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P. Ram Manohar

Glimpses of the *Siddhamantra*

Introduction

The *Siddhamantra* is a short treatise on pharmacology in Ayurveda that was composed by Keśava, a renowned physician scholar who lived in the 13th century CE.¹ This work is historically important for theoretical innovations that have been put forth by the author to explain drug action with greater clarity and precision. The treatise is very short, (*atyalpam*, in the words of the author himself) leaving ample scope for discussions and interpretations. But for the elaborate commentary *Prakāśa* composed by Vopadeva, the son of the author, much of the thought process involved in construction of the new theories would have perhaps remained in oblivion.

¹"Thus, the date of Keśava is fixed as the first half of the 13th Cent. AD" (Sharma 1977: 2, intro. p. 4), and "since Keśava appears to have been the royal physician of Siṃharāja, who is usually identified with Siṃhaṇa or Singhaṇa II, one of the Yādava kings of Devagiri, who reigned from A.D. 1210 to A.D. 1247, he lived during the first half of the thirteenth century" (Meulenbeld 1999–2002: IIA, 186).

Publications of Siddhamantra

The book was published first in 1898 without the commentary and later in 1977 by Priya Vrat Sharma with the commentary in Sanskrit.² Priya Vrat Sharma had access to five manuscripts of the text apart from the 1898 printed edition, but there is still room for a meticulous critical edition of the work today. The British Library in London reportedly has a copy of the 1898 edition of *Siddhamantraprakāśa*.³ Meulenbeld gives a brief description of Keśava in his monumental work *History of Indian Medical Literature*. In the bibliography, he lists two other editions of *Siddhamantra* edited by Morarji Vaidya and Yadavji Trikamji Acharya in 1908 and 1975 respectively.⁴

Sharma and Meulenbeld have discussed in fairly great detail about the author, the date of the text, the comment-

²Pade and Bhālacandra 1898, Sharma 1977.

³Priya Vrat Sharma states in his introduction, "It was published in 1898 at the Jñānasāgara Press, duly edited by Vaidya Śaṅkaradāji Śāstrī Pade with the assistance of Śrī Bhālacandra. This publication is entitled *Siddhamantraprakāśa* though there is no commentary. In fact, the text is *Siddhamantra* and the commentary is known as *Prakāśa*. In introduction, the editor has remarked that the work was not available at that time (as now)" (Sharma 1977: section 2, intro. p. 3).

⁴Meulenbeld lists additional printed editions of *Siddhamantra* not mentioned by P. V. Sharma: "a ed., together with another work called *Yogeśvara*, under the common title of *Āyurvedasaṃgraha*, by Vaidya Śaṃkara Dājī Śāstrī Pade, with the assistance of Śrī Bhālacandra, Jñānasāgara Press, Bombay 1898 ...; the title of this publication is *Siddhamantra Prakāśa*, though the commentary is absent (P. V. Sharma's Introduction to the *Siddhamantra*. 3); ... *b ed. by Morarji Vaidya of Bombay, 1908/09 ..., *c ed. by Vaidya Yadavji Trikamji Acharya (together with the *vātaghnatvādinirṇaya* of Nārāyaṇa Bhiṣaj ..., d Vopadeva's *Hṛdayadīpaka Nighaṇṭu* and *Siddhamantra* of Vaidyācārya Keśava with *Prakāśa* Commentary of Vopadeva, ed. by Priya Vrat Sharma, Chaukhamba Ayurveda Granthamala 1, Amarabharati Prakashan, Varanasi, 1977." (Meulenbeld 1999–2002: IIA, 212–13).

ary, the historical context as well as the contents of the text and the commentary in his introduction. This does not, however, rule out the scope for a fresh enquiry into the work. In fact, *Siddhamantra* deserves more serious attention from the students and practitioners of Ayurveda than has been meted out to it. A comprehensive translation is very much desirable and the text should also be approached with a critical and analytical bent of mind.

The subject matter of Siddhamantra

Siddhamantra can be approximately translated as "the infallible or fail-safe hymn" and the title promises immediate and surefire practical results to those who access the work. In this context, the word siddha can be interpreted as "tested and proven effective". In other words, this treatise is claimed to be as effective as a tested mantra or hymn. Susruta has also referred to tested and effective formulations as a potent mantra. In one context he states that the formulations that have been vouchsafed by authorities and which produce tangible results can be used like a mantra without the need for logical analysis. Vāgbhaṭa compares a tested medicine with a potent mantra. The author claims that the work is composed to enable the physicians to comprehend the principle (tattva) of drug potency (dravyaśakti)

⁵The *Vācaspatyam* encyclopedia considers the word *siddha* to indicate "rock salt, king, maturity, sage, divine being," etc. (Bhaṭṭācārya 1969–1970: 5293). Monier-Williams' dictionary interprets *siddha* as "accomplished, successful, perfected, sacred, illustrious," etc. (Monier-Williams *et al.* 1899: 1215).

⁶Suśrutasaṃhitā, cikitsāsthāna 1, 76ab (Ācārya 1938: 403): mantravat saṃprayoktavyo na mīmāṃsyaḥ kathañ cana∣

⁷ Astāngahṛdayasaṃhitā, uttarasthāna 40, 81 (Kuṃte et al. 1902: 954): idam āgamasiddhatvāt pratyakṣaphaladarśanāt mantravat saṃprayoktavyaṃ na mīmāmsyam kathañ cana 81|

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quickly (*drāk*) and easily (*sukhena*).⁸ A physician who is well versed with the knowledge of potency and action of drugs can indeed become successful in clinical practice. Drug potency means ability of the drug to alleviate disease. Like a fail-safe *mantra*, it can be applied with ease and reaps rich dividends. In other words, it is as short and powerful as a *mantra*.

The opening verse invokes Dhanvantari and is a eulogy in praise of his contributions towards revealing the properties of medicinal plants. This appears to be an allusion to the *Dhanvantarinighaṇṭu*, which must have enjoyed a high reputation in the time of the author.⁹ This invocation has a double meaning.¹⁰ The salient features of the *Siddhamantra* can be summarized as follows:

- 1. Reverse approach to pharmacological evaluation of drugs.
- 2. Classification of drugs into 48 (57) subgroups under eight broad groups based on reverse pharmacological attributes.
- 3. Reconciliation of contradictions in the views of authorities in the field of Ayurveda.
- 4. Construction of theories to facilitate reconciliation of contradictions.
- Achieving brevity in effectively compressing a vast subject into the space of less than a couple of hundred verses.

⁸Keśava summarizes the purpose of composing his work thus (Sharma 1977: section 2, p. 2): granthaḥ saṃgranthyate 'ty alpaṃ siddhamantrāhvayo mayā, vaidyāḥ sukhena drāk dravyaśaktitattvam vitantv iti

⁹Meulenbeld dates the *Dhanvantarinighaṇṭu* to the eleventh century (1999–2002: IIA, 173).

¹⁰The invocation with which the *Siddhamantra* begins is (Sharma 1977: section 2, p. 2): āyurvedasudhāṃbodhisārasāraṇikā giraḥ ullāsitauṣadhagrāmah jayanty amṛtajanmanah

I shall now review these features in greater detail.

The reverse approach to pharmacology

The uniqueness of *Siddhamantra* is the reverse approach to pharmacology adopted by the author. Deviating from the tradition of elaborating the taste (rasa), properties (guna), potency (vīrya), post-digestive state (vipāka) empirically observed activity (prabhāva) and then inferring the action on humours (dosa), 11 Siddhamantra enlists substances in 57 categories depending on their action on the humours (dosa). The original contribution of Siddhamantra lies not in simply listing the action of substances on the humours (dosa), but the precision with which the action is delineated.¹²

The knowledge of taste (rasa) and other pharmacological principles of a drug do not constitute an end in itself. They are the means to understand the activity of the drug or food substance in terms of the effect on the humours (dosa). Available works on Ayurveda discuss in greater detail about taste (rasa), properties (guna), potency (vīrya), and post-digestive state (vipāka) and are less explicit when it comes to the net effect they have on the balance of the humours. Things are further complicated by the fact that differences in opinion are also seen amongst the authorities in the field and it becomes quite a task for the average

¹¹Meulenbeld (2001), "Reflections on the Basic Concepts of Indian Pharmacology," provides an excellent review of the classical approach to understanding drug action in the tradition of Ayurveda.

¹²Keśava explains that the taste (rasa), properties (guna), potency ($v\bar{i}$ rya), and post-digestive state (vipāka) of a drug constitute the means to determine the action of the drug on the humours (doṣa). His work, he says, deals with the effect of substances on the humours (dosa), which is the end itself and so he does not discuss the therapeutic means, i.e., rasa, guṇa, vīrya and vipāka (Sharma 1977: section 2, p. 2): rasavīryavipākair hi dravyaśaktir vivicyate| kope śame vā doṣāṇām sātra spaṣtā na tena te|

physician to make proper decisions in the clinic. The Siddhamantra is an attempt to fill this gap.

Classification of substances into 48 (57) subgroups under eight broad groups

The *Siddhamantra* is a strikingly terse piece of literary work and there are just nine verses in the text that sum up the conceptual basis on which drugs and food articles are classified into 57 categories indicating their impact on the humours (dosa). According to Vopadeva, the commentator, these nine verses are together known in Sanskrit as the navaślokī.¹³ The enumeration of these substances in these 57 categories is achieved in the remaining 160 verses making a total of 169 verses. The classification of substances enlisted in the Siddhamantra is structured and logical. The text considers in a precise manner how a given herb or food substance can affect the humour (dosa) by either pacifying it or disturbing it. These effects are computed for all the logical possible combinations and permutations of the three humours (doṣa) forming eight broad groups in all: wind (vāta), bile (pitta), phlegm (kapha), wind-bile (vātapitta), wind-phlegm (vātakapha), phlegm-bile (kaphapitta), pacifying the three humours (tridosahara) and disturbing the three humours (tridoṣakara). The eight broad categories become fifteen when we consider the pacifying and aggravating effect on the dosas. They further expand into fifty-seven specific subgroups indicative of the varied im-

¹³Vopadeva states at the end of his commentary on the ninth verse of the Siddhamantra that the section of nine verses, or navaślokī, concludes here (Sharma 1977: section 2, p. 12): iti vopadevīyasiddhamantraprakāśe navaślokī

pact on the humours (dosa).14 The expanded list according to Vopadeva is as follows:

I. vātaghna group (the vāta pacifiers)

1 vātaghna

Pacifies vāta in isolation as well as vāta associated with pitta and kapha separately or together but it neither pacifies nor aggravates pitta and kapha in isolation; the same logic applies in all the 'pacifying (-ghna)' subgroups¹⁵

- 2 vātapittaghna
- 3 vātaślesmaghna
- 4 vātaghnapittala

Pacifies vāta in isolation as well as vāta associated with kapha, but it aggravates vāta associated with pitta as well as pitta in isolation, same logic applies in all the 'aggravating (-la)' subgroups¹⁶

- 5 vātaghnaśleşmala
- 6 vātaghnapittaśleşmala
- 7 vātaghnapittodāsīna

Pacifies vāta only in isolation, does not aggravate or pacify vāta associated with pitta and kapha or pitta and kapha in isolation, same logic applies in all the 'neutral (-udāsīna)' subgroups¹⁷

¹⁴Keśava summarizes the classification system of drugs based on their action on the doṣas (ibid.): vāte pitte kaphe vātapitte vātakaphe kramāt, kaphapitte trișu hitavargāḥ saptahito 'ṣṭamaḥ|

¹⁵Illustrative definition of a vātaghna drug (Sharma 1977: section 2, p. 11): vātaghnam eva yad dravyam tad vātam hanti kevalam| sānyam ca kevalāvanyau na hanti na karoti ca

¹⁶Illustrative definition of a *vātaghna* drug that aggravates other *doṣas* (ibid.): vātaghnam anyajananam dravyam yad hanti tac calam kevalam kevalau sānyāv anyo vardhayate malau

¹⁷Illustrative definition of a *vātaghna* drug that is neutral on other *doṣa*s (ibid.): vātaghnam anyodāsīnam yat tac chuddhānilāpaham śuddhau sānyau na hanty anyau na karotīti sarvatah

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- 8 vātaghnaślesmodasina
- 9 vātaghnapittaśleşmodasina

II. pittaghna group (the pitta pacifiers)

- 1 aghna
- 2 pittaślesmaghna
- 3 pittavātaghna
- 4 pittaghnavātala
- 5 pittaghnaślesmala
- 6 pittaghnavātaślesmala
- 7 pittaghnavātodāsīna
- 8 pittaghnaślesmodāsīna
- 9 pittaghnavātaślesmodāsīna

III. ślesmaghna group (the ślesma pacifiers)

- 1 ślesmaghna
- 2 ślesmavātaghna
- 3 ślesmapittaghna
- 4 ślesmaghnavātala
- 5 ślesmaghnapittala
- 6 śleşmaghnavātapittala
- 7 ślesmaghnavātodāsīna
- 8 śleṣmaghnapittodāsīna
- 9 śleşmaghnavātapittodāsīna

IV. vātapittaghna group (the vātapitta pacifiers)

- 1 vātapittaghna
- 2 vātapittaghnaśleşmala
- 3 vātapittaghnaślesmodāsīna

V. vātaśleṣmaghna group (the vātaśleṣma pacifiers)

- 1 vātaśleşmaghna
- 2 vātaśleṣmaghnapittala
- 3 vātaśleṣmaghnapittodāsīna

VI. pittaślesmaghna group (the pittaślesma pacifiers)

- 1 pittaśleşmaghna
- 2 pittaślesmaghnavātala

- 3 pittaślesmaghnavātodāsīna
- VII. dosaghna group (the tridosa pacifiers)
 - 1 vātapittaślesmaghna
- VIII. dosodāsīna group (the tridosa neutrals)
 - 1 vātapittaślesmodāsīna
- IX. vātala group (the vāta aggravators)
 - 1 vātala
 - 2 vātalapittodāsīna
 - 3 vātalaślesmodāsīna
 - 4 vātalapittaślesmodāsīna
- X. *pittala* group (the *pitta* aggravators)
 - 1 pittala
 - 2 pittalavātodāsīna
 - 3 pittalaślesmodāsīna
 - 4 pittalavātaślesmodāsīna
- XI. *śleṣmala* group (the *śleṣma* aggravators)
 - 1 śleșmala
 - 2 ślesmalapittodāsīna
 - 3 ślesmalavātodāsīna
 - 4 ślesmalavātapittodāsīna
- XII. vātapittala group (the vātapitta aggravators)
 - 1 vātapittala
 - 2 vātapittalaślesmodāsīna
- XIII. pittaślesmala group (the pittaślesma aggravators)
 - 1 pittaśleşmala
 - 2 pittaślesmalavātodāsīna
- XIV. vātaśleṣmala group (the vātaśleṣma aggravators)
 - 1 vātaślesmala
 - 2 vātaśleşmalapittodāsīna
- XV. dosala group (the tridosa aggravators)
 - 1 vātapittaślesmala

In this classification, it appears as though the *vātapittaghna* and vātaśleṣmaghna subgroups under the vātaghna group (I.) and the pittaślesmaghna subgroup under the pittaghna group (II.) are repeated in the vātapittaghna, vātaślesmaghna and pittaślesmaghna groups mentioned later (IV, V, and VI respectively). Vopadeva clarifies that in the case of the subgroup vātapittaghna falling under the vātaghna group, vāta is dominant and pitta has only a secondary association, whereas in the *vātapittaghna*, both *vāta* and *pitta* are equally dominant.¹⁸

Both Vopadeva and Sharma have encountered difficulties in listing the 57 groups that can be derived based on the action of substances on the humours (dosa). In fact, Keśava does not give the number 57 and only mentions eight broad categories that can be sub-classified further. Vopadeva in his commentary gives the detailed list, which has been tabulated by Sharma. Vopadeva says that there are nine subgroups under the vātaghna group, but he actually lists only seven of them, i.e.,

- 1. vātaghna,
- 2. vātaghnapittala,
- 3. vātaghnaślesmala,
- 4. vātaghnapittaślesmala,
- 5. vātaghnapittodāsīna,
- 6. vātaghnaślesmodāsīna,
- 7. vātaghnapittaślesmodāsīna.

Sharma lists eight subgroups under vātaghna by adding vātapittaghna and vātaśleṣmaghna but omitting vātaghnapittaślesmodāsīna mentioned by Vopadeva. Sharma, however, lists nine subgroups under pittaghna and śleşmaghna groups by adding pittaślesmaghna, pittavātaghna and ślesmavātaghna, ślesmapittaghna subgroups respectively. In addition, vātaślesmaghna and pittaślesmaghna groups are listed separately.

¹⁸Vopadeva clarifies that there is no overlap in the subgroups: sapitte vāte vātaprādhānyam vāte pitte tūbhayaprādhānyam vācyam ity asankarah

This leads to repetition of these categories as subgroups under vātaghna and pittaghna groups as well as independent groups.

Vopadeva mentions that variant groups like vātaghnapittalālpakapha can also be derived from this classification as this becomes necessary when fixing the properties of a drug in a very precise manner.¹⁹

In fact, it is not sure whether Keśava ever attempted to fit the substances listed in his work under 57 categories. The actual categories under which Keśava lists medicinal and food substances are quite different from the mathematical subgroups given by Vopadeva and Sharma. Keśava categorizes substances on the basis of actually-observed properties (yatra dravye yo drstah sa tatrokta eva). Keśava's listing is given below and makes 48 subgroups under eight major groups.

I. vātaghna varga

- 1. vātaghna, e.g., Modakī,
- 2. vātaghnaślesmala, e.g., Asthiśrňkhalā,
- 3. vātaghnapittakaphakrt, e.g., Miśreyā,
- 4. vātaghnapittalālpakapha, e.g., Āksikīsurā,
- 5. vātaghnapittakarakapha, e.g., Tilataila,
- 6. vātaghnalpapittaślesma, e.g., Madhumāraka,
- 7. vātaghnapittakaphodāsīna, e.g., Masūrayūsa,
- 8. vātaghnaślesmalapittodāsīna, e.g., Palāndu

II. pittaghna varga

- 1. pittaghna, e.g., Candana,
- 2. pittaghnavātakara, e.g., Sipi (gundrā),
- 3. pittaghnaślesmala, e.g., Śālmalī,

¹⁹Vopadeva explains that further variants are possible but can be resolved into the main groups to avoid infinite regress (Sharma 1977: section 2, p. 12): vātaghnapittalālpaśleṣmalādayas taratamabhedā vātaghnapittalaślesmalādyantarbhūtatvād anantatvāc ca na gaṇitāḥ

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- 4. pittaghnavātakaphakṛt, e.g., Marsaśāka,
- 5. pittaghnavātakaphodāsīna, e.g., Phalgu,
- 6. pittaghnakaphodāsīna, e.g., Bimbī

III. kaphaghna varga

- 1. kaphaghna, e.g., Sāla,
- 2. kaphaghnavātala, e.g., Rakta Śigru (flower and shoot),
- 3. kaphaghnapittala, e.g., Brahmasomā,
- 4. kaphaghnapittavātakṛt, e.g., Droṇapuṣpī,
- 5. kaphaghnavātalapittodāsīna, e.g., Veņupatrī,
- 6. kaphaghnapittalavatodāsīna, e.g., Madhu (Auddālaka),
- 7. kaphaghnapittavatodāsīna, e.g., Drakṣāsava,
- 8. kaphaghnavātakṛtpittodāsīna, e.g., Kharjūramadya

IV. vātapittaghna varga

- 1. vātapittahara, e.g., Śākavṛkṣa,
- 2. vātapittaghnaśleṣmala, e.g., Tāla (Narapuṣpa),
- 3. vātapittaghnakaphodāsīna, e.g., Cañcu

V. kaphavātaghna varga

- 1. kaphavātaghna, e.g., Devadāru,
- 2. kaphavātaghnapittala, e.g., Varuņa,
- 3. kaphavātaghnapittodāsīna, e.g., Vilva,
- 4. kaphavātaghnālpapittala, e.g., Śigruphala

VI. kaphapittaghna varga,

- 1. kaphapittaghna, e.g., Jambū,
- 2. kaphapittaghnavātakara, e.g., Karañja,
- 3. kaphapittaghnavatodāsīna, e.g., Tilaparņī,
- 4. kaphapittaghnālpavātala, e.g., Taṇḍulīya

VII. dosaghna varga

1. tridoṣaghna, e.g., Kāśmarī

VIII. doșala varga,

- 1. vātala, e.g., Tila (flower, greens),
- 2. vātalālpapittakapha, e.g., Ruņeyaka Phala,

- 3. pittala, e.g., Śamī (fruit),
- 4. ślesmala, e.g., Mocarasa,
- 5. vātapittakara, e.g., Āmra (tender fruits),
- 6. vātapittakarakaphodāsīna, e.g., Kapittha (unripe fruits),
- 7. vātaślesmakara, e.g., Yastimadhu,
- 8. vātaślesmalālpapittakara, e.g., Yatuka (Keśaparni),
- 9. kaphapittakara, e.g., Āmra (medium unripe),
- 10. kaphapittakaravatodāsīna, e.g., Kusumbha Taila,
- 11. kaphapittakarālpavātala, e.g., Chatraka,
- 12. tridosala, e.g., Sarsapa (Śāka)

Wujastyk (2000) has analysed in detail the problems with combinatorics of flavour (rasa) and humour (dosa) in Indian medical literature. He observes that the medical writers did not develop algorithms to work out their concept of combinatorics with mathematical precision.²⁰ The Siddhamantra is interesting in this context because Keśava is obviously not interested in mathematically deriving the combinatorics of the humours (dosa). He follows an empirical approach and creates a classification based on actual observations of the properties of substances, which add up to 48 subgroups under eight broad groups. However, his son, Vopadeva does attempt to mathematically derive the combinatorics and ends up with a problematic list of 57 subgroups, which

²⁰Wujastyk (2000: 479–95) observes, "The evidence above seems to show that the medical authors had understood the concept of combinatorics, but that they had not developed or were not aware of algorithms for producing results. These algorithmic methods seem only to have been used amongst the mathematicians from Varāhamihira, Mahāvīra, and Bhāskara onwards. Varāhamihira had an early form of algorithm, which appears rather clumsy to use in practice. Mahāvīra introduced (or at least was an early adopter of) a delightfully straightforward technique and was also the earliest author so far identified to use the medical problem of the flavours as an example of this algorithmic technique."

he fails to satisfactorily list and elaborate. Sharma (1977) does not throw further light on the logical inconsistencies of Vopadeva's listing, but his tabulation is very helpful in understanding Vopadeva's approach to deriving the combinatorics of the humours (dosa). The combinatorics of the humours (dosa) into 48 (57) subgroups under eight broader groups is a unique contribution of Siddhamantra in three ways. First, it is the concept of udāsīna that makes this classification unprecedented and different from what has been attempted in the earlier works. Secondly, the combinatorics of Caraka, Suśruta and Vāgbhata are based on pathological derangement of the humours (dosa) and Suśruta adds blood (rakta) along with the three humours (dosa). On the other hand, for the first time, Keśava classifies medicinal substances on the basis of their pharmacological action on the dosas.

Reconciliation of contradictions amongst authorities

Keśava expresses concern that the views of celebrated authorities in the field of Ayurveda should contradict each other when it comes to the delineation of pharmacological properties. Taking the example of honey, Keśava points out that Caraka characterizes it as an aggravator of wind (vāta),21 while Suśruta deems it to be a pacifier of wind (vāta).22 On the other hand, Khāraṇādi does not specify it as either an aggravator of pacifier of wind (vāta). Vopadeva

²¹Properties of honey as described in the Carakasaṃhitā sūtrasthāna 27, v. 245 (Ācārya 1941: 167) are as follow: vātalam guru śītañ ca raktapittakaphāpaham sandhātr cchedanam rūkṣam kaṣāyam madhuram madhu

²²The properties of honey as described in the Suśrutasamhitā sūtrasthāna, 132 (Ācārya 1938: 207), are as follow: madhu tu madhuram kaşāyānurasam rūksam śītām agnidīpanam varnyam svaryam laghu sukumāram lekhanam hrdyam vājīkaranam sandhānam ropanam (samgrāhi) caksu-

points out in his commentary that Keśava has reconciled such contradictions in case of honey and other substances like *vetrāgra*, *koradūṣa*, *paṭola* and *tālasasya*.²³

Keśava's approach is reminiscent of Vāgbhaṭa's attempts to reconcile the contradictions between the *Carakasaṃhitā* and the *Suśrutasaṃhitā*. Indu (*fl. ca.* 1100–1150), in his Śaśilekhā commentary on the *Aṣṭāṅgasaṅgraha*, points out that the contradiction in delineating the properties of the water from rivers that flow out of the Himalayan ranges in the texts of Caraka and Suśruta have been reconciled by Vāgbhaṭa. According to Caraka, the waters flowing from the Himalayan ranges are wholesome and good for health.²⁴ However, according to Kṛṣṇātreya and Suśruta, they cause illnesses like growths in the neck and the like.²⁵ Vāgbhaṭa resolves this controversy by explaining that the water from the mountains that flow forcefully against the

şyam prasādanam sūkşmamārgānusāri pittaśleşmamedomehahikkāśvāsakāsātisāraccharditrṣṇākṛmiviṣapraśamanam hlādi tridoṣapraśamanam ca

²³Vopadeva clarifies how the logic of resolving the controversies regarding the properties of honey can be applied to other drugs (Sharma 1977: section 2, p. 8): tathā ca carakeṇa vetrāgraṃ vātaleṣu paṭhitam...|. khā-raṇādinā tridoṣaghneṣu paṭhitam...| tad apy atra madhuvan nirnītam| ata eva suśrutena kaphapittaghnam evoktam|

²⁴In this verse, Caraka explains that the waters that are broken and dispersed by falling on stones and flowing from the Himalayan ranges are pure, wholesome and used by gods and sages (Ācārya 1941: 171): nadyaḥ pāṣāṇavicchinnavikṣubdhābhihatodakāḥ himavatprabhavāḥ pathyāḥ puṇyāḥ devarṣisevitāḥ.

²⁵Suśruta says that the water from rivers originating in the Himalayas cause heart disease, swelling, diseases of head and swelling in the neck (Ācārya 1938: 213): tatra sahyaprabhavāḥ kuṣṭhaṃ janayanti vindhyaprabhavāḥ kuṣṭhaṃ pāṇḍurogaṃ ca malayaprabhavāḥ kṛmīn māhendraprabhavāḥ ślīpadodarāṇi himavatprabhavāḥ hṛdrogaśvayathuśirorogaślīpadagalagaṇḍān prācyāvantyā aparāvantyāścārśāṃsyupajanayanti pāriyātraprabhavāḥ pathyāḥ balārogyakarāya iti|.

rocks are wholesome for health while they are harmful when stagnant.²⁶

Theoretical construct to facilitate reconciliation

What makes this classification unique, however, is the introduction of the novel concept termed $ud\bar{a}s\bar{\imath}na$ or 'neutral' to indicate a neutral effect on the humours $(dosa)^2$. This means that the effects of substances on the dosa are evaluated in terms of whether they pacify, disturb or have no effect on the humours (dosa).

In the example of honey, Keśava's contention is that it is wind-neutral ($v\bar{a}tod\bar{a}s\bar{i}na$), that is, inherently neutral with respect to wind ($v\bar{a}ta$). Because it is inherently neutral, it can behave as aggravator or pacifier of wind ($v\bar{a}ta$) depending on conditions like dosage, time factor, combination etc. By itself, pure honey can neither aggravate nor pacify wind ($v\bar{a}ta$), but when conditioned it can be an aggravator or pacifier of wind ($v\bar{a}ta$). Interpreted thus, the contradictions in the statements of Caraka and Suśruta get resolved and the silence of Khāraṇādi with regard to the action of honey on

²⁶The commentator Indu explains in his commentary on *Aṣṭāngasangraha* how Vāgbhaṭa has resolved the contradictory statements in the works of Caraka and Suśruta (Āṭhavale 1980: 4): paratantravirodho yathā carakagranthena kṛṣṇātreyo viruddhaḥ, tathā carako himavatprabhavānām nadīnāṃ pathyatvam icchanti, kṛṣṇātreyasuśrutau tāsām eva galagaṇḍādikartrtvaṃ, vāgbhaṭas tūpalasphāletyādinā virodhaṃ nivartayati – upalāsphālanakṣepavicchedaiḥ kheditodakāḥ, himavanmalayodbhutaḥ pathyāsta eva ca sthitāḥ, kṛmiślīpadahṛtkaṇṭhaśirorogān prakurvate

²⁷Vopadeva explains the logic of the validity of the concept of audā-sīnya (Sharma 1977: section 2, p.7): niṣpratibandha upādhivyāpāre vātalo-pahitasya madhuno vātalatve nyāyasiddhe vacanavaiyarthyam iti cen na, asid-dhe hy audāsīnye nyāyapravṛttir iti iha tv asmad eva vacanān nyāyasahakṛtād audāsīnyasiddhih

wind ($v\bar{a}ta$) can be put into perspective.²⁸

Brevity in expressing a vast subject in a compact manner

Keśava claims that it is a matter of amazement only to the dull-witted that the determination of the pharmacological property of a substance not discussed in this work will not be found elsewhere. He means to say that the dull-witted might wonder how a work that is so brief can be so comprehensive and all-inclusive. In other words, the intelligent reader will be able to appreciate the skills of the author in composing this work.

The commentator Vopadeva remarks that it is impossible to capture the infinite range of medicinal substances within the scope of a book. But the Siddhamantra has extensively compiled information from all the available and authoritative sources of Ayurveda and in that respect becomes quite comprehensive and complete even when it is extremely concise.29

Snippets from the commentary of Vopadeva

Siddhamantra would lose much of its charm were it not for the learned commentary of Vopadeva. Being the son

²⁸Vopadeva explains how the controversy surrounding the properties of honey can be resolved with the help of the concept of audāsīnya (Sharma 1977: section 2, p.7): tasmāc chuddham madhu vātodāsīnam ity abhihitam, tattūpādhibhedādvāt alam vātaghnañ cety ucitam, upadhayaś ca mātrādayah|

²⁹Vopadeva clarifies how this work is comprehensive in spite of being very brief (Sharma 1977: section 2, p. 66): yady apy ānantyād dravyāṇi kārtsnyena vaktum aśakyāni tathāpi yāvanti prācīnesu granthesu labdhāni tāvanti nirnītānīty arthah atra visaye adhīmatām buddhivihīnānām citram katham īdṛśenātisamkṣiptena granthena tādṛg vistīrṇacarakādiśāstroktasamagradravyanirnayaity anupapattigarbho vismayah, na tu buddhimatām

of Keśava, Vopadeva has perhaps preserved the original thought process of the author and his interpretations are crucial in throwing light on some of the key verses, which by themselves would leave much to the imagination of the reader.

For instance, the verse that alludes to the contradiction between the views of Caraka, Suśruta and Khāraṇādi does not mention that the discussion is about honey. Vopadeva makes this explicit in his commentary.³⁰

Keśava only mentions that he has resolved contradictions between the authorities. It is Vopadeva who gives an elaborate account of the methodology and the arguments with examples of how this is achieved by the author.

Keśava does not mention generic power (*prabhāva*) when he enumerates the factors that determine drug action. Vopadeva explains that *prabhāva* is not a property of the drug.³¹

Vopadeva's commentary is studded with succinct remarks and statements that are quite revelatory. In one context he mentions that the author considers three authorities as the most reliable amongst many others. Interestingly, these authorities form a triad that is not a familiar combination in the tradition of Ayurveda – Caraka, Suśruta and Khāraṇādi. Sharma takes it for granted that Caraka, Suśruta and Vāgbhaṭa form the triad referred to by Vopadeva and Keśava.³² However, on a closer look, it is

³⁰Vopadeva points out that Keśava is referring to honey in the particular verse (Sharma 1977: section 2, p. 6): vātalam carako brute vātaghnam vaṣti suśrutaḥ, khāraṇādir vadaty anyo, ity ukter atra nirṇayaḥ – yathā madhu carakeṇa vātalam uktaṃ

³¹Sharma 1977: section 2, p. 3: prabhāvasya tv asadhāraṇadravyalakṣanān atiriktalakṣanatvan na guṇatvam|

³²Sharma comments (1977: section 2, intro. p. 10), "While accepting the authority, the commentator accepts only three, Caraka, Suśruta and

quite obvious that the third authority is Khāranādi and not Vāgbhata. In fact, Keśava refutes the views of Vāgbhata in favor of Suśruta when they contradict each other.33 But on a closer look, it is quite obvious that Vopadeva is commenting on the verse composed by Keśava that mentions Caraka, Suśruta and Khāranādi, by name, and not Vāgbhata. Vopadeva justifies the authority of this triad on the grounds that their works are credible, complete, have an unbroken tradition and have been commented upon by eminent scholars in the field.34

It is interesting to note that Vopadeva underplays the authority of Vāgbhata when he contradicts Suśruta in deciphering the pharmacological properties of palm grain (talasasya). According to Vāgbhata, palm grain (talasasya) aggravates bile (pitta) and has a laxative liquid (sāra) action. On the other hand, Suśruta attributes to it the ability to pacify bile (pitta) and mentions that it is heavy to digest. Vopadeva explains that Vāgbhata has misread the word rasa "taste" as sāra "liquid" and pittahrd "bile-heart" as pittakrt "bile-producing," and thus wrongly interpreted its pharmacological properties. He further quotes Caraka and Khāranādi in support of Suśruta and concludes that Keśava has characterized palm grain (talasasya) as a pacifier of wind (vāta) and bile (pitta) and aggravator of phlegm (kapha).35

Vāgbhaṭa because they are complete, traditionally unbroken and commented on by scholars."

³³See Sharma 1977: section 2, p. 10.

³⁴Vopadeva spells out the criteria for credibility of the authorities accepted by Keśava as follows (Sharma 1977: section 2, p. 10): carakādīnām trayāṇām evopādānam, tatpraṇītatantrānām pramāṇatvāt, sampūrṇatvād avicchinnasampradāyatvād abhiyuktair vyākhyātatvāc ca

³⁵ Vopadeva explains why the view of Vāgbhaṭa is not acceptable when compared with that of Suśruta (Sharma 1977: section 2, p. 10): ata eva tad-

Vopadeva's commentary is replete with quotations from various authorities in the field of Ayurveda, many of whose works have been lost subsequently. His commentary is also very valuable in fixing the identities of the medicinal and food substances mentioned by Keśava.

Discussion

Keśava stands out in the tradition of Ayurveda for his original thinking, critical approach, innovative ideas and practical outlook. Being an accomplished clinician himself, Keśava realized the importance of precision devoid of ambiguities in deciphering and understanding the pharmacological properties of medicinal substances. Though critical, he is also very respectful of the authorities and the tradition of Ayurveda. He employs his intellectual prowess to authenticate the traditional teachings of Ayurveda with the help of new theoretical constructs, clever arguments and new classifications. And the novelty of his innovative ideas gets subsumed in the service of those authorities whom he selects as the most credible.

The commentary of Vopadeva reveals the aggressive attitude of Keśava in refuting the views of many authorities in the process of justifying his own interpretations. But Keśava expresses equal vehemence when it comes to defending and reconciling the views of those whom he considers to be the ultimate authorities on the subject.

viruddhānām anyeṣām aprāmānyam eva| yathā phalam tu pittalam tālam saram iti vāgbhatavākyasya phalam svādu rase tesām tālajam guru pittahrd iti suśrutavākyavirodhāt...kiñ ca rasam ity atra saram iti, hrd ity atra krd ity anyathā gṛhītaṃ suśrutavākyam evātra mūlaṃ sambhāvyate

Conclusion

The Siddhamantra of Keśava is an important work that has been neglected by scholars and practitioners of Ayurveda in contemporary times. There is no doubt that this work has historical importance for the novel ideas and approaches that it has brought forth in the field of Ayurvedic pharmacology. However, it has to be pointed out that Keśava was not a mere theoretician and he was not building up his arguments merely on the basis of textual analysis. As Vopadeva has pointed out, his father recorded the properties of the drugs accurately, as observed by himself, and did not forcefully classify them into predetermined groups.³⁶ The uniqueness of Siddhamantra rests on the fact that its author was a clinician of no mean order and his clinical experiences contributed significantly in helping him arrive at decisive insights on the pharmacological properties of controversial medicinal substances. The Siddhamantra is thus the "hymn of success," exemplifying a rigorous approach to corroborate clinical experience with textual analysis in arriving at a deeper understanding of the classical writings of Ayurveda.

Further reading

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³⁶Vopadeva remarks that the properties of substances have been documented exactly as they have been observed (Sharma 1977: section 2, p. 12): yatra dravye yo dṛṣṭaḥ sa tatrokta eva| yathā vātaghnī pittalā cālpakaphā cāpy aksikī suretyādi

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