vagbhata> (on 4 June 2017).
- Maas, Philipp A. (2008). "The Concepts of the Human Body and Disease in Classical Yoga and Āyurveda". In: *Wiener Zeitschrift für die Kunde Südasiens = Vienna Journal of South Asian Studies* 51, pp. 125–62. doi: 10.1553/wzkslis123.
- (2010). "On What Became of the Carakasamhitā After Dṛḍhabala's Revision". In: *eJournal of Indian Medicine* 3, pp. 1–22. URL: <https://ugp.rug.nl/eJIM/article/view/24728> (on 3 Mar. 2018).
- (2013). "A Concise Historiography of Classical Yoga Philosophy". In: *Historiography and Periodization of Indian Philosophy*. Ed. by Eli Franco. Publications of the De Nobili Research Library 37. Vienna: Sammlung de Nobili, pp. 53–90. URL: <http://www.academia.edu/3520571/> (on 27 May 2016).
- (2014). "Der Yogi und sein Heilsweg im Yoga des Patañjali". In: *Wege zum Heil(igen)? Sakralität und Sakralisierung in hinduistischen Traditionen*. Ed. by Karin Steiner. Wiesbaden: Harrassowitz, pp. 65–89. ISBN: 0195124359. URL: <https://www.academia.edu/7054657/> (on 3 Mar. 2018).
- Malalasekara, G. P. (1960). *A Dictionary of Pāli Proper Names*. 2 vols. Indian Texts Series. London: Luzac & Co. URL: <https://archive.org/details/PaliProperNamesVoliADh> (on 27 Feb. 2018). Vol. 2: <https://archive.org/details/PaliProperNamesVoliINH>.
- Meulenbeld, Gerrit Jan (1999–2002). *A History of Indian Medical Literature*. 5 vols. Groningen: E. Forsten. ISBN: 9069801248.
- Olivelle, Patrick (1998). *The Early Upaniṣads. Annotated Text and Translation*. South Asia Research. New York, Oxford: Oxford University Press. ISBN: 9780195124354.
- Pingree, David E. (1970–1994). *A Census of the Exact Sciences in Sanskrit*. 5 vols. Philadelphia: American Philosophical Society. URL: <https://archive.org/details/PingreeCESS> (on 3 Mar. 2018).
- Rama Sastri and S. R. Krishnamurthi Sastri, eds. (1952). *पातञ्जलयोगसूत्रभाष्य-विवरणम्। (शङ्करभगवत्पादप्रणीतम्) = Pātnjala[sic]-yogasūtra-bhāṣya Vivaraṇam of Śaṅkara-Bhagavatpāda. Critically Edited with Introduction*. Madras Government Oriental Series 94. Madras: Government Oriental Manuscripts Library. URL: <https://archive.org/details/Patanjala-yogasutra-bhasyaVivaranamOfSankara-bhagavatpada> (on 20 Oct. 2017).
- Shee, Monika (1986). *Tapas und tapasvīn in den erzählenden Partien des Mahābhārata*. German. Studien zur Indologie und Iranistik Dissertationen 1. Reinbek: I. Wezler Verlag für Orientalische Fachpublikationen.

- Sukthankar, Sitaram Vishnu, Shripad Krishna Belvalkar, et al., eds. (1933–1959). *The Mahābhārata*. 19 vols. Poona: Bhandarkar Oriental Research Institute.
- Utgikar, N. B. (1923). “The Story of the Ṛṣi Aṇī-Māṇḍavya in its Sanskrit and Buddhistic Sources”. In: *Proceedings and Transaction of the Second Oriental Conference Calcutta January 28th to February 1st, 1922*. Calcutta: Calcutta University, pp. 221–38. URL: <https://archive.org/details/ProceedingsAndTransactionsOfTheSecondOrientalConference> (on 3 Mar. 2018).
- Wezler, Albrecht (1997). “The Story of Aṇī-Māṇḍavya as Told in the Mahābhārata: Its Significance for Indian Legal and Religious History”. In: *Beyond Orientalism. The Work of Wilhelm Halbfass and its Impact on Indian and Cross-Cultural Studies*. Ed. by E. Franco and K. Preisendanz. Poznań Studies in the Philosophy of Sciences and the Humanities 59. Amsterdam: Brill Rodopi, pp. 533–55. ISBN: 9789042002470.
- (2001). “‘Psychedelic’ Drugs as Means to Mystical Experience: Aldous Huxley Versus Indian ‘Reality’”. In: *Aldous Huxley Between East and West*. Ed. by C. C. Barfoot. Textet: Studies in Comparative Literature 37. Amsterdam: Rodopi, pp. 199–220. ISBN: 9789042013476.
- White, David Gordon (1996). *The Alchemical Body: Siddha Traditions in Medieval India*. Chicago: University of Chicago Press. ISBN: 0226894975.
- Wujastyk, Dagmar (2015). “On Perfecting the Body. Rasāyana in Sanskrit Medical Literature”. In: *AION: Annali dell’Università degli Studi di Napoli “L’Orientale”. Elisir Mercuriale e Immortalità. Capitoli per una Storia dell’Alchimia nell’Antica Eurasia. A cura di Giacomella Orofino, Amneris Roselli e Antonella Sannino XXXVII*, pp. 55–77. ISSN: 11128-7209. URL: <https://www.libraweb.net/articoli.php?chiave=201509901&rivista=99> (on 16 Aug. 2017).
- (2017). “Acts of Improvement: On the Use of Tonics and Elixirs in Sanskrit Medical and Alchemical Literature”. In: *History of Science in South Asia* 5.2, pp. 1–36. DOI: 10.18732/hssa.v5i2.26.
- Wujastyk, Dominik (2003). *The Roots of Ayurveda: Selections from Sanskrit Medical Writings*. 3rd ed. Penguin Classics. London, New York, etc.: Penguin Group. ISBN: 0140448241.
- (July 9, 2014). *Kuṭipraveśam rasāyanam*. Cikitsā blog. URL: <https://cikitsa.blogspot.ca/2014/07/kutipravesam-rasayanam.html> (on 23 Dec. 2017).

---

Please write to [wujastyk@ualberta.ca](mailto:wujastyk@ualberta.ca) to file bugs/problem reports, feature requests and to get involved.

The History of Science in South Asia • Department of History and Classics, 2-81 HM Tory Building, University of Alberta, Edmonton, AB, T6G 2H4, Canada.