

Mahādevadeva's *Hikmatprakāśa* – A Sanskrit treatise on Yūnānī medicine^{1,2}

Part I: text and commentary of Section I with an annotated English translation

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The *Hikmatprakāśa*³ is a Sanskrit medical treatise about the principles and practice of Yūnānī medicine, written by Mahādevadeva⁴ and completed in CE 1773/1774.⁵ The author also composed a *Hikmatpradīpa*. The latter work has not been edited and information about its contents is not available.

One edition of the *Hikmatprakāśa* has been published.⁶ The edited text consists of 1,928 verses, most of them *śloka*s though other metres are also represented.⁷ The treatise is divided into three sections (*khaṇḍa*) of 97, 1142 and 689 verses respectively. These three sections are heterogeneous in style and contents.

Section one is subdivided into an introduction (1–5) and five chapters with

¹This paper is part of the Proceedings of the Symposium “Ayurveda in Post-Classical and Pre-Colonial India”, International Institute for Asian Studies, Leiden, 9 July 2009.

²It has not been possible to identify all the Persian/Arabic terms in nāgarī script.

³A description of the work is found in G. Jan Meulenbeld (2000), IIA, 338 and Priyavrat Śarmā (1977), IV, 301–302.

⁴See Th. Aufrecht's CC I, 436, 766; II, 100, 184, 237. Aufrecht refers to him as Mahādeva-panḍita, as does G. Hāldār (1963, 467). P.V. Śarmā (1975, 326) gives his name as Mahādeva, Rahman et al. (1982, 126–127) as Mahādevabhaṭṭa.

⁵See 3.689: *viyadbṛhadbhānukarīndusamkhye śrīvikramādityanṛpendravarṣe / pūrṭim ... yāto 'dbhuto vaidyakaśārabandhaḥ //* : this wonderful composition on the essentials of medicine has been completed in the year 1830 of the era of king Vikramāditya. See CC II, 100. G. Hāldār (1963, 467) and Atrideva (1976, 318) assign the author to the thirteenth or fourteenth century.

⁶Edited by Paṇḍit Nandalālaśarman, Śrīveṅkaṭeśvar Press, Bombay 1913/1914.

⁷Other metres employed are, for example: *indravajra* (1.1.2; 2.2.425; 3.650), *upendravajra* (1.1.35ab; 2.2.119; 3.653), *upajāti* (2.2.109; 262; 336; 337; 338; 456; 548; 567), *vasantatilakā* (2.2.67), *śārdūlavikrīḍita* (2.2.263; 3.546).

the titles *doṣasvarūpādinirūpaṇa* (1–23), its continuation, *punaḥ prakṛtam anu-sarati* (24–34), *śukratraividhya* (35–57), *mūtraparīkṣā* (1–19), and *nāḍīparīkṣā* (1–21).

This arrangement and the numbering of the verses, put in by the editor or already present in the manuscript(s) he made use of, indicate that the first three chapters belong closely together, exposing basic principles and explaining technical terms employed in sections two and three.

No information is available on the author(s) of the commentary (*ṭīkā*) on the *Hikmatprakāśa*. Its style and contents differ considerably from those of the treatise itself, and the character of the remarks on the three sections shows considerable internal disagreements. Section three has, apart from the *ṭīkā*, another commentary, called *vākya*, which makes it a point of discussion whether one or more authors are involved.

Section one has comments in Sanskrit, without the admixture of a single Persian/Arabic word, but they are restricted to remarks on 1.1.11cd and 1.1.19–23.

The commentary on section two is of a completely different nature. It is continuous and composed in a mixture of Sanskrit and Persian.

The remarks in the *ṭīkā* on section three are sparse and mostly in Sanskrit; its *vākya* is for a large part a paraphrasis in Persian of the verses.

The sources of the *Hikmatprakāśa* remain unknown. Its colophon describes the work as a composition on the essentials of treatment (*cikitsāsāranibandha*), *pārasīpratibimba*, called *Hikmatprakāśa*. This establishes that the sources are Persian and that the treatise has not been translated from Arabic as Th. Aufrecht would have it.⁸

The only source mentioned by name in the *Hikmatprakāśa* is Mādhava.⁹

A later work quoting the *Hikmatprakāśa* is Mauktika's *Vaidyamuktāvalī*, a medical treatise probably dating from the nineteenth century.¹⁰

Introductory remarks

The author's use of *nāgarī* in writing Persian and Arabic words has the disadvantage that a number of consonants employed in those languages cannot be represented: alef, se, he hoti, zal, ze, sad, zad, ta, za, ain, ghain, qaf, and gaf,

⁸CC I, 766.

⁹See 2.2.77–78. This verse is identical with *Mādhavanidāna* 9.3 on *raktapitta*, borrowed from *Aṣṭāṅgahṛdayasaṃhitā*, *Nidānasthāna* 3.7cd–8ab.

¹⁰See G. Jan Meulenbeld (2000), IIA, 374. P.V. Śarmā (IV, 302) mentions that Mauktika also refers to the *Hikmatpradīpa*.

which makes it cumbersome to find the correct spellings. His use of vowels does not always agree with standard Persian or Arabic. The author adds to many words of Persian or Arabic origin a final a for metrical reasons. This procedure is followed inconsistently.

The *maṅgala* pays homage to Gaṇeśa¹¹ and Dhanvantari.¹²

*praṇamya paramātmānaṃ sarvātmānaṃ jagadgurum /
yasya māyāvilāsa bhāti nānāvidhaṃ jagat // (1.1.1)*

After paying obeisance to the lord of the world, the highest soul (*paramātmāna*), the soul of the whole world (*sarvātmāna*), by whose playful art (*māyāvilāsa*) the world in its various aspects shines forth,¹³

*nṛsiṃhadevātmajābālakṛṣṇadevātmabhūr bheṣajakarmadakṣaḥ /
devo mahādeva udārakīrtyai hikmatprakāśaṃ tanute vicitram // (1.1.2)*

Mahādevadeva, expert medical practitioner, son of Nṛsiṃhadeva, grandson of Bālakṛṣṇadeva, composes, in order to acquire illustrious fame, the multi-faceted *Hikmatprakāśa*.

*vidyaiṣā hikmata proktā najrī amlīti sā dvidhā /
najrī vastuvimarsāś ca amlī syāt tadupakramaḥ // (1.1.3)*

This system of knowledge is called Hikmata;¹⁴ it is of two kinds: *najrī* and *amlī*. *najrī* is concerned with considerations on (medicinal) substances,¹⁵

¹¹The Indian god who removes obstacles and is often paid homage to at the beginning of a project.

¹²The Indian god of medicine.

¹³The author is a Hindu and employs here a term current in *Vedānta* philosophy. The *Hikmatprakāśa* contains a large number of references to Hinduism: Ādityaṅgendra (3.689), Āsura (2.2.285; 3.257), Daitya (3.19), Daityāntaka (3.19), *Dāśarathē śaraḥ* (3.650), *dhaneśadīś* (2.2.336), Durgā (2.2.267), *mīnadhvajotsava* (2.2.427), Mṛtyuṃjaya Ādideva (3.254), Nāga (2.2.85), *nāmasmaraṇa* (3.218), *rāmabāṇa* (3.257 and 633), Rāvaṇa (2.2.608), *saṃnyāsadharmā* (2.2.849), *śivārcana* (3.179), Śrīguru (2.2.66), Śrīhari (597), *śrīkāntānāmasmaraṇa* (3.218), *śrīnṛsiṃhasmṛti* (2.2.17), *śrīrāmabāṇa* (3.633), Śrītāmbikā (3.685), Śrīvikrama (3.689), Sudarśana (3.395), *Tārṣya* (3.180), *vaḍavānala* (2.2.97), Viṣṇu (2.2.85).

¹⁴*hikmat*.

¹⁵*najr* = nature, origin.

amlī with their application in treatment.¹⁶

*prabhunā vibhunā sarvaṃ sarvajñena vikalpitam /
samīrāṅnyambubhūmīnāṃ samavāyāt samantataḥ* // (1.1.4)

The whole world has been fashioned by the omniscient and powerful lord from the everywhere present assemblage (*samavāya*) of wind, fire, water and earth.

*paryāyāḥ kramaśaś caiṣāṃ havā ātaśa āba khāk /
hakīmakulla īśaḥ syād yenaikatra niveśitāḥ* // (1.1.5)

The synonyms of these (elements) are, in due order, *havā*, *ātaśa*,¹⁷ *āba*,¹⁸ and *khāk*.¹⁹ It is the lord, the supreme physician²⁰ by whom these are made to settle down as one whole.

Examination of the own nature of the *doṣas*, etc.²¹

*dehe dehabhṛtāṃ saiva caturbhūtī sukhetare /
doṣarūpaiḥ pariṇatā vidadhāti samāsamā* // (1.1.6)

It is, consisting of the four elements (*bhūta*)²² and transformed (*pariṇata*) into happiness and suffering by (the constituents) in the form of *doṣas*, arranged in an even (*sama*) or uneven (*asama*) way in the bodies of embodied beings.²³

¹⁶ *amal* = putting in practice.

¹⁷ *ātiṣṭh*.

¹⁸ *āb*.

¹⁹ *khāk*.

²⁰ *hakīmakulla* = *hakīm-e-kull*.

²¹ *doṣasvarūpādinirūpaṇa*.

²² The term *bhūta* as indicating one of the four elements has been borrowed from Indian thought, where five elements (*mahābhūta*) are distinguished, the four of Islamic thought and space (*ākāśa*) as the fifth one.

²³ A *sama* condition, equilibrium, means health, an *asama* one, absence of equilibrium, leads to disease. The same concept forms an essential part of āyurvedic theory, where a balanced state of the *doṣas* (*doṣasāmya*) is a characteristic of health, whereas an imbalance (*doṣavaiṣāmya*) is typical of a diseased state.

*doṣaḥ khilta iti proktaḥ sa caturdhā nirūpyate /
saudā safrā tathā balgam turīyaṃ khūna ucyate // (1.1.7)*

The term for *doṣa* is *khilta*.²⁴ They are four in number: *saudā*,²⁵ *safrā*,²⁶ *balgam*²⁷ and, as the fourth one, *khūna*.²⁸

*āhārasya parīpāke phenāḥ syāt kaphasaṃjñakaḥ /
samyakpakvas tu rudhirodbhavakārī rasa smṛtaḥ // (1.1.8)*

The foam (*phena*) arising during the digestion (*parīpāka*) of the food is called phlegm (*kapha*). When it has been digested appropriately (*samyakpakva*) and is able to give rise to blood, it is known as *rasa*.²⁹

*sa kelūsa ca kemūsa yakṛdaṅgonmukho yadi /
kharapākas tu pittaṃ syād bhasma saudā samīritam // (1.1.9)*

When it goes towards the organ called liver (*yakṛt*)³⁰ it is (called) *kelūsa*³¹

²⁴ *khilt*. See on *khilt*: Āyurvedīyaviśvakoṣa IV, 552. The Arabic plural is *akhlāt*; see Āyurvedīyaviśvakoṣa I, 34.

²⁵ *saudā* i.e., black. Black bile as a concept of medical theory has been adopted from Greek medicine. M.H. Shah, 37, fn.4: The equivalents of *saudā*, atrabilious or black bile, employed in Latin versions, are not appropriate as black bile derived from the combustion of bile is one out of the several varieties of abnormal *saudā*, others being the combustion products of phlegm, blood and ordinary *saudā*.

²⁶ *safrā*, i.e., yellow (bile).

²⁷ Phlegm.

²⁸ The Persian name of blood is *khūn*. The author uses the Arabic *dam* rarely. He refers to the four morbid factors of Yūnānī medicine as *doṣas*, without paying attention to crucial differences in the two concepts. The three Indian *doṣas* are completely independent of each other and their qualities and actions do not overlap, as opposed to the humours of Islamic medicine which therefore can be transformed into one another. See on the humours in Islamic medicine: M.H. Shah, XXIV–XXV.

²⁹ The doctrine that phlegm as a *doṣa* arises during the digestion of the food is foreign to *āyurveda*, which teaches that the first stage of the process of digestion of the food is dominated by the influence of *kapha*. *Āyurveda* agrees with the process described in also calling *rasa* the juice produced by the digestion of the food and regarding it as a precursor of blood.

³⁰ The liver is a much more important organ in Islamic medicine than in *āyurveda*.

³¹ *kaylūs* = chyle (see Āyurvedīyaviśvakoṣa IV, 385; Platts; Schlimmer 136).

and *kemūsa*.³² Due to intense digestion bile (*pitta*) arises; its ashes (*bhasman*) are called *saudā*.³³

*tatra saudā dharātattvaṃ rūkṣaṃ śītaṃ svabhāvataḥ /
pittam agneḥ svarūpaṃ tu safrā rūkṣam uṣṇakam // (1.1.10)*

Black bile, of the nature of earth (*dharā*), is dry and cold by its own nature. The yellow bile, also called *safrā*, which has the same properties as fire, is dry and hot.

*balgam vārisvarūpaṃ syāt sa kaphaḥ snigdhaśītalah /
asraṃ vāyuh khūna iti snigdhoṣṇaṃ teṣu tadvaram // (1.1.11)*

Phlegm possesses the same properties as water; this phlegm is moist and cold. The moist and hot (properties) in blood (*asra*), wind (*vāyu*) and blood (*khūna*) are their most prominent parts.³⁴

commentary:

*vāyos tu prānarūpatayā jīvasya snigdhoṣṇatvasāhacaryāt tathābhūta-
rudhirāśrayatvāj jīvapraṇayor ekāśrayatvena snigdhoṣṇatvaṃ na duṣyati.
yathā dīpe snigdhoṣṇaḥ snehaḥ prakāśakaḥ kimtu viruddhaṃ pariharati.
prakupīto vāto rūkṣaḥ śīta eva.*

Since *vāyu* possesses the same properties (*rūpa*) as *prāṇa*,³⁵ and because *jīva*³⁶ is associated with (*sāhacarya*) moisture and heat, and because *jīva*

³² *kaymūs* = chyme, roher Nahrungssaft (see Schimmer 136; Platts). Compare Hassan Kamal, 439: chyme. This doctrine is foreign to *āyurveda*.

³³ See on the processes described: Hassan Kamal, 350. *Āyurvedic* theory has nothing in common.

³⁴ This verse is problematic. Blood is referred to twice, as *asra*, one of the Sanskrit words for blood, and as *khūna*, the Persian word for blood.

The mention of *vāyu* as a *doṣa* is very remarkable since it is not classified as such in Islamic medicine, whereas it is a most important one in *āyurveda*. The commentary on the verse is rightly concerned with this point.

³⁵ This term occurs only in this comment. It designates in *āyurveda* the vital breath or one of the five kinds of *vāyu*. The term *prāṇin* occurs in the sense of living being in 1.1.29.

³⁶ This term, meaning the principle of life, is rare; it is also used at 1.3.3; *jīvoṣman*, however, vital or innate heat, occurs a few times in section II of the treatise, while *jīvin* is

and *prāṇa* depend on (*āśrayatva*) blood which has the same properties (*tathābhūta*), no objection can be raised (to the thesis) that these (*jīva* and *prāṇa*) are moist and hot on account of this dependence. As in (the following example): the moist and hot oil in a lamp gives light (*prakāśaka*). The contrary (*viruddha*), however, does not apply: excited *vāta* is exclusively dry and cold.³⁷

*tatsambaddhāparam doṣatrayam tasya nirākṛteḥ /
nirākṛtāḥ samastāḥ syur yato roganibarhaṇam // (1.1.12)*

By the removal of the other triad of *doṣas*, connected therewith, all will be removed, which leads to the suppression of disease.³⁸

*pavanādidharāntānām caturṇām śaktivaibhavāt /
dravyeṣu prakṛtir jātā tabīat sā prakṛtitā // (1.1.13)*

The constitution (*prakṛti*) in (medicinal) substances is brought about by the power of the faculties (*śaktis*) of these four (elements), beginning with wind and ending with earth.³⁹ This constitution (*prakṛti*) is called *tabīat*.⁴⁰

*śītoṣnasnigdhārūkṣatvaṃ vīryadvayaṃ guṇadvayāt /
caturdhā bhedaṃ āpannā caturbhiś ca pṛthaktayā // (1.1.14)*

Coldness, heat, moisture and dryness consist of two *vīryas*, which, on account of the dyad of *guṇas*, reach a fourfold division because of the distinctness of the four.⁴¹

found at 1.1.46.

³⁷In *āyurveda* wind, when not excited, is neither hot nor cold (*anuṣṇāśīta*).

³⁸The reference to the other triad of *doṣas* is a problem, unless the group of *asra*, *vāyu* and *khūna* of 1.1.11 is meant.

³⁹The four elements, wind, fire, water and earth, mentioned in 1.1.4 as constituting the whole world, are referred to.

⁴⁰*tabī'at* = nature, kind, property (Schlimmer 396). The term *tabī'at* is defined at 3.2: *vīryadvayaguṇadvandvagaṇanaṃ dravyasaṃkare / sāmīyāt samaṃ viśeṣāt tu tabīat seti nirṇayaḥ //*, i.e., The calculation concerning the two *vīryas* and the two *guṇas* in a mixture of (medicinal) substances leads to the conclusion of neutrality due to a state of balance but to a (particulate) *prakṛti* due to distinctions.

⁴¹Coldness and heat are the two *vīryas*, moisture and dryness the two *guṇas*; this results in four possible combinations: cold and dry, cold and moist, warm and dry, warm and

*burūdat śītataḥ proktā harārat coṣṇatā matā /
ratūbat snigdhatā jñeyā yabūsat rūkṣatā smṛtā // (1.1.15)*

Coldness is called *burūdat*,⁴² heat is called *harārat*,⁴³ the name of moisture is *ratūbat*,⁴⁴ while dryness is known as *yabūsat*.⁴⁵

*sardī garmī tarī khuṣkī tatparyāyā ime punaḥ /
uṣṇaṃ hāra itī proktaṃ śītaṃ bārida ity api // (1.1.16)*

Synonyms of these terms are, respectively, *sardī*, *garmī*, *tarī*, and *khuṣkī*; hot is known as *hāra*⁴⁶ and cold as *bārida*.⁴⁷

*snigdhaṃ rataba nāmnā tu rūkṣaṃ yābisasaṃjñakam /
apare 'pi ca paryāyāḥ sarda khuṣka garam tara // (1.1.17)*

Moist bears the name of *rataba*,⁴⁸ dry the name of *yābisa*,⁴⁹ other synonyms are *sarda*,⁵⁰ *khuṣka*,⁵¹ *garam*⁵² and *tara*.⁵³

*sāmānādhikaraṇyena dvandvatve ca dvayor dvayoḥ /
evam aṣṭavidhā sā syāt punar bhedacatuṣṭayāt // (1.1.18)*

moist. This interpretation is confirmed in 3.2, quoted on 1.1.13. Hot and cold, the two *vīryas*, are regarded as active qualities, moist and dry, the two *guṇas*, as passive. See on this distinction, elaborated by Aristotle, M.H. Shah, XIV–XV.

⁴² *bārid* = cold, *burūdat* = coldness.

⁴³ *harārat*.

⁴⁴ *ruṭūbat*.

⁴⁵ *yābis* = dry, *yabūsat* = dryness.

⁴⁶ *hārr*.

⁴⁷ *bārid* means cold.

⁴⁸ *ratab* = moist. The author chooses *snigdha* for the property moist, though this term is employed for oily and fatty substances in Sanskrit; *ārdrā* as a term for wet or moist is not completely absent from the text of the *Hikmatprakāśa* but less often used (see, e.g., 2.2.313).

⁴⁹ *yābis* = dry. The author does not reject *śuṣka* as the Sanskrit equivalent of dry, dried up, but uses it less frequently (see, e.g., 2.2.313).

⁵⁰ *sard* = cold.

⁵¹ *khuṣk* = dry. Daljīt Siṃha II, 26 = *rūkṣa*.

⁵² *garm* = hot.

⁵³ *tar* = moist. Daljīt Siṃha II, 26 = *snigdha*.

Because each pair (of two properties) is based on the same substrate (*adhikaraṇa*), an eightfold division is possible based on the four distinct entities.

*ekadvitricatuḥsaṃkhyāguṇitaṃ yatra tad bhavet /
ekaṃ dvayaṃ ca pūrvāsāṃ sa darjā saṃprakīrtitaḥ // (1.1.19)*

When there is a first, second, third or fourth degree (of a property) present (in a medicinal substance), this is called a first, second, etc., *darjā*.⁵⁴

*yatra dravye kṛṣābhāsaṃ śītatvādy aṇu saṃbhavet /
na punar vyaktim āyāti badarje avvala smṛtam // (1.1.20)*

When in a medicinal substance coldness, etc., are slightly developed and do not manifest themselves, it is called the first degree (*badarje avvala*).⁵⁵

*vyaktaṃ syād yatra śītādi jñāyate manujaiḥ punaḥ /
bhiṣagvaryair vibhāvyaṃ tat darje doyama īdrśam // (1.1.21)*

When in a substance (the property) cold, etc., are manifest and can be known by human beings, this is regarded by excellent physicians as the second degree (*darje doyama*).⁵⁶

*vyaktaṃ vedyaṃ pragalbhaṃ ca yatra śītādikaṃ bhavet /
tatra trir guṇitatvāt tu darje soyama vastuṣu // (1.1.22)*

When in substances (the properties) cold, etc., are manifest, can be acknowledged and are strongly developed, the third degree (*darje soyama*)⁵⁷ (is said to be present) on account of this threefold presence (*triguṇitva*).⁵⁸

⁵⁴ *daraj*, *daraja* = grade, degree. These four degrees are very frequently referred to in section two where the properties of a medicinal substance are specified.

⁵⁵ 'awwal = first. The expression *badarje avvala* is probably a rendering of Persian *badaraj-e-'awwal*.

⁵⁶ Persian *dowwom* = second is more usual, but *doyyam* as an alternative form is also permitted. *darje doyama* is probably the same as Persian *daraj-e-doyyam*.

⁵⁷ Persian *sevvom* = third is the more common form; *soyyam* is an alternative form. *darje soyama* is probably the equivalent of Persian *daraj-e-soyyam*.

⁵⁸ The terms *eka-*, *dvi-* and *triguṇita* are very frequent in section two where the properties and actions of medicinal substances are specified.

*vyaktaṃ vedyam prauḍhavaikalyakāri prāyo dravye śaityam auṣṇādikam
vā /
evam vastu jñeyam aṃśāṃśavijñair āyurvidbhis tad badarje cahāram //*
(1.1.23)

When coldness, heat, etc., are in general manifest in a substance, can be perceived, are fully developed and bring about defects, the substance is known as of the fourth degree (*badarje cahāram*)⁵⁹ by knowers of āyurveda who are acquainted with (the determination of) each single component (*aṃśa*) (in a medicinal substance).⁶⁰

commentary:

*puruṣavyāghradrṣṭāntena yathā – mṛgayāvihārī naras taccarmanakhā-
diratnān avamaṃ vastu saṃjihīrṣur mahāṭavyāṃ ciraṃ vastuṃ svavaśṭi-
kartuṃ ca punaḥ svaprabhāvāvirbhāvaṃ ca vidhātuṃ caturdhā sāhasaṃ
tanoti. tatrādau taṃ prahartuṃ parikaraḥ prathamam sāhasam. tat-
samīpe sammukhīkaraṇaṃ dvitīyaṃ sāhasam. tena sākaṃ saṃgaras
tṛtīyaṃ sāhasam. tannigrahaś caturthaṃ sāhasam. nigrahas trividhaḥ
– śamano niṣkarṣaṇo nāśanaṃ ca. sāhasacatuṣṭayasampannaḥ pumān
kāryasiddhiṃ labhate. tathaiva. śrījaganmātur vibhūtirūpiṇī dravya-
mātrasya śaktimatī prakṛtiḥ tabīatnāmnī prakāṭibhūtā caturdhā
prasṃmarā tatparākramo mṛgapuruṣasadṛśaḥ manujaprakṛtir mahāṭavī
tatra ciraṃsthitāḥ svādhīnakaraṇaṃ cobhayatra samam eva nyūnādhika-
duṣṭadoṣāntakasvarūpo vyāghras tannigrahaḥ spaṣṭa eva. bimbapratibimba-
bhāvayoḥ tataś ca samyagārogyaprapṛtī ratnalābhaḥ yaśaḥsamupapattir
vijayasadrṣī etad uddeśena hetunā kāryakaraṇe tadāhopuruṣikayā manuja-
prakṛtyaṭavyām antaḥpravṛttilakṣaṇā gatiḥ prathamāsāhasatulyā sa darjā
avvala smṛtaḥ. evam evottarottarameghamānantahpravṛttir dviguṇā gatiḥ
darjā doyam. triguṇā cet darjā soyam. caturguṇā cet darjā cahāram. ity
avadhiḥ. kāyam tabīat mijāj svabhāvaparyāyah – iti vyākhyā.*

A man who likes hunting and wants to take hold of (a tiger's) skin, claws and other precious things which are objects of great value, who lives for a long time in a great forest in order to take possession of them, shows his power by performing four kinds of rash action. Following his traces with the aim

⁵⁹ Persian *ba-daraj-e-cahārom*.

⁶⁰ See on this procedure, called *aṃśāṃśakalpanā* in āyurveda, *Aṣṭāṅgahṛdayasamhitā*, *Nidānasthāna* 1.9–11 = *Mādhavanidāna* 1.9–11 and the commentaries on these treatises.

to slay him is the first rash action. Coming face to face with him in his vicinity is the second rash action. The third rash action consists in the fight with him. Catching him is the fourth rash action. This catching is of three kinds: soothing, luring him out of his shelter, and killing him. A man able to carry out these four rash actions will reach his aim.

In the same way as in the example of the man and the tiger (it can be reasoned as follows).

tabīat is the name of the constitution of all matter endowed with faculties and consists of the great power of the Mother of the World, manifesting itself in four ways that stream forth from it. Its energy is like that of the wild animal and the man. The constitution of mankind resembles staying for a long time in a great forest. (The wish) to bring (the other) under one's control is the same on both sides. The tiger is (present) in the form of disease (consisting) of deficient, excessive or corrupted *doṣas*. (The meaning of) subduing it (the tiger) is evident.

When starting from taking into consideration the object of comparison and that with which it is compared, reaching a sound state of health is the acquisition of precious objects; the acquisition of fame is the same as the victory (over the tiger) according to this type of illustration. Boasting on one's prowess in reaching one's purpose as the ground, the way of action, characterised by the behaviour within the great forest of human nature, similar to the first rash action, is called the first degree (*darjā*). The way of action consisting of a behaviour with two characteristics is the second degree. If three characteristics (are present) it is the third degree and if four (are present) the fourth degree. This ends the explanation.

kāyam, *tabīat* and *mijāj*⁶¹ are other terms for one's own nature. This ends the commentary.

The characteristics of the *darjās* have been clearly delineated⁶²

*mātādil lakṣaṇaṃ khyātaṃ samānabalamallavat /
ayātādāl samānatvaṃ yatra sarvātmanā bhavet /
tad dravyaṃ motādil proktam etan mataviśāradaih // (1.1.24)*

⁶¹ The term *mizāj* is usually rendered as 'temperament'. See on the temperaments: Hassan Kamal, 163 (complexions), M.H. Shah, XVIII–XXIV, 219–226.

⁶² *darjālakṣaṇaṃ viśadaṃ nirūpyate.*

A characteristic is called *māṭadil*⁶³ when it resembles that of wrestlers with an equal force. When this equality is complete in a substance it is known as *ayatdāl*.⁶⁴ Such a substance is declared to be *motadil*⁶⁵ of two kinds by the experts in this field.

*yatrāste śīśiratvādi caturguṇam akhaṇḍitam /
traiguṇyaṃ rūkṣatāyās tu tac copaviṣam īritam // (1.1.25)*

When in a substance coldness, etc., are integrally present to the fourth degree, but dryness to the third degree, it is known as an *upaviṣa*,⁶⁶

tad yathā phaṇiphenādis snuhyarkakṣāram ity api / (1.1.26ab)

as, for example, opium and also the latex of *snuhī*⁶⁷ and *arka*.⁶⁸

*caturguṇam tu śaityādirūkṣatvaṃ tāvad eva hi // (1.1.26cd)
yatrāsti tad viṣam jñeyaṃ vatsanābhaś ca saṅkhiyā /
pūrvaṃ syāt tu davāsammī sammamutlak paraṃ smṛtam // (1.1.27)*

When in a substance coldness, etc., are present to the fourth degree and dryness to the same degree, it is known as a poison, such as *vatsanābha*⁶⁹

⁶³The meaning of *ma'tadil* is clarified by the commentary on 2.2.313: *ārdram ekaguṇam śītam śuṣkam uṣṇam tathā smṛtam / snigdhatārūkṣatāsāmyaṃ dhatte pītam sitam varam //*; commentary: *māṭadil darakhuśkī tarī*. This verse describes the properties of a kind of *tutthaka*: it is moist to the first degree and cold, dry and hot to the same degree; it provides equality of moisture and dryness; when drunk, the white type is the best; commentary: neither dry nor moist. The term *māṭadil* is employed at 2.2.271, where a particular substance, *vedamuṣka*, is said to have a *māṭadil prakṛti*. The term is also found at 2.2.1127 and 1133.

⁶⁴This can only be *ta'ādul* = equilibrium, balance.

⁶⁵*mu'tadil* = moderate, temperate, equal, neither cold nor hot. Daljīt Siṃha II, 26 also interprets the term as neutral, indifferent (*anusṇasīta* = neither hot nor cold.)

⁶⁶An *upaviṣa* is a secondary poison. Sanskrit alchemical and medical treatises are acquainted with a group of *upaviṣas* consisting of a number of plants.

⁶⁷Several species of *Euphorbia* are used as *snuhī*.

⁶⁸*Calotropis gigantea* (Linn.) W.T. Aiton and *Calotropis procera* (Aiton) W.T. Aiton are the sources of *arka*. Opium, the latex of *arka* and that of *snuhī* belong to the core group of the *upaviṣas*.

⁶⁹Several species of *Aconitum* are used as *vatsanābha*.

and *saṅkhiyā*.⁷⁰ The former is called *davāsammī*,⁷¹ the latter is known as *sammamutlak*.⁷²

*tabāat kaiḥyat kuvvat khāsiyat ca catuṣṭayam /
nikhilaṃ dravyagaṃ jñeyam alpaṃ kiṃvā 'py analpakam // (1.1.28)*

The four called *tabāat*, *kaiḥyat*,⁷³ *kuvvat*⁷⁴ and *khāsiyat*⁷⁵ should be known to be present in all substances, be it to a smaller or to a greater extent.

*prāṇiprakṛtisamyogād yat prakṛtyantaram bhavet /
tad viḡāhya punar yat syāt kaiḥyat sā prakṛtitā // (1.1.29)*

When, due to the combination of a living being (*prāṇin*) and a constitution (*prakṛti*), another constitution (*prakṛti*) arises and penetrates, this is called *kaiḥyat*.⁷⁶

*kuvvat śaktes tu paryāyo vividhā sā bhaved iha /
stambhanī recanītyādibhedās tāsāṃ samāsataḥ // (1.1.30)*

kuvvat is a synonym of *śakti*. It is manifold. Briefly, it has types like an immobilising (faculty) (*stambhanī*), a purgative (faculty) (*recanī*), etc.

*stambhanī trividhā śaktiḥ kābij hāvis mumāsika /
imsāka kabja havasa karmāṅy āsāṃ vidur budhāḥ // (1.1.31)*

⁷⁰I.e., arsenic.

⁷¹*dawā'* = medicine; *samm* = *poison*, i.e. a poisonous substance that can be used as a medicine. The term *dawāsammī* is employed at 2.2.805 (in the description of the plant called *arka* in Sanskrit, a *Calotropis* species) and 862 (in the description of the plant called *snuhī* in Sanskrit, a *Euphorbia* species).

⁷²The term *mutlaq* indicates that an unrestrained, absolute poison is meant.

⁷³Quality, property.

⁷⁴*quwwat* = power, Kraft (Schlimmer 187).

⁷⁵*khāṣṣiyat* = property, quality.

⁷⁶I suppose that this statement refers to the doctrine, accepted in Islamic (and Greek) medicine, that the elements and consequently the humours can be transformed into one another, due to their overlapping qualities, making for example blood change into yellow bile and yellow bile into black bile.

The faculty (*śakti*) that brings about obstruction (*stambhana*) is of three types: *kābij*,⁷⁷ *hāvis*⁷⁸ and *mumāsika*.⁷⁹ Wise men know that their actions are (called) *imsāka*,⁸⁰ *kabja*⁸¹ and *havasa*.⁸²

*malarodhakarī pūrvā rajaḥsvedāsrjāṃ parā /
retahstambhe ṛtīyā syād recanī tu dvidhā matā // (1.1.32)*

The first (type) causes obstruction (*rodha*) of the impurities (*mala*), the second obstruction of menstrual discharge (*rajas*), sweat (*sveda*) and blood (*asṛj*), the third brings about suppression (*stambha*) of semen (*retas*). The purgative (faculty) *recanī* is of two kinds.

*ekā mudira idār kartrī śukrārtavasya ca /
svedamūtrapravṛttau ca saiva proktā bhiṣagvaraiḥ // (1.1.33)*

One faculty (*śakti*), *mudira idār*,⁸³ gives rise to semen and menstrual dis-

⁷⁷ *qābiḍ* = constipating. Daljīt Siṃha II, 34 = *saṃgrāhin* (astringent), *ānāhakāraka* (bringing about the disorder called *ānāha*, a kind of hardness of the bowels described as a separate entity in āyurveda). Ainslie I, 115: *qābiḍāt* = astringentia. This *śakti* is found frequently, at 2.2.106 (commentary), 134 (commentary), 137 (commentary), 853, 960, 986, 1004, 1059; 3.132, etc. An explanatory comment on 2.2.44–45: *rūkṣatvāt kābijaśaktimān* learns that dryness is connected with *kābij*. The commentary on 22.87d explains *andak kābija* of the text as *tṣat saṃgrāhīty arthaḥ*, i.e.: its meaning is: somewhat astringent.

⁷⁸ Hassan Kamal, 438: *hābis* is a blood stopping drug. Daljīt Siṃha II, 20: *raktastambhana* (styptic). This *śakti* is found at 2.2.986, 1060; 3.132, etc.

⁷⁹ The faculty called *mumāsik* is rather rare (mentioned in the commentary on 2.2.134); more frequent is *mumsik* = retaining, holding back; this term is found at 2.2.385, 501, 1085, 1091, etc.

⁸⁰ *imsāk* means keeping back, detaining; in medicine it denotes the prolonging of pleasure in sexual intercourse.

⁸¹ *qabḍ*; *qabḍīyat* = constipation. Daljīt Siṃha II, 65: *kabja* = *yakṛjjanya*, giving rise to disorders of the liver (*qabaḍ* = having a pain in the liver) and (76) *kabja* = *malāva-rodhaka*, i.e., constipating.

⁸² *ḥawāss*, i.e., out of one's senses, beside oneself, stupefied, unconscious.

⁸³ The term *mudira* cannot be but an error for *mudirra*; a *śakti* with the name *mudira* is absent from sections two and three of the *Hikmatprakāśa*, while *mudirra* is frequent there. Moreover, *idār* makes no sense, meaning going round, revolving; its grammatical connection with *mudirra* implies that it should be changed into *idrār*: causing urine, etc.,

charge. Excellent physicians declare that the same brings about the appearance of sweat and urine.

*arka svedo bola mūtram haija ārtavam īritam /
manīḥ śukraṃ samuddiṣṭam etan matavicakṣaṇaiḥ* (1.1.34)

*arka*⁸⁴ is the same as sweat, *bola*⁸⁵ is urine, and *haija*⁸⁶ is menstrual discharge. *manī* is the name of semen (*śukra*). This is the opinion of those expert in these subjects.

tatra śukratraividhyaṃ yathā

The threefoldness of the seminal fluid is as follows.

*manīḥ prajotpādanaśaktiṣūktā vilokanāliṅganarto 'ṅganāyāḥ /
kledaḥ smarāpāyakaro mañjī syān nirhārakāle skhalanaṃ vadī syāt //*
(1.1.35)

*manī*⁸⁷ is mentioned among the faculties (*śaktis*) that produce offspring by looking at (*vilokana*) and embracing (*āliṅgana*) a woman in her fertile period (*ṛtu*). Moisture (*kleda*), the cause of the draining away of the libido (*smarāpāya*) is *mañjī*; *vadī* is the emission (*skhalana*) at the time of ejaculation (*nirhārakāla*).

*aparā musahil nāmnī isahāl recanaṃ viśaḥ /
nauma nidrā samākhyātā munavvim tad vidhāyiniḥ //* (1.1.36)

to flow copiously. A faculty called *mudirra* is explained in the commentary on 2.2.202–203: *mudirra rajomūtrayoḥ śodhanaṃ recanaṃ ca plīhapakvāśayor duṣṭadoṣebhyaḥ śuddhikṛt*, i.e., *mudirra* is the purification and evacuation of menstrual discharge and urine and the freeing of spleen and receptacle of digested food from corrupted *doṣas*. The term *mudirra* is employed at 2.2.114, 172, 186, 408, etc.. Daljīṭ **Siṃha (II, 2)** explains it as *mūtrala*, i.e., diuretic and (17) as *pravartaka*, i.e., setting in motion.

⁸⁴ *araq* = sweat.

⁸⁵ *baul* = urine.

⁸⁶ *haiḍ* = menses, menstrual discharge.

⁸⁷ *manī* = seminal fluid.

Another faculty (*śakti*) called *musahil*⁸⁸ (causes) defecation, (called) *isahāl*.⁸⁹ Sleep is called *nauma*;⁹⁰ *munavvim* is the faculty (*śakti*) performing this (function).⁹¹

*parīpākas tu doṣāṅāṃ nujjij nāma samīritah /
tadvidhā na kṣamā yā sā muñjij saṃjñeti kathyate // (1.1.37)*

*nujjij*⁹² is the complete digestion (*parīpāka*) of the *doṣas*; a similar one not suitable (*kṣama*) (to perform this function) is said to bear the name of *munjij*.⁹³

*sukur madaśya paryāyas tatkrtau yā paṭur bhavet /
śaktir musakkir sā proktā pratīcīvaidyakovidaiḥ // (1.1.38)*

*sukur*⁹⁴ is a synonym of intoxication (*mada*). The faculty (*śakti*) skillful in bringing it about is called *musakkir*⁹⁵ by the experts among western physicians.⁹⁶

*kaya vāntiḥ purāvidbhir gaditā tatkarī tu yā /
mukavvī śaktir ākhyātā dravyeṣv āyurvidāṃ varaiḥ // (1.1.39)*

Vomiting is called *kaya*⁹⁷ by those knowledgeable about ancient knowledge.

⁸⁸ *mushil* = purgative. Compare the heading of 3.270: *safūf mushil*, i.e., a purgative powder (*reacanacūrṇa*). The term *mushil* is employed at 2.2.106 (commentary), 524, 978, 1123, etc.

⁸⁹ *ishāl* = purging.

⁹⁰ *naum* = sleep.

⁹¹ *munauvim* is the Arabic term, borrowed in Persian, for a soporific or sedative. The terms *munavvim* and *munavvī* are employed at 2.2.364, 691, 716, 911, etc.

⁹² *naḍj* = ripening; *naḍij* = ripe, mature.

⁹³ *munḍij* = suppurative, digestive. Hassan Kamal, 432: *munḍij*: producing suppuration. The *śakti* called *munjij* is mentioned at 2.2.114, 410, 467, 3.120, etc. *munjiz* is a purgative medicine.

⁹⁴ *sukr* means drunkenness.

⁹⁵ *muskir* = intoxicating, inebriating.

⁹⁶ The author repeatedly refers to western physicians, those who adhere to Islamic medicine: *pratīcībhavavaidyavaryāḥ* (2.2.381); *pratīcībhiṣajaḥ* (2.2.247); (2.2.593); *pratyakcikitsakāḥ* (2.2.445); *prācīnavaidyaguravaḥ* (3.318).

⁹⁷ *qay*.

The faculty (*śakti*) that causes it is called *mukavvī*⁹⁸ by the best knowers of āyurveda with respect to substances.

*taftīha srotasāṃ rodhaṃ vimuktis tatkarī tu yā /
mufattih śaktir ity eṣā suddā rodhaḥ prakīrtitaḥ // (1.1.40)*

*taftīha*⁹⁹ is obstruction of the channels and *mufattih*¹⁰⁰ is the faculty (*śakti*) that brings about release; obstruction is called *suddā*.¹⁰¹

*naūja inaāj caiva dīpanaṃ puṣpadhanvanaḥ /
tatprayojanakarṭrīve munaij samudāhṛtā // (1.1.41)*

*naūja*¹⁰² and *inaāj*¹⁰³ are (terms for) the inflaming of Kāma.¹⁰⁴ The faculty (*śakti*) responsible for reaching its aim, bears the name of *munaij*.¹⁰⁵

*vāha ojaḥ samuddiṣṭaṃ tatpaṭutvakarī tu yā /
śaktir uddīpanāntaḥsthā muvvaḥī sā nigadyate // (1.1.42)*

*vāha*¹⁰⁶ designates *ojas*;¹⁰⁷ the faculty (*śakti*) that brings about its intensity, present in its inflammatory force, is called *muvvaḥī*.¹⁰⁸

⁹⁸ *muqayyī* is the correct term. *muqawwī* = fortifiant (Schlimmer 289), corroborant (Schlimmer 159). This faculty is mentioned at 2.2.87, 90, 147, 477, etc. The commentary on 2.2.90 elucidates the term: *mukavvī kalava yāne dil hṛdayabalapradam ity arthaḥ*, i.e. it means that it provides strength to the heart (*qalb* in Arabic, *dil* in Persian).

⁹⁹ This term is found at 2.2.544; *taftīḥ* = opening.

¹⁰⁰ *mufattihāt* = medicines which remove obstructions. Ainslie I, 139: *mufattihāt* = deobstruentia, i.e., substances loosening obstruction. Hassan Kamal, 432: an aperient drug. The term *mufattih* is found at 2.2.104, 142, 154, 172, etc.

¹⁰¹ *sadd* = obstruction. Daljīt Siṃha II, 76: *suddā* = *vibandha*, i.e., obstipation.

¹⁰² *nā'ūd* = erection. This term is also found at 2.2.422.

¹⁰³ Probably *inā'ād*.

¹⁰⁴ *Puṣpadhanvan*, 'armed with a bow of flowers', is a name of Kāma, the god of love.

¹⁰⁵ *mun'īd* = whatever causes an erection. Mentioned at 2.2.460, 477, 501, 601, 667; 3.224, 545, etc.

¹⁰⁶ The Arabic term *bāh* means lust, sperm. Daljīt Siṃha II, 310: *bāha* = *kāmaśakti*, the ability to make love.

¹⁰⁷ In āyurveda *ojas* is a vital fluid, necessary for the maintenance of life.

¹⁰⁸ *mubahhī* is aphrodisiacal. The term *mubahī* is employed at 2.2.88–90 (commentary), 112 (commentary: *muvahī*), 460, 477, 639, 823; 3.224, etc.

*varma aurāma śoṭhaḥ syāt tasya tahlīla saṃkṣayaḥ /
muhallil śaktir ity eṣā tatkrte pratipādītā // (1.1.43)*

*varma aurāma*¹⁰⁹ is swelling; its subsidence is *tahlīl*.¹¹⁰ *muhallil*¹¹¹ is the faculty (*śakti*) in bringing about this (subsidence).

*saṃśodhya samatākāryaṃ sā latīfa iti smṛtā /
śaktir mulattifa khyātā hitā doṣacatuṣṭaye // (1.1.44)*

Bringing about a balanced state (*samatā*) after purification (*saṃśodhana*) is known as *latīfa*.¹¹² Its faculty (*śakti*), *mulattifa*,¹¹³ is wholesome for the tetrad of *doṣas*.

*śaithilyaṃ khadara proktaṃ ceṣṭāyāṃ varṣmaṇaḥ sataḥ /
vidhīyate yayā sā ca mukhaddir śaktir ucyate // (1.1.45)*

The name of slowness of the movements (*ceṣṭā*) of the body (*varṣman*)¹¹⁴ is *khadara*.¹¹⁵ The faculty (*śakti*) by which this is brought about is called *mukhaddir*.¹¹⁶

¹⁰⁹ *waram* is a swelling or a tumour. Daljīt Siṃha II, 69: *aurāma* = *śoṭha* (swelling). Compare commentary on 2.2.478: *muhallil aurāma* = *śoṭha*.

¹¹⁰ *tahlīl* = digestion. The term is rendered as decline, decay by Schlimmer (187).

¹¹¹ *muhallil* is the property of a medicinal substance which, by its subtlety, dissolves and dissipates any morbid and stagnate fluid, a solvent (Steingass). Daljīt Siṃha II, 13: *muhallil* = *doṣādivilayana*, i.e., dissolving the *doṣas*, etc.; Schlimmer 288: dissolvent. Ainslie I, 24: *muhallilāt* = sicutientia. Hassan Kamal, 431: a discutient drug. The term *muhallil* is found at 2.2.90, 104, 154, 241–242 (commentary), 414, 467, etc. It is explained in the commentary on 2.2.90: *muhallila akhalāta fāsida doṣaduṣṭavaiṣamyajit*; *muhallil akhlāt fāsida* means overcoming the imbalance of corrupted *doṣas* and is followed by its Sanskrit equivalent.

¹¹² *latīf* is penetrating. Daljīt Siṃha II, 329: *latīf* = *sūkṣma*, subtle.

¹¹³ *mulattīf* = attenuating. Daljīt Siṃha II, 31 = *tāralyajanana*, causing unsteadiness. Ainslie I, 46: *muliṭṭīfāt* = *attenuentia*. Hassan Kamal: an assuasive drug. The term *mulattīf* is found at 2.2.415, 654, etc.

¹¹⁴ Compare 3.399: *varṣmaroga*.

¹¹⁵ *khadar* means sluggishness, torpor.

¹¹⁶ A medicine that benumbs the limbs is called *mukhaddir*. Hassan Kamal, 432: a narcotizer. The term is employed at 2.2.364 and 927. The term *mukhardira* at 2.2.134 must be an error for *mukhaddira*.

*gaś vaikalyaṃ samādiṣṭam ātaṅkasyā 'pi jīvinaḥ /
vidhīyate yayā śaktir mugaśśī sā 'bhidhīyate // (1.1.46)*

*gaś*¹¹⁷ designates weakness (*vaikalya*) of the disease (*ātaṅka*) and the patient (*jīvin*). The faculty (*śakti*) that brings this about is known as *mugaśśī*.¹¹⁸

*śirohr̥dyakṛd āhuś ca pakvāśaya iti kramāt /
dimāg dil jigar medā etad aṅgacatuṣṭayam // (1.1.47)*

Head, heart and liver, and the receptacle of digested food, this group of four, are called, in the same order, *dimāg*,¹¹⁹ *dil*, *jigar*,¹²⁰ and *medā*.¹²¹

*ājāy raīs ity uktaṃ śreṣṭhaṃ dehe śarīriṇām /
yathā kavvī baliṣṭhaṃ syāt mukavvī sā praśasyate // (1.1.48)*

*ājāy raīs*¹²² is the best part of the body of embodied beings. In the same way as *kavvī* is the strongest, so the faculty of bringing it about (*mukavvī*) is praiseworthy.

*taskīna vedanāśāntis tadvidhātrī tu yā bhavet /
śaktir muskina sā proktā cikitsātatparair nṛbhiḥ // (1.1.49)*

*taskīna*¹²³ is the alleviation of pain. The faculty (*śakti*) that brings it about is called *muskina*¹²⁴ by those devoted to treatment.

*nīstrimśakṣatasamdhānavidhānacaturā tu yā /
mudammil śaktir uddiṣṭā dravyeṣu prabhunirmitā (1.1.50) //*

¹¹⁷ *ghaṣh* = debasement, corruption.

¹¹⁸ *mukḥaṣh* means corrupting. The term *mugaśśī* is employed at 2.2.172, 186, 573, etc.

¹¹⁹ *dimāgh* designates the brain.

¹²⁰ *jigar* denotes the liver.

¹²¹ *mī'da* is the Arabic word, borrowed by Persian, for stomach.

¹²² The meaning of *ājāy* is not clear. *ra'īs* = at the head of, in charge of.

¹²³ *taskīn* = allaying, mitigation.

¹²⁴ Hassan Kamal: anodyne. The term *muskin* is employed at 2.2.134 (commentary), 601, 691, 911, 917, 1085, 1105; 3.120, etc.

The faculty (*śakti*) skillful in performing the closure of wounds by a sword, called *mudammil*,¹²⁵ has been laid down by the Lord in the substances.

*talīna koṣṭhamṛdutā tatkarmanipuṇā tu yā /
vibandhaghñī mulayyan sā dehasvāस्थ्यakarī sadā // (1.1.51)*

tālīna is softness of the intestines. The faculty (*śakti*) that is skillful in effecting this and that removes obstipation is (called) *mulayyan*¹²⁶ and brings about a healthy state of the body.

*khuṣī farhat prasādaḥ syān manaso dehapāṭavam /
ubhayaṃ vidadhāty eṣā muḥfarrah sā prakīrtitā // (1.1.52)*

*khuṣī farhat*¹²⁷ is mental balance and alertness of the body. The faculty (*śakti*) that performs both functions is called *muḥfarrah*.¹²⁸

*kṣatād vranād vā pūyādi niḥsārayati kāntidā /
mujallī vyāhṛtā sā hi śaktir nirṇayakāribhiḥ // (1.1.53)*

The faculty (*śakti*) that makes pus flow out of wounds or ulcers and that bestows beauty is called *mujallī*¹²⁹ by the (physicians) who take decisions.

*kṣudbodha istihā nāma taduddīpanakāriṇī /
śaktiḥ sā mustahī jñeyā dravyasattvavicāribhiḥ // (1.1.54)*

¹²⁵ *mudammil* = cicatrizing. Hassan Kamal: a healing drug. *mudammil* is found in the commentary on 3.645–646, where it is rendered as drying up (of a wound), (*kṣataśoṣaṇa*); the term also occurs at 2.2.544, 959, 986, etc.; 2.2.137 (commentary): *mudammilkurūha kṣatādīnāṃ sandhigartādīpūrakāḥ*, filling up holes left in the closure of wounds, etc..

¹²⁶ *mulāyīm* is gentle, mild, soft, comforting, *mulāyanat* means soothing, acting gently. Daljīt Siṃha II, 175: *sāraka*, i.e., making to flow. Schlimmer: emollient. *mulayyan* is found at 2.2.104, 110, 114, 410, 467, etc.

¹²⁷ *khushī* means happiness; *farhat* is joy, a term occurring at 3.184–187. As in other instances, the author juxtaposes a Persian and an Arabic word of the same meaning.

¹²⁸ *muḥfarriḥ* is the name of an exhilarating medicine. Schlimmer 157: cordial, Herzstärkend. Compare 2.2.154d: *manasas tu muḥfarriha*.

¹²⁹ The Arabic verb *jalā* means to remove, evacuate. This term is frequently found; see 2.2.140, 282, 298, 372, 823, 1068, 1109, etc.

The awakening of the feeling of hunger bears the name of *iṣṭihā*.¹³⁰ The faculty (*śakti*) that causes this arousal is called *mustahī*¹³¹ by those deliberating on the nature of substances.

*kṣataṃ kurhā samādiṣṭaṃ vṛaṇe svāṅge ca yat kṛtaṃ /
mukarah śaktir uddiṣṭā tatkarī cā 'pi śīghrakṛt // (1.1.55)*

A wound and one that is made in an ulcer of one's own body is called *kurhā*.¹³² The quick acting faculty (*śakti*) that brings it about is known as *mukarah*.¹³³

*kledasaṃśoṣaṇādītvāt sauṣīryaṃ vitanoti yā /
mujaḥḥif śaktir ity eṣā kathitā sūkṣmadarśibhiḥ // (1.1.56)*

The faculty (*śakti*) that produces cavities (*sauṣīrya*)¹³⁴ by drying up moisture (*kleda*), etc., is called *mujaḥḥif*¹³⁵ by those with a subtle vision.

*anupānaviśeṣeṇānekā 'ātāṅkaghṇatā tu yā /
khāṣiyat sā vinirdiṣṭā dravye dravyaviśāradaiḥ // (1.1.57)*

The faculty (*śakti*) that through the particularities of an *anupāna*¹³⁶ destroys several diseases is called *khāṣiyat*¹³⁷ in a substance by the experts in substances.

¹³⁰ *iṣṭihā* = longing, craving.

¹³¹ *mustahī* must be an error for *muṣṭahī* because it belongs to *iṣṭihā*. The term *muṣṭahī* means covetous, craving. The faculty called *muṣṭahī* is found at 3.577. Daljīt Siṃha gives *kṣudhājanana*, arousing the feeling of hunger, as an equivalent.

¹³² *qarḥat* = wound with a sword, sore, ulceration.

¹³³ *muqarriḥ* means caustic, vesicatory. Hassan Kamal, 432: blistering. The term *mukarrah* is found at 2.2.596 and 865, *mukarriḥ* is employed at 2.2.550.

¹³⁴ A footnote gives *jīwāf* as an equivalent.

¹³⁵ *mujaḥḥif* = desiccative. Hassan Kamal, 433: desiccator. Daljīt Siṃha II: *rūkṣaṇa*, drying up. Schlimmer 190: desiccative. The term *mujaḥḥif* is found at 2.2.106 (commentary), 140, 753, 764, 853, 960, 1139, etc.

¹³⁶ An *anupāna* is in āyurveda a specific drink to be taken together with or after ingesting a medicine.

¹³⁷ *khāṣiyat* = peculiar nature, also property in general.

The list of *śaktis* described in this part of section 1 is far from exhaustive. Many more are found in text and commentary of sections 2 and 3. In most cases an explanation is wanting.

Examples are:¹³⁸ *hapsadam*,¹³⁹ *muattisa*,¹⁴⁰ *mufarttiha*,¹⁴¹ *muftih*,¹⁴² *mugajjī*,¹⁴³ *muhachil*,¹⁴⁴ *muhatarik*,¹⁴⁵ *muhrik*,¹⁴⁶ *mujlak*,¹⁴⁷ *mukaddam*,¹⁴⁸ *mukattaya*,¹⁴⁹ *mukayī*,¹⁵⁰ *mukhardirra*,¹⁵¹ *mulaham*,¹⁵² *multih*,¹⁵³ *munaffir*,¹⁵⁴ *munahūj*,¹⁵⁵

¹³⁸ This list is not complete.

¹³⁹ The commentary on 2.2.137 elucidates: *hapsadam śonitapravr̥t̥tihr̥t*, i.e., stopping bleeding. *habs-e-dam* is composed of *habs* = restraining and *dam* = blood.

¹⁴⁰ *mu'at̥tis*, sternutatory. Used at 2.2.958 and explained in the commentary as: *atasaya chikkā tadvidhāyini śaktih*, i.e., the faculty that causes sneezing. 'at̥sat is a sneeze, its Sanskrit equivalent is *chikkā*.

¹⁴¹ Employed at 2.2.950. Not explained. This word may be an error for *mufarrih* or *mufattiḥ*.

¹⁴² *muftih*. Not explained. Occurring in 2.2.256.

¹⁴³ Occurring in 2.2.823. Not explained. This term may be an error for *mugashshī*.

¹⁴⁴ Found at 2.2.256 and not explained. The term *muḥṭhil* means adverse, unwholesome.

¹⁴⁵ Employed in the commentary ad 2.2.435–441 and explained as *vidāhinī*, leading to incomplete digestion. *muḥṭariq* = set on fire.

¹⁴⁶ Occurring at 2.2.550 and 1105; not explained. *muhrik* = moving, stirring up.

¹⁴⁷ Found in the commentary on 2.2.241–242; probably explained as *muhallil vakam*, i.e., restraining.

¹⁴⁸ *muqaddam* is employed in the comments on 2.2.619–622, where it is not explained. *muqaddim* means preliminary, introductory.

¹⁴⁹ *muqatta'* means cut in pieces. The term *mukattayamanī* appears in the commentary on 2.2.187–188, where it is explained as drying up sperm (*śukraśoṣiṇī*). *mukattay* is found at 2.2.861, where it is not explained.

¹⁵⁰ A *muqaiyih* is a vomitive. Present in 2.2.524 and 1068 and not explained.

¹⁵¹ Found at 2.2.927 and not explained.

¹⁵² Employed at 2.2.567; not explained. *mulahḥim* is: making fleshy.

¹⁵³ Found in 2.2.256; not explained.

¹⁵⁴ Occurring in the commentary on 2.2.517, where it is explained as *glānīpradā*, leading to lassitude.

¹⁵⁵ Employed at 2.2.460; not explained.

*munakkī*¹⁵⁶ *munavvat*,¹⁵⁷ *muṭṭihī*,¹⁵⁸ *murattib*,¹⁵⁹ *musarikhan*,¹⁶⁰ *musaskhin*,¹⁶¹
muśammī,¹⁶² *muskit*,¹⁶³ *mutaffif*,¹⁶⁴ *muwallid*,¹⁶⁵ *sehaglīj*.¹⁶⁶

The examination of the urine¹⁶⁷

doṣair ākrāntadehasya pratikartuṃ rujāṃ cayam /
mūtranāḍīparīkṣā tu prathamam paribhāvyate // (1.2.1)

In order to counteract the mass of diseases of the body attacked by the *doṣas*, examination of the urine (*mūtra*) and pulse (*nāḍī*) should be taken into consideration first.

marīj bīmār rogī syāt tatparīkṣā dvidhaiva hi /
śanāsī nabja kārūra nāḍīmūtrasya sā smṛtā // (1.2.2)

¹⁵⁶ *munaqqī* means purifying. The term is employed and explained in the commentary on 2.2.110: *munakkī kurūhaśuśa uraḥkṣatasamaṣodhinīty arthaḥ*, i.e., purifying sores of the lungs; *qurūh* = ulcers, sores, *shuṣh* - lung. *uraḥkṣata* is the Sanskrit equivalent.

¹⁵⁷ Found in the commentary on 2.2.528–531 as *munavvatul-laham* and explained as *māṃsarohinī*, i.e., promoting the growth of new tissue.

¹⁵⁸ Occurring in 3.120; not explained.

¹⁵⁹ Present in 2.2.611 and 1070; not explained. *murattib* means setting in order.

¹⁶⁰ Found at 2.2.282; not explained.

¹⁶¹ Found in 3.120; not explained. This term may be an error for *mukḥaṣḥṣhin*, irritating.

¹⁶² Present in 3.512, where the commentary explains: *muśammī* = *pācanī*, promoting maturation, and 5.519–526, where the commentary says: *muśammī* = *dehapuṣṭikarī*, i.e., giving the body a well-nourished appearance.

¹⁶³ Employed at 2.2.282; not explained. One of the meanings of *muskit* is: silencing, making dumb.

¹⁶⁴ Found at 2.2.904; possibly explained as *vītihotravraṇāntaka*, i.e., curing the wound of a *vītihotra*, an obscure term.

¹⁶⁵ Used in the commentary on 2.2.168 and explained as *saudāśabada* (*śabada* is Persian *shawad*) and *saudāsamudbhavakara*, i.e., making black bile arise. The term *muwallid* means: generating, procreating.

¹⁶⁶ Found at 2.2.596 and not explained.

¹⁶⁷ *atha mūtraparīkṣā*. See on the examination of the urine in Islamic medicine: Hassan Kamal (1975), 702–707, M.H. Shah (1966), 255–274. The examination of the urine is of no importance in sections two and three.

A patient is a *marīḍ*¹⁶⁸ and *bīmāra*.¹⁶⁹ (His) examination is of two kinds: the knowledge of *nabḍ* (pulse) and of *kārūra* (urine) is known as (the knowledge) about the pulse and the urine.

pāroḥṣyād avarā pūrvā varā sāmakṣyataḥ parā |
caturvarṇaṃ caturbhiḥ syād doṣair mūtraṃ tu rogiṇaḥ || (1.2.3)

The first (of these) is inferior on account of the hidden nature (of the *nāḍīs*), the second is superior due to visibility. The urine of a patient may have four colours due to the four *doṣas*.

śafeda avviyaj śvetaṃ syāha asvada mecakam |
jarda asfara pītaṃ syāt surkha ahmara lohitaṃ || (1.2.4)

*śafeda*¹⁷⁰ (and) *avviyaj*¹⁷¹ (mean) white,¹⁷² *syāha*¹⁷³ (and) *asvada*¹⁷⁴ (designate the colour called) *mecaka*, i.e., dark-blue,¹⁷⁵ *jarda*¹⁷⁶ (and) *asfara*¹⁷⁷ (are names for) yellow, (and) *surkha*¹⁷⁸ (and) *ahmara*¹⁷⁹ (mean) red.

sitaṃ acchaṃ ca bahulaṃ mūtraṃ śaitya viśeṣataḥ |
śubhraṃ sāndraṃ kaphodrekād asāndraṃ doṣapākataḥ || (1.2.5)

White (*sita*), transparent (*accha*), and profuse (*bahula*) is the urine in particular by (the effect of) coldness; it is bright (*śubhra*) and viscid (*sāndra*) due

¹⁶⁸ *marīḍ* = a patient.

¹⁶⁹ *bīmār* = a patient.

¹⁷⁰ *śafīd* = white

¹⁷¹ *abyad* = white

¹⁷² Avicenna's *Qānūn* (see M.H. Shah, 256) does not distinguish whiteness as a colour of the urine, but has a section (see M.H. Shah, 259–260) on urine that is described as being of a white colour. Urine that is thin and transparent is called white.

¹⁷³ *siyāh* = black.

¹⁷⁴ *aswad* = black.

¹⁷⁵ Avicenna (see Hassan Kamal, 704, M.H. Shah, 258) distinguishes three shades of black.

¹⁷⁶ *zard* = yellow.

¹⁷⁷ *aṣfar* = yellow to the highest degree. Avicenna (see Hassan Kamal, 703, M.H. Shah, 256–257) describes various shades of yellow.

¹⁷⁸ *surkḥ* = red.

¹⁷⁹ *aḥmar* = red. Avicenna (see Hassan Kamal, 703, M.H. Shah, 257) describes four shades of red.

to the preponderance (*udreka*) of phlegm (*kapha*); it is non-viscid (*asāndra*) by maturation (*pāka*) of the *doṣas*.

*avadātaṃ ghaṇaṃ cāpi picchilaṃ śleṣmadoṣataḥ /
upāyo gadito vaidyais tatra mūtravirecanam // (1.2.6)*

Phlegm (*śleṣman*) as a *doṣa* makes it clear (*avadāta*), thick (*ghana*) and slimy (*picchila*); the vaidyas say that in this case (administration of) a diuretic (*mūtravirecana*) is the (appropriate) treatment (*upāya*).

*asitaṃ malinaṃ vātakopavaikṛtyasūcakam /
saudā vikṛtijaṃ cā pi parijñātaṃ bhiṣagvaraiḥ // (1.2.7)*

Excellent physicians are of the opinion that urine that is dark (*asita*)¹⁸⁰ and turbid (*malina*) indicates a morbid condition (*vaikṛtya*) by excitation (*kopa*) of wind,¹⁸¹ and also as one arising from a morbid alteration (*vikṛti*) of black bile.

*śyāmalaṃ ghanavicchinnaṃ saudākopena saṃbhavet /
sabja ajakhar pālāśaṃ bhaven mūtraṃ viṣāśinaḥ // (1.2.8)*

The urine will assume a dark colour (*śyāmala*) and become dense (*ghana*) and possess disconnected parts (*vicchinna*) by excitation of black bile; it will be brightly green¹⁸² and *pālāśa*¹⁸³ (in colour) in someone who has ingested poison.

*śyāmaṃ sāndraṃ ca yan mūtram ūṣmaṇā dagdhadoṣatām /
prakaṭīkurute doṣavicāre bhiṣajāṃ prati // (1.2.9)*

When the urine is of a dark colour (*śyāma*) and viscid (*sāndra*) it makes manifest that a burnt (*dagdha*) condition of the *doṣas* by heat (*ūṣman*) is present according to the deliberations of physicians.

¹⁸⁰ Avicenna (258) distinguishes three shades of a dark colour.

¹⁸¹ This reference to excitation of wind does not agree with the theory of Islamic medicine.

¹⁸² *sabz* = green; *azhar* = bright. Brightly green is the meaning intended (*sabz-e-azhar* in Persian).

¹⁸³ Having the colour (bright orange-red) of a flower of the *pālāśa* tree, *Butea monosperma* (Lam.) Taub. *pālāśa* as a colour name occurs several times: 2.2.60, 224.

*śaṣkasya yavasasyeva nīraṃ yad bhāvanābhavam /
iṣat pītaṃ hi mandāgne raṅgatkhairī udāhṛtaḥ // (1.2.10)*

When the urine resembles the water arising from the steeping (*bhāvanā*) of dry fodder and is slightly yellow (the patient) is called *raṅgatkhairī*¹⁸⁴ from sluggishness of the fire.

*phalapūratvagābhāsaṃ tīkṣṇāgner upajāyate /
turañjī unnajī ceti nāmnā varṇaḥ prakīrtitaḥ // (1.2.11)*

Urine with a colour like that of the rind of a *phalapūra*¹⁸⁵ arises in one with an intensely burning (*tīkṣṇa*) (digestive) fire; this colour bears the name of *turañjī*¹⁸⁶ and *unnajī*.¹⁸⁷

*jvalanaṃ jvālābhaṃ yat tu raktaṃ pītaṃ ca mecakam /
sa varṇa ātaśī nārī proktaḥ tasya parīkṣakaiḥ // (1.2.12)*

When (the urine is) of a blazing colour (*jvalana*) and resembles a flame (*jvāla*), red, yellow and black (*mecaka*), the colour is called fiery¹⁸⁸ by those expert in examining it.

*tatroṣmaṇā kharatvaṃ tu doṣāṇāṃ jātum ucyate /
ehatarāk sa vijñeyyaḥ sokhtaḡī hirkata smṛtā // (1.2.13)*

In such a case the roughness (*kharatva*) of the *doṣas* is said to have arisen from heat (*uṣman*). It is known as *ehatarāk*¹⁸⁹ and as heat.¹⁹⁰

*mohtarik dagdhakartā syād eṣa śabdasthiter vidhiḥ /
jāfarānī kuṅkumābham atyuṣṇajvariṇo bhavet // (1.2.14)*

¹⁸⁴ Possessing the colour (*rank*) of *khair*, a product derived from *Acacia catechu* Linn.

¹⁸⁵ The same as *bījapūra*, *Citrus medica* Linn.

¹⁸⁶ *turañjī* = orange-like.

¹⁸⁷ This may mean: of the colour of a fruit of the medlar tree (*ānaj*), *Mespilus germanica* Linn..

¹⁸⁸ *ātaśī nārī*, two words of the same meaning.

¹⁸⁹ *iḥtirāq*, i.e., burning, being burnt.

¹⁹⁰ *sūkhṭagī* = burning, *hirkat* = heat. Two words of the same meaning are employed again, the one Persian, the other Arabic.

*mohtarik*¹⁹¹ gives it a burnt aspect; this is the way the term is interpreted. The urine of someone with a very hot (*atyuşṇa*) fever (*jvara*) is *jāfarānī*,¹⁹² of the colour of saffron (*kuṅkuma*).

*airāvataphalābhāso nārañjī varṇa ucyate /
tatsādṛśyaṃ bhaven mūtraṃ raktapittavikāriṇaḥ // (1.2.15)*

The colour resembling that of an *airāvata* fruit¹⁹³ is known as *nārañjī*,¹⁹⁴ the urine of someone with the *raktapitta* disorder (*vikāra*) will resemble it.

*vardī gulābī paryāyau pāṭalaṃ vadato guṇam /
asahab kiṃcid etasmād avadātaḥ smṛto budhaiḥ // (1.2.16)*

*vardī*¹⁹⁵ (and) *gulābī*¹⁹⁶ are synonyms of the property (*guṇa*) called *pāṭala*;¹⁹⁷ it is somewhat lordly (*aṣṭhab*); for that reason it is called pure (*avadāta*) by wise (physicians).

*varṇadvayānugaṃ mūtraṃ jāyate raktavegataḥ /
kānī tv atyantasoṇaḥ syād dāḍimīkusumād api // (1.2.17)*

Urine possessing two colours arises from the excitation (*vega*) of blood; it will be of a crimson colour¹⁹⁸ (and) extremely red (*soṇa*), also as (red as the red colour) of a pomegranate (*dāḍimī*) flower.

*tatrāsraprājyabhāve tu śodhanaṃ śastam īritam /
aktam yāvakavarṇaṃ syād dagdhāgrglakṣaṇaṃ vadet // (1.2.18)*

In a condition with an abundance of blood (*asraprājya*) purification is recommended. When (the urine is) *akta*,¹⁹⁹ of the colour of barley water (*yāvaka*),

¹⁹¹ *muḥtariq* means set on fire, burnt. The term *muhtarik* is mentioned in 2.2.805.

¹⁹² *za'farānī*.

¹⁹³ P.V. Sharma's Kosa: = *nāraṅga*: *Citrus reticulata* Blanco.

¹⁹⁴ *nārañj* is an orange.

¹⁹⁵ *ward* = rose.

¹⁹⁶ *gulāb* = rose.

¹⁹⁷ This refers to the purple colour of the flowers of the tree called *pāṭala*; *Stereospermum chelonoides* (Linn.f.) DC.

¹⁹⁸ *kānī*; *qānī*: of a beautiful crimson colour. Āyurvedīyaviśvakoṣa: blackish red.

¹⁹⁹ If this is a Sanskrit word it will mean besmeared.

one says this is a characteristic of burnt blood (*dagdhāsrj*).

*aśkarī raṅgagullālā raktakopajvare bhavet /
samāsān mukhyavarṇānāṃ vyañjanaṃ samudāhṛtam // (1.2.19)*

In a fever by the excitation of blood it is *aśkarī*²⁰⁰ *raṅgagullālā*.²⁰¹ The characteristics of the most important colours have been expounded in brief.

The examination of the pulse²⁰²

*haivānī caiva naḥsānī rūhadvayam udāhṛtam /
hṛdayasthaṃ śiraḥsthaṃ ca dehidehasukhāvaham // (1.3.1)*

Two kinds of *rūha*²⁰³ are said to exist: *haivānī*²⁰⁴ and *naḥsānī*.²⁰⁵ They reside in the heart and in the head (respectively) and bring about well-being in the bodies of embodied beings.

*tatsaṃgatās tu yā nāḍyaḥ śiriyān asava kramāt /
hṛtpadme yās tu saṃlagnāḥ samantāt prasphuranti tāḥ // (1.3.2)*

The *nāḍīs* connected with them are called *śiriyān* and *asava*²⁰⁶ respectively. Those that are attached to the heart-lotus pulsate everywhere.

²⁰⁰This may be related to *āśkār* = manifest, clear.

²⁰¹*gulāl* = a red powder used for dyeing; *raṅk* = colour.

²⁰²*atha nāḍīparīkṣā*. See on Islamic pulse-lore: Hassan Kamal (1975), 542–546, M.H. Shah (1966), 234–254. The examination of the pulse is not referred to in sections two and three.

²⁰³See on this concept: M.H. Shah, 131–134. Compare 2.2.6 and its commentary, where four kinds are distinguished.

²⁰⁴*ḥaywānī* = relating to an animal.

²⁰⁵*naḥs* = soul, spirit; *naḥsānī* = relating to the soul.

²⁰⁶The *asavaḥ* are vital breaths known from Vedic times onwards and also known to classical Indian medicine. The commentary on 2.2.46 and 248–249ab explains the concept differently; ad 2.2.46: *asava śiraḥsaṃbaddhāś ceṣṭāvāhinyo dhamanyaḥ*, i.e., the *asavaḥ* are arteries, connected to the head, which carry (the impulses) for making movements; ad 2.2.248–249ab: *ustarakhā 'sava śiraḥsaṃbaddhaceṣṭāvāhīnīśirāśaithilyam*; this comment, essentially the same as the preceding one, changes *dhamanī* into *sirā* (a vein or a vessel in general) and gives the Persian name of a disorder of the *asavaḥ*.

*śiro'ntarbhāgasam̐baddhās tābhiḥ śreṣṭhādikaṃ bhavet /
śreṣṭho jīvanivāso hṛdrājño rājyāsanam̐ yathā // (1.3.3)*

By means of those attached to the inner part of the head arise the excellent (seats), etc. The most excellent one is the residence of the *jīva*, the royal seat as it were of the king in the form of the heart.

*tadbhavā dhamanī mukhyā manuṣyamaṇibandhagā /
parīkṣaṇīyā bhiṣajā hy aṅgulībhiś catasṛbhiḥ // (1.3.4)*

The chief artery (*dhamanī*) arising from it that goes to the human wrist has to be examined by the physician with four fingers.²⁰⁷

*yathoktagatiparyāyāḥ yāvat syuḥ saptaviṃśatiḥ /
tāvat samāhitamaṇaḥ prekṣyā tasyā gatīḥ puraḥ // (1.3.5)*

The movement of as many as the vessels of the same name (*paryāya*) that follow the course mentioned, (namely) twenty-four, has also to be observed with attention.

*gizāla mṛgaparyāyas tadvad utplutya gacchati /
guzālī gatir ākhyātā pittakopavikārataḥ // (1.3.6)*

*gizāla*²⁰⁸ is a synonym of deer (*mṛga*). When an artery (*dhamanī*) moves in the same way with leaps it is called the *gizālī* way of movement,²⁰⁹ (arising from) an alteration by excitation of bile (*pitta*).

*taraṅganāma mauja syāt maujī gatir āratīritā /
nivedayati varṣmastaṃ vāyor uṣmāṇam̐ eva sā // (1.3.7)*

²⁰⁷ Islamic medicine requires four fingers, for each of the humours one, whereas āyurveda teaches the use of three fingers.

²⁰⁸ *ghizāl*.

²⁰⁹ M.H. Shah (1966), 238: a gazelle pulse, similar to the pulsus bisferiens, has its beat first sluggish but later on it suddenly becomes quick; 239: the gazelle pulse differs from the supernumerary pulse (extrasystole) in having an extra stroke before the end of each beat.

The name of a wave is *mauja*.²¹⁰ A *maujī* way of movement is known;²¹¹ it indicates heat of wind, staying in the body.

*dūda syāt krimiparyāyo dūdī tasya gatiḥ smṛtā /
śleṣmaṇaḥ saṃcayaṃ cāmaṃ prakāṭīkurute hi sā // (1.3.8)*

*dūda*²¹² is a synonym of *krimi*.²¹³ Its way of movement is called *dūdī*.²¹⁴ It makes clear an accumulation of phlegm and also of *āma*.²¹⁵

*numal pipīlikā mora numalī tadgatiḥ smṛtā /
yasya nāḍī tathā gacchen mṛtiṃ tasyāśu nirdīśet // (1.3.9)*

*numal*²¹⁶ is an ant (*mora*);²¹⁷ its way of moving is called *numalī*.²¹⁸ When one's pulse is like that it indicates one's death within a short time.

*asipatrasya paryāyo minśāra iti kīrtitaḥ /
yathā syāt tu kramaḥ kāṣṭhe minśārī sā gatir bhavet // (1.3.10)*

²¹⁰ *mauj* = wave.

²¹¹ M.H. Shah (1966), 238: wavy (undulant) pulse has the irregularity in both the spatial features as well as the movement of pulse; this type of pulse is usually soft but not very small and it always possesses some width; it feels as if it has a series of waves of varying heights and speeds.

²¹² *dūd* = worm.

²¹³ The Sanskrit word *krimi* designates a variety of invertebrate animals, in particular arthropods, i.e., insects and spiders.

²¹⁴ M.H. Shah (1966), 238–239: vermicular pulse – this is similar to the wavy pulse but is small and rapid; its rate gives the impression of being quick but it is really not so.

²¹⁵ The Sanskrit medical term *āma* is employed for the not fully digested juice derived from the ingested food.

²¹⁶ The Arabic word for ant is *namul*.

²¹⁷ *mūr*, *mor* is the Persian word for ant.

²¹⁸ M.H. Shah (1966), 239: ant-like pulse is smaller and more rapid than the vermicular; it is, however, the height and length which are more affected than the width; indeed the width does not show any appreciable change.

The synonym of the blade of a sword is *minśāra*.²¹⁹ The way of moving called *minśārī* is present when it is like its course in a log of wood.²²⁰

*tadgatiṃ dhamanī dhatte bāhyāntaḥśoṭharogīṇaḥ /
jumbulafāranāmnī yā gatir mūṣakapucchavat // (1.3.11)*

The artery (*dhamanī*) of a patient with inner and outer swelling (*śoṭha*) that has a way of moving like that of the tail of a mouse/rat is called *jumbulafāra*.²²¹

*pittaśleṣmaprakopena dhamanyāḥ sambhavet kila /
mālī śalākāsadrśī sūkṣmā dhīrā balātyayāt // (1.3.12)*

When (the movement of) an artery (*dhamanī*) is brought about by excitation of bile and phlegm it is (called) *mālī*, resembling a probe (*śalākā*), subtle and firm (*dhīrā*), from the excess of its force.²²²

*gatyāghātadvayaṃ yasyām adhastād aṅguler bhavet /
julfittat sā smṛtā pittaśleṣmadaghatvabodhinī // (1.3.13)*

²¹⁹ *minśār* = saw, hand-saw. Sanskrit *asi* does not mean saw; another word, *kartarī* for example, would have been a better choice.

²²⁰ M.H. Shah (1966): serrate pulse, like the wavy pulse, affects height, breadth and length; it, however, feels hard even though not uniformly; in short, it is a quick, rapid and hard pulse but irregular in both the height of its rising phase and its hardness or softness.

²²¹ *dhanbālfārī*. M.H. Shah (1966), 243, fn.3: *zambulfar*, lit. mouse-tail; 239: decurtate pulse is the one which gradually increases or decreases in one or more features of the beats; it varies most characteristically in height but may be also in speed and strength of beats.

²²² M.H. Shah (1966) does not describe this type of pulse, but has instead (239) a spindle-shaped pulse which is at first small but increases in height gradually until it reaches its maximum and then declines to its original height gradually like two mouse-tails joined to each other at their bases.

When under the fingers a dyad of beats (*gatyāghāta*) is present²²³ it announces, called *julfittat*,²²⁴ burntness of bile and phlegm.

*murtaid prasphurantī yā gatiḥ koṣṭhasya rūkṣatām /
vidgrahatvaṃ ca saudāvī vikārāñ jñāpayaty api // (1.3.14)*

A way of moving that quivers (*prasphurantī*), called *murtaid*,²²⁵ announces dryness of the intestines and (the way of moving called) *saudāvī* makes known obstipation (*vidgrahatva*) and disorders of black bile.

*irtisā kampaparyāyas tadviśiṣṭā tu yā bhavet /
murtadaś nāma sā jñeyā safrā-saudā-vikārayuk // (1.3.15)*

*irtisā*²²⁶ is a synonym of tremor (*kampa*). The way of moving that exhibits its peculiarities is known as *murtadaś*²²⁷ and is associated with disorders of yellow and black bile.

*imtilā pūtir uddiṣṭā 'srjo 'syāṃ mumtilī tu sā /
tamaḥkaphād adhogā yā munkavij sā prakīrtitā // (1.3.16)*

²²³ M.H. Shah (1966), 239: dicrotic pulse, according to some physicians, is a single beat with variation of time while others regard it to be a coupled beat; the intermission in this beat is however never so long that the phase of contraction follows the phase of expansion [constituting two beats]; it is also not necessary that if fingers feel it's two beats, the pulse is to be taken as being made of two distinct beats; otherwise, the [anacrotic] pulse, in which the expansion [stroke] stops for a while and rises again, will have to be deemed as a pulse made of two beats; the pulse should be taken as composed of two beats only when there is a deep fall between the initial upstroke and the succeeding rise of the beat.

²²⁴ This term is not clear to me. It may be *dhū'l-fittat*.

²²⁵ *murta'id* = trembling.

²²⁶ *irti'āsh* = tremor; *irtishā'* = bribery. *Āyurvedīyaviśvakoṣa II, 1375: exudation, infiltration.*

²²⁷ This is an error for *murta'iśh*, trembling, which is related to *irti'āsh*. M.H. Shah (1966, 239) refers to a tremulous pulse as a variety of supernumerary pulse.

Fullness (*pūr̥ti*)²²⁸ of blood is known as *imtilā*;²²⁹ its way of moving is (called) *mumtilā*.²³⁰ The downwards movement by phlegm is called *munkavij*.²³¹

*ūrdhvam utplutya yā gacchet kiṃcin māyuprakopataḥ f²³²
śāhakbulanda sā khyātā dhamanī saṃparīkṣakaiḥ || (1.3.17)*

The artery (*dhamanī*) that moves with upward leaps, arisen from a slight degree of excitement of water,²³³ is called *śāhakbulanda*²³⁴ by the examiners (of the pulse).

*caturaṅgulasamsthānād api dīrghā tavīla sā /
darāja iti paryāyas tasyā eva nipātitaḥ || (1.3.18)*

The movement that is extended even compared with the form of four fingers is (called) *tavīla*.²³⁵ Its synonym is *darāja*²³⁶ from the way of its falling down (*nipāti*).

*parimāṇā nyūnarūpā sā kasīra samīritā /
amīka nimnagā yā ca arījā dhamanī smṛtā || (1.3.19)*

A way of movement that is less in circumference is called *kasīra*.²³⁷ The artery (*dhamanī*) that moves deeply is called *amīka*²³⁸ and *arījā*.²³⁹

²²⁸ The text has *pūti*, i.e., putrefaction, which does not agree with the meaning of the Persian/Arabic equivalent and is a simple error.

²²⁹ *imtilā* = fullness, repletion; indigestion. **Āyurvedīyaviśvakoṣa II, 1368: repletion, congestion.**

²³⁰ *mumtali* = full, replete.

²³¹ *munqabiḍ* means contracted, shrunken, constipated. The term *munkabij* is employed at 2.2.911.

²³² *mā'u* = water.

²³³ Excitement (*kopa*) of water is an unusual term; it is also found at 2.2.536. The humours (doṣas) may become excited, but not the elements. Probably phlegm is intended, in the same way as in āyurvedic texts *soma* is used to denote phlegm (*kapha*).

²³⁴ *śhāhiq* = high, lofty; *buland* = elevated.

²³⁵ *tawīl* = long.

²³⁶ *darāz* = long.

²³⁷ *kaṣīr* = short.

²³⁸ *amīq* = deep.

²³⁹ *irjā'a* = reduction may be meant.

*yāyā gatis tu doṣāṇām dhatte prājyativahīnataḥ /
galbe kasūra arkāblāt tāratamyena nirdīset // (1.3.20)*

When its movement arises from an insufficient abundance of the *doṣas* it is called proportionally *galbe*²⁴⁰ *kasūra*²⁴¹ *arkāblāt*.²⁴²

*vāḥḥulbasta nirdoṣā svasthasya parikīrtitā /
iti saṃkṣepato nāḍīparīkṣā kathitā budhaiḥ // (1.3.21)*

The movement without *doṣas* of a healthy one is called *vāḥḥulbasta*.²⁴³ Thus has been told, in brief, the examination of the pulse by wise men.

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²⁴⁰ *ghalb* = victorious, prevailing.

²⁴¹ *quṣūr* = failing, defect, deficiency.

²⁴² The meaning of this term is not clear. '*arq* = having but little flesh on the bone. *araq* = very slender. *arkāblāt* may also contain '*abl* = stripping a tree of leaves.

²⁴³ *wāḥḥ* = complete, perfect; *baṣṭa* = capability, abilities.

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