





# A Body Of Knowledge: The Wellcome Ayurvedic Anatomical Man And His Sanskrit Context

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#### Abstract

A widely-known painting currently in the Wellcome Library (Iconographic 574912i) depicts an anatomical view of the male human body according to the tenets of classical Indian medicine, or ayurveda. The painting is surrounded by text passages in the Sanskrit language on medical and anatomical topics. In this paper, the Sanskrit texts are identified, edited, translated and assessed. I establish a *terminus a quo* for the painting, and explore the relationship of text and image.

#### Keywords

Ayurveda, anatomy, painting, India, Sanskrit, medicine, Bhāvamiśra, Bhāvaprakāśa, Suśruta, Suśrutasaṃhitā, history, South Asia.

#### Introduction

In October 1986, the Wellcome Library in London acquired the painting shown in Fig. 1 from an art dealer in London. It was accessioned by the library as 'Iconographic Collection 574912i.' The painting measures 62.5×40.5 cm, and is executed in pen and watercolour. The painting is uniquely important because it presents an interpretation of the interior of the human body as understood by practitioners of ayurveda, the medical system originating in early South Asia. Other examples of

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this particular type of image are at present unknown. Because of the rarity of this type of illustration, this painting has been used as a book cover or an illustration in many publications, and has begun to take on a public life.<sup>1</sup>

Ayurveda, the classical medical system originating in South Asia, is a structured method of theorising the human body, illness, therapy, and the healthy lifestyle. It has a documented history that stretches back to the time of the Buddha in the fifth century BC. 2 For more than two millennia, thousands of authors in South Asia produced a very extensive literature on classical medicine.<sup>3</sup> This literature was transmitted in manuscript form until the widespread printing of Sanskrit texts became common in the nineteenth century.4 Many hundreds of thousands of Sanskrit medical manuscripts still exist today, preserved in private collections and in libraries in India, Nepal, Pakistan, Sri Lanka and the rest of the world.<sup>5</sup> Yet extensive cataloguing and searches in this wealth of manuscripts has turned up almost no pre-modern images of any kind. Some alchemical manuscripts contain sketches of alchemical apparatus.<sup>6</sup> But although the medical texts discuss and describe many topics that would lend themselves to illustration, such as intricate surgery, human anatomy, and medical botany, no images related to these or any other subjects are to be found in the manuscripts of these works. The cultural history of the manuscript book in India is complex and yet to be fully worked out, especially for the earlier periods. 7 It will involve reception theory and a sociology of book production, patronage and readership. At the present stage of research, all we can say is that Sanskrit medical manuscripts were normally not illustrated.

In contrast, medical illustrations from pre-modern China and Japan are much more common.<sup>8</sup> It may be the influence of book culture from East Asia that explains the appearance of numerous medical illustrations in manuscripts from Tibet and Nepal. The extraordinary series of medical paintings produced under the patronage of Sangye Gyamtso (1653–1705) was a unique and influential project whose social and intellectual origins deserve further exploration.<sup>9</sup> Whatever the causal posi-

 $<sup>^{1}\</sup>mathrm{E.g.}$ , Comba 1991, Meulenbeld and Wujastyk 1987, Van Alphen and Aris 1995, Wujastyk 1998.

<sup>&</sup>lt;sup>2</sup>Bronkhorst 2007, Wujastyk 1993, 2003a,b, 2004b, Zysk 2000.

<sup>&</sup>lt;sup>3</sup>This literature is surveyed by Meulenbeld 1999–2002.

<sup>&</sup>lt;sup>4</sup>Shaw 1978, 1987.

<sup>&</sup>lt;sup>5</sup>Janert 1965 and Biswas and Prajapati 1998 survey the catalogues of Indic manuscripts worldwide.

<sup>&</sup>lt;sup>6</sup>Wujastyk 1987.

<sup>&</sup>lt;sup>7</sup>Losty 1982.

 $<sup>^8</sup>$ E.g., Brokaw and Chow 2005, Kornicki 1998, 2003, Lo and Morishima 2005a,b, Matuk 2006, Shumin *et al.* 2007.

<sup>&</sup>lt;sup>9</sup>Parfionovich et al. 1992.

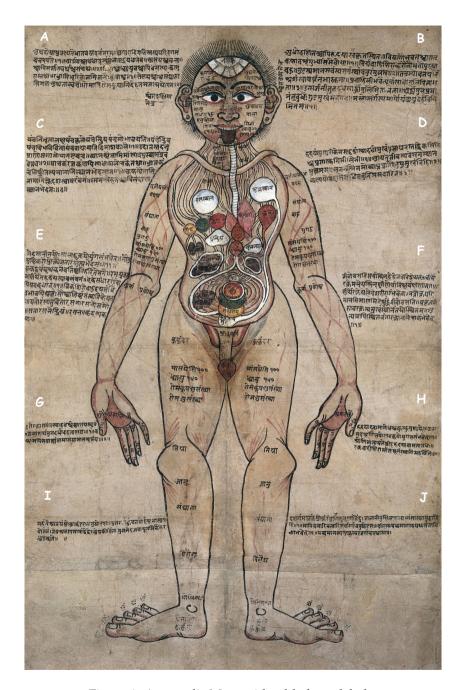


Figure 1: Ayurvedic Man, with added text labels.

tion of Sangye Gyamtso's medical illustrations in the history of Tibetan painting from the late seventeenth century onwards, it remains the case that Tibetan medical manuscripts from before his time did sometimes contain paintings of materia medica, and other medical-related themes.

But the Wellcome Library's 'Ayurvedic Man' stands out in the tradition of painting in peninsular South Asia, and in the slender history of Sanskrit medical illustration. The artist, presumably collaborating with or under the instruction of a physician, produced an image that charts the organs and vessels of the ayurvedic medical body according to the Sanskrit medical textual tradition.

# Tradition and textuality

Text is always at the heart of ayurvedic medicine. Text legitimates and empowers participants in the tradition. Ayurvedic physicians, pharmacologists, marketeers and even historians use the high textuality of ayurvedic knowledge as a reference point and a badge of validity. It is entirely in keeping with this disposition to textuality that the creators of this image attached blocks of text to the body. It is not only a painting, it is a diagram. It is labelled, inscribed, annotated and commented upon, exactly like a Sanskrit manuscript text. We can view this painting in the same light as Michelangelo's 'Prisoners' series of sculptures. In their case, the figures are embedded in rock, and struggle to free themselves. The Ayurvedic Man is willingly imprisoned in text, passively permitting the texts to speak for him.

I have presented discussion elsewhere to show that this painting is a Nepalese production, directly influenced by Tibetan traditions of illustrating bloodletting points. The connection with Tibetan medical painting is clear to inspection: see Fig. 2, and compare the treatment of hands and feet, their outward rotation, the elbow and knee joints, overall posture, etc. These characteristic features also appear in some images from South East Asia, though usually not in Chinese medical body images. Further exploration of the art history of the stylistic features of medical images across Asia is likely to lead to important discoveries and connections. While some progress has thus been made with identifying the stylistic influences affecting the painting, the *texts* surrounding the Ayurvedic Man image have not previously been systematically and completely identified, edited and translated. In

<sup>&</sup>lt;sup>10</sup>Wujastyk 2002, 2007 and forthcoming.

 $<sup>^{11}</sup>$ Das 2003, p. 77, n. 249 did correctly note that, 'there are several text passages on the sides of the diagram. Those I attempted to identify were all found in [the *Bhāvapra-kāśa*]...'



Figure 2: Tibetan Bloodletting and Moxibustion points. Wellcome Or. Tibetan chart 48(1). Reproduced courtesy of the Wellcome Library.

# Ayurvedic man's texts

The text passages that frame this body image are excerpts from a sixteenth-century ayurvedic work called the <code>Bhāvaprakāśa</code>, by the author Bhāva Miśra, son of Laṭakana. The title is playfully polysemous, meaning 'Bhāva's Clarification', 'An Illumination of the States of Being', 'Light on the Conditions', and 'An Elucidation of What Is'. Bhāva Miśra wrote his encyclopaedic compendium of ayurvedic medicine between 1550–1590, probably in north India. <sup>12</sup> The nineteenth-century ayurvedic physician Dattārāma (fl. <code>ca.1882/1923</code>), whose views may presumably be taken as representative of learned orthodox opinion in Mathura, wrote in 1895 that Bhāvamiśra was born in the country of the Madras (around modern Sialkot and the surrounding regions between the Ravi and the Chenab rivers) and settled later in Varanasi, where he became a renowned physician with 400 pupils. <sup>13</sup>

 $<sup>^{12}\</sup>mbox{Meulenbeld}$  1999–2002, IIa, pp. 239–46 provided a discussion of the evidence for this date.

<sup>&</sup>lt;sup>13</sup>Dattārāma Srikṛṣṇalāla Māthura 1890–1904, v. 1, p. 36. Cf. Meulenbeld 1999–2002, IIb, p. 271, n. 194. The Sanskrit text of Dattārāma's description is cited by Wujastyk 2005, p. 108 and n. 28.

The *Bhāvaprakāśa* gradually established itself as one of the more important Sanskrit medical works ever written. Manuscript copies are abundant in libraries in South Asia and abroad. Printed editions began to appear from 1855 onwards, especially from presses in Bombay and Calcutta. These editions were often accompanied with Hindi, Bengali or Gujarati translations. At least 16 editions were published between 1855 and 1998, and older editions continue to be reprinted. An English translation of the *Bhāvaprakāśa* was completed by Srikantha Murthy in 1998–2000.

The work is voluminous and slightly confusing in its arrangement, due to having several overlapping methods of reference. It consists of three large divisions (khandas) with an embedded treatise on materia medica (nighantu). Division I has six chapters (prakaranas) followed by the materia medica treatise, and then by a seventh chapter that is itself about the same length as the first six chapters together. Chapters 1-6 and 7 are also called parts 1 and 2. Divisions II and III both focus on therapy and also constitute an eighth chapter, with 73 internal subsections. Bhāvamiśra cited scores of earlier authorities and his work was has remained influential right up to the present time, when it forms part of the standard degree syllabus at Ayurvedic colleges across India. 15 The passages of the Bhāvaprakāśa used to accompany the Ayurvedic Man image are drawn from the third chapter (prakarana), that deals with embryology and anatomy. Can we draw any conclusions from the decision to use the *Bhāvaprakāśa* as the source of the texts to accompany the painting? I think not, beyond the patron's wish to use a popular and authoritative work that was in wide circulation and was well known to many pandits and physicians.

The identification of the painting's text passages as citations from the *Bhāvaprakāśa* does, however, provide us with a definite *terminus post quem* for the painting. It cannot have been produced before the late sixteenth century. Theoretically, the painting of the Ayurvedic Man could have been produced at an earlier period, and the text added later, but the tight integration of text and image makes this unlikely.

#### Reflections and conclusions

There remain a number of open questions regarding this image. For example, is the image intended by the artist to be of a corpse or a living person? The 'living' eyes would suggest that it is the latter. Images of

<sup>&</sup>lt;sup>14</sup>Meulenbeld 1999–2002, IIb, pp. 261–2, n. 14.

<sup>&</sup>lt;sup>15</sup>Detailed references to citations are given by Meulenbeld 1999–2002, IIa, pp. 241–2.

gods in India are often given open eyes as part of a ceremony of investing them with life and divine presence. Open eyes suggest life. Furthermore, the image is related to Tibetan images showing moxibustion and bloodletting points, and these are only relevant to a living being.

Nevertheless, the display of internal organs might suggest the dissection of a dead body. In that case, the body would probably be lying on its back, not standing. <sup>16</sup> My subjective impression is that this painting is in the nature of a diagram, rather than an artist's impression from life. It may be argued that the uncertain correspondence between some ayurvedic organs and those known to modern anatomy proves that the image contains a fictional element, and that again it cannot be from life. This seems to me to be a weak argument since, as Ernst Gombrich argued convincingly many years ago, in the making and viewing of images, interpretation, presupposition and prior knowledge is all. <sup>17</sup> For a physician who knew, because his authoritative and trusted scholarly education told him so, that certain receptacles, pipes, and other entities were to be found in the human body, those entities would be evident to the interpreting eye.

We must also ask how this painting was received, its audience and function might have been. The trail of the painting's provenance stops abruptly in London in 1986, so that avenue of investigation into its production and use is unfortunately closed to us. Very little is known about the social history of images and their production and consumption in the pre-modern period. But in a short article written some years ago, I drew attention to an account of the production of an series of ayurvedic botanical paintings that was prepared in about 1907. This album was produced in Kathmandu, and thus shares at least the general location with our present painting, even if the date is about two hundred years later.

The Kathmandu botanical paintings were a collaborative project between a learned physician and a group of artists for whom painting was a caste skill. The project was was initiated under the patronage of the Bir Shamsher Jang Bahadur Rana, Prime Minister of Nepal from 1885 to 1901. We know of this work because of the account given by the Bengali Scholar Mahamahopādhyaya Hara Prasad Śāstrī, who was working in Kathmandu at the time.<sup>19</sup>

<sup>&</sup>lt;sup>16</sup>However, we may recall that Vesalius drew his dissected bodies in various standing poses, so this is not a medical historical imperative.

<sup>&</sup>lt;sup>17</sup>Gombrich 1960.

<sup>&</sup>lt;sup>18</sup>Wujastyk 2000.

<sup>&</sup>lt;sup>19</sup>Notice of this work appeared in H. P. Śāstrī's preface to v. 2 of his catalogue of Sanskrit palm-leaf manuscripts in the royal library of Kathmandu (Śāstri 1905, 1915, v. 2, pp. i–ii).

In the summer of 1907 I obtained permission from the Government of Bengal to proceed to Nepal for the purpose of examining a new collection of manuscripts made by the Nepal Darbar....

At the library, we spent our time in examining the ancient palm-leaf manuscripts mainly, some of which were written in transitional Gupta, ancient Newari, ancient Bengali and other ancient characters. We spent our mornings in examining some ancient Bengali songs, with Sanskrit commentaries, found in the library, and the evenings were spent in examining several hundreds of pictures of Indian Ayurvedic medicinal plants, prepared under the patronage of the late Prime Minister of Nepāl. The pictures were drawn and painted by men of the Citrakara [i.e., painter] caste under the direction of an expert Sanskrit and Āyurvedic scholar. The pictures related not only to the Himālayan plants but also to plants found in the plains of India. The Scholar and the Citrakara went together and drew those pictures under the very trees they painted. Sometimes their identification was doubtful, but in the majority of cases it was all right. It reflects great credit on the Nepal Durbar for undertaking this difficult task which, when published, will be very much appreciated by all interested in Indian botany, specially in Indian medicinal plants.

The series of paintings was never published, and their fate remains unknown at the present time.

Several elements in the above account suggest patterns of production that are plausible in relation to the anatomical painting under discussion here. A rich, perhaps royal, patron who initiates the project. A physician who is also a scholar of Sanskrit and ayurveda. And one or more painters of the Citrakara community. Finally, a calligrapher or scribe. Some clues about the interaction between the scribe and the scholar can be gleaned from the analysis of the texts given below. The scholar was not a great expert in the Sanskrit texts, and the scribe was apparently ignorant of Sanskrit. Between them, they produced texts that are riddled with errors and incoherent in terms of selection and placement. The sparse linguistic clues given in the analysis below that pertain to provenance support the location of the work in Nepal.

As for audience, reception and usage, the account by Hara Prasad Śāstrī gives no description of the purpose of the 1907 botanical series, and we can only speculate over their use(s) as well as those of the

present painting. The painting is flat and shows no signs of having been rolled up, so it was presumably intended for display. On the other hand, the colours and condition are fresher than would be the case if the painting had been exposed for two centuries. Perhaps the painting was created to be displayed in the examining room of a royal physician. It may have been used for teaching, again presumably in a well-financed setting such as a royal college or pāthaśālā.

To conclude, the Ayurvedic Man is an image painted no earlier than about 1700, on which have been written extracts from the classic ayurvedic work called *Bhāvaprakāśa* by Bhāvamiśra (fl. *ca.* 1650–1690). The extracts are taken from chapter 3 of the work, that deals with anatomy and embryology. Although the extracts are connected with physiology and anatomy, but do not function as tightly-integrated labels to the body image, but rather as reflections on related anatomical issues. There are many errors.

As the sections below show, the textual quality of the extracts from the *Bhāvaprakāśa* is poor. In each short passage there are 20 or more errors. The high density of erroneous readings makes it impossible, in my view, that these texts could have been read and understood by someone without a pre-existing knowledge of the text. For such a person, the texts might have been recognisable, and would have been sufficient to bring the correct verses to the memory of the physician-scholar. For others, the verses would have been more or less unintelligible, and would have appeared as a collection of relevant lexical items in a general syntactic sequence broadly suggestive of anatomical significance.

#### The texts

The following are diplomatic transcriptions from the texts in the painting. The transcriptions reproduce scribal errors faithfully. The symbol  $\Box$  is used to show illegible characters. Upper brackets  $\Box$  mark superscript or marginal insertions or additions to the text by a second scribe. The line-division in the transcription are the same as those in the painting. The texts are mostly in verse, but the line-division in the painting does not reflect the verse structure. The textual notes attached to each passage record the readings of the fourth edition of the  $Bh\bar{a}va-prak\bar{a}\acute{s}a$  edited by Śāstrī and Vaiśyaḥ 1960 and published as volume 130 in the Kāśī Sanskrit Series (henceforth KSS). This is a popular and authoritative vulgate edition that has gone through several editions and reprints. The edition gives no account of the manuscript sources on

<sup>&</sup>lt;sup>20</sup>Unfortunately, each different edition of KSS v. 130 has different pagination.

<sup>&</sup>lt;sup>21</sup>Meulenbeld 1999–2002, pp. 261–2, n. 14, edition 'm.'

which it is based. Its Sanskrit is generally correct, as is usual with KSS editions, although its relationship to the manuscripts on which the text is based is not transparent.

The translations below are my own and are based on the KSS edition. Where even the corrected text in the painting differs from the KSS edition, I have translated the KSS version of the verses. The single-word labels that appear on various parts of the body image are often hard or impossible to read. Furthermore, they are often not in Sanskrit, but in  $bh\bar{a}s\bar{a}$ , i.e., a vernacular derivative of Sanskrit. I hope that in future, further scrutiny of the image, and further ingenuity by scholars, may lead to more decipherments of these labels. I would always be glad to hear of these.

#### Text A

त्रथरोषाप्रवस्यतेथातवस्तर्नंतरम्। श्राह्मत्रियातिस्त्ययिर्गामं यवस्यते॥१॥श्राह्मवश्राध्यात्र्यंम्स्नोत्तद्वय्यते॥श्राह्मवश्राध्यात्र्यंम्स्नोत्तद्वय्यतेष्यः।श्राह्मवश्राध्यात्र्यः।श्राह्मवश्राध्यात्र्यः।श्राह्मवश्राध्यात्र्यः।श्राह्मवश्राध्यात्र्यः।श्राह्मवश्राद्यात्र्यः।श्राह्मवश्राद्यात्र्यः।श्राह्मवश्राद्यात्र्यः।श्राह्मवश्राद्यात्रः।।श्राह्मवश्राद्यात्रः।श्राह्मवश्राद्यात्रः।।श्राह्मवश्राद्यात्रः।श्राह्मवश्राद्यात्रः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श्राहः।श

# Transcription

#### KSS edition readings:

U			
$^1$ दोषाः	<sup>7</sup> ॰ <del>श</del> ्वापि	<sup>13</sup> रन्ध्राणि	<sup>19</sup> त्वचः
<sup>2</sup> आदेर्	<sup>8</sup> अथ च	$^{14}$ स्रोतांसि	<sup>20</sup> लोमानि
<sup>3</sup> परिणामञ्	<sup>9</sup> सन्धयः	<sup>15</sup> कूर्चाश्च रज्जवः	<sup>21</sup> लोमकूपाञ्च
$^4$ आर्तवं चा $^{f u}$	<sup>10</sup> शिरा	<sup>16</sup> ँआः	<sup>22</sup> एतन्मयो मतः
<sup>5</sup> मलास्तदुपधातवः	$^{11}$ स्नायवश्चापि	<sup>17</sup> सीमान्ताश्	·
<sup>6</sup> आश्रयाश्च	<sup>12</sup> धमन्यः	<sup>18</sup> च तथा	

This passage represents *Bhāvaprakāśa*, *pūrvakhaṇḍa*, *bhāga* 1, *prakaraṇa* 3 *garbhaprakaraṇa*, verses 94c–98b (KSS, p. 28).

#### Translation

94cd Now the humours will be described, and after that, the tissues.

- 95 The movement of food etc., and its transformation will be stated; blood too, and the impurities of the tissues and the subsidiary tissues;
- 96 the receptacles and the layers of skin, the lethal points and the joints; and the ducts and sinews as well as the pipes and the tendons too;

97 the orifices and mass of tubes with nets, and the brushes and ropes; the grooves too, and the junctions and aggregate bones, 22 the seams, and also the skin,

98ab the hairs and pores. The body is thought to be made of these.

<sup>&</sup>lt;sup>22</sup>On the 'aggregates' संघाता, as a type of bone, see Suśrutasaṃhitā śā.5.16.

## Text B



# Transcription

अधो दिण  $^1$ तश्चापि हृदया  $^2$  स $^-$ य $^-$ कृत  $^3$  स्थितः  $^4$  ॥ $^5$  विषणौ  $^6$  भवतश्चारात्  $^7$  कफात् शृंगुभ्यां  $^8$  समेधीया  $^9$  ॥ १॥ विर्य  $^{10}$ वाहिशिराधारौ तौ मतौ पुरुषा  $^{11}$  वहु  $^{12}$  ॥ गुडस्य  $^{13}$ मान  $^{14}$  सर्वस्य सर्वस्थां  $^{15}$ चतुरं गुलम् ॥ २॥ तत्र स्योवतप  $^{16}$  तिं  $^{17}$  श्रं  $^{18}$  शंखावर्त्तनभास्  $^{19}$  तु ना  $^{20}$  ॥ प्रवाहिली  $^{21}$  भवेत्पूर्वा साधा गुलिपिता  $^{22}$  म ता ॥ ३॥ उत्सर्जनी तु तदध  $^{23}$  सार्द्धां गुलिमिता  $^{24}$  मता  $^{25}$  ॥ अर्द्धां गुलप्रमा नं  $^{26}$  तु बुधैः  $^{27}$  गुडमुखं  $^{28}$  मतं ॥ ४॥ मलोत्सर्गस्य मार्गोऽयं वायुदेहं  $^{29}$  विनि मितम्  $^{30}$ ॥ ५॥

KSS edition readings:			
$^{1}$ दक्षिण	<sup>9</sup> च मेदसाम्	<sup>17</sup> ति ॰	<sup>24</sup> सा सार्द्ध
$^2$ हृदयाद्	$^{10}$ वीर्य	<sup>18</sup> ॰स्रः	<sup>25</sup> om. v. 90cd
<sup>3</sup> यकृतः	$^{11}$ पौरुषा	<sup>19</sup> ॰ििभास्	<sup>26</sup> ॰ णं
$^4$ स्थितिः	<sup>12</sup> ॰वहौ	<sup>20</sup> ताः	<sup>27</sup> बुधैर्
<sup>5</sup> om. vv. 81c–88a	<sup>13</sup> गुदस्य	$^{21}$ प्रवाहिणी	<sup>28</sup> गुंद ॰
<sup>6</sup> वृषणौ	$^{14}$ मानं	<sup>22</sup> सार्द्धाङ्गलमिता	<sup>29</sup> पायुर्देहे
<sup>7</sup> भवतः सारात्	$^{15}$ सार्द्धं स्याच्	<sup>23</sup> °अधः	<sup>30</sup> ॰र्मितः
<sup>8</sup> कफासृङ्भ्यां	$^{16}$ स्युर्वलयस्		

This passage represents a version of *Bhāvaprakāśa*, pūrvakhaṇḍa, bhāga 1, prakaraṇa 3 garbhaprakaraṇa, verses 81–91 KSS, pp. 27–8 that omits several verses through common processes of scribal error.

## Notes on readings

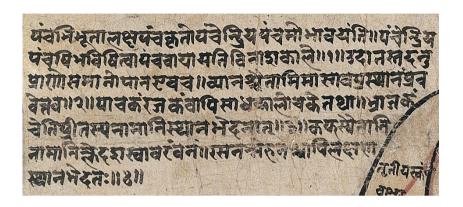
- 5 The omission of vv. 81c–88a may be attributable to a scribal saut du même au même from 81c स्थित: to 88d प्रतिष्ठिता.
- 8,9 The KSS edition readings recorded in these notes refer to p. 28, note 3 of the edition, that gives कफासृग्या च as an unattributed variant for the accepted reading कफास्झांस .
  - 24 Haplography.
  - 25 A saut du même au même from ॰सम्मिता at the end of 90b to मता at the end of 90d.

#### Translation

81ab Below and to the right of the heart is the location of the liver.

- 87cd The testicles arise from the essence of phlegm, blood, flesh, and fat.
  - 88 They are thought to be the supporting structure for the ducts that carry virility, that convey manliness. The rectum is four and a half centimetres in total.
  - 89 There are three folds in it. They are like the convolutions of a conch shell. The first is called 'forward conductor', and is thought to be one and a half centimetres long.
- 90ab Below that is the 'expeller', one and a half centimetres long.
  - 91 Experts consider the orifice of the rectum to be half a centimetre long. This, the anus, is the passage created in the body for the expulsion of impurity.

## Text C



# Transcription

पंचिमिभूता $^1$  लक्ष $^2$  पंचकृतो $^3$  पंचेन्द्रिय $^4$  पंचमो $^5$  भावयंति॥ पंचेन्द्रिय $^6$  पंचिष $^7$  भविषित्वा $^8$  पंचवायामित $^9$  विनाशकाले॥ १॥ उदातस्तदनु $^{10}$  प्राणो $^{11}$  समानोपान एव च॥ व्यानश्चैतािम $^{12}$  मासावप्र $^{13}$  स्थानं $^{14}$  प्रव $^{15}$  वेत्तव $^{16}$ ॥ २॥ पाचकं रजकं $^{17}$  वािप $^{18}$  साधकालोचके तथा॥ भ्राजकं चेित प्रीतस्य $^{19}$  नामािन स्थानभेदनात् $^{20}$ ॥ ३॥ कफस्यैतािन नामािन क्रेदश $^{21}$  खावरंवनं $^{22}$ ॥ रसन $^{23}$  श्लेहनश्चािप $^{24}$  लक्षण $^{25}$  स्थानभेदतः॥ ४॥

KSS edition readings	:		
<sup>1</sup> ॰भूतास्	<sup>8</sup> भावयित्वा	<sup>15</sup> प्रभे	<sup>22</sup> चावलम्बनः
$^2$ त्व $\hat{\mathbf{u}}$	<sup>9</sup> पञ्चत्वमायान्ति	<sup>16</sup> दतः	<sup>23</sup> ॰नः
<sup>3</sup> कृत्व:	$^{10}$ उदानस् $^{\circ}$	<sup>17</sup> र <b>ञ्जक</b> ं	<sup>24</sup> स्नेह ॰
<sup>4</sup> ॰द्रियं	<sup>11</sup> प्राणः े	<sup>18</sup> चापि	<sup>25</sup> श्लेषणः
<sup>5</sup> पञ्चसू	<sup>12</sup> ॰तानि	<sup>19</sup> पित्तस्य	
<sup>6</sup> ॰द्रियं	<sup>13</sup> नामानि वायोः	<sup>20</sup> ॰भेदतः	
<sup>7</sup> पञ्चसु	$^{14}$ स्थान	$^{21}$ क्रोदनश्	

This passage represents Bhāvaprakāśa, pūrvakhanda, bhāga 1, prakarana 3 garbhaprakarana, verse 266 (पञ्चिम...), followed by v. 108 (उदानस्तदनु॰...), v. 121 (पाचक...), and v. 127 (कफस्य...) KSS, pp. 69, 30, 31, and 35.

## Notes on readings

1 This word, printed as पञ्चिम्न्तास् in the KSS and several other editions, is problematic, as is the whole verse. It is a direct quotation from the *Suśrutasaṃhitā*, that has the verse at *śārīrasthāna*, adhyāya 9, v. 11 with पञ्चा : Ācārya 1915, p. 301 f.:

पञ्चाभिभूतास्त्वथ पञ्चकृत्वः पञ्चेन्द्रियं पञ्चसु भावयन्ति॥ पञ्चेन्द्रियं पञ्चसु भावयित्वा पञ्चत्वमायान्ति विनाञकाले॥ ११॥

There is a grammatical difficulty of either a missing final letter required for the instr. pl. पञ्चभिस, or a long आ required for a sandhi of पञ्च+अभि°, and the odd sense that the latter phrase would give. The nineteenth-century edition of the Suśrutasamhitā by Muralīdharaśarman gives the emendation पंचादिभृतास which makes some sense (1895–1899, v. 2, p.115). Muralīdharaśarman discussed the difficulty of this verse in his footnote on the same passage, and noted a variant reading with long आ, i.e., ॰आभिभृतास 23 This latter is the reading later adopted by Ācārya and cited above. These and other readings were present in the manuscripts available to the commentator Dalhana (12th century). He offered several different possible meanings for this verse.<sup>24</sup> Clearly this verse has been problematic for many centuries.<sup>25</sup> The earliest setting of the verse is in the summary of a chapter about pipes (धमन्यः), <sup>26</sup> and its general meaning appears to be that the pipes are what connect the internal person to the external world of material objects, via his five senses, for the duration of his life.

#### Translation

- 266 [The pipes] made of all five elements five times cause the one having five senses to exist amongst the five. Having caused the one having five senses to exist amongst the five, they return to the fivefold state at the time of death.
- p. 108 Up-breath, then fore-breath, co-breath, down-breath, and through-breath: these are the names of the wind distinguished according to location.

<sup>&</sup>lt;sup>23</sup>Further discussion of the work of the pioneering editor and illustrator of ayurvedic texts, Muralīdharaśarman, is given in Wujastyk 2002.

<sup>&</sup>lt;sup>24</sup>E.g., पञ्चाभिभूताः /पञ्चभिर् अभिभूताः /पञ्चादिभूतान्यथ पञ्चकृत्वा /पञ्चाभिभूतास्त्वथ पञ्चधा वा.

<sup>&</sup>lt;sup>25</sup>The verse is also cited and discussed by Kāsīrāma (fl. *ca.* 1600) in his commentary *Gūḍḥārthadīpikā* on v. 1.5.38 of the Śārṅgadharasaṃhitā Śāstrī 1931, p. 55b.

<sup>&</sup>lt;sup>26</sup>Suśrutasamhitā śā.9.

- p. 121 Cooker, dyer, reacher, illuminator, and shiner: these are the names of the bile, distinguished according to location.
- p. 127 Moistener, dripper, taster, oiler, and gluer: these are the names of the phlegm, distinguished according to location.

These four verses were selected to give an account of how the five senses are connected to their objects, and then to give a series of five technical names each for types of wind, bile and phlegm (the three fundamental humours of ayurveda). The first verse does not seem to fit with the last three, but the common theme is that they each treat sets of five entities.

#### Text D



# Transcription

हृदयां  $^1$  पुण्डरीकेन  $^2$  सदृशं स्याद् अधोमुखं॥ जाग्रतस्तद्विकसिति  $^3$  श्वप्रणस्तु  $^4$  निमीलिनी  $^5$ ॥ शा आयंतु  $^6$  जीवस्य वेसनस्थान  $^7$  मुत्तमम्॥ अत $^8$ तस्मि  $^9$  तमोव्याप्त  $^{10}$  प्राणितु  $^{11}$  प्रसुखंति  $^{12}$  हि॥ २॥ कक्षयोर्वक्षसे  $^{13}$  संधि  $^{14}$  वत्रुनि  $^{15}$  ममदारिते  $^{16}$ ॥ ३॥

#### KSS edition readings:

$^{1}$ हृदयं	⁵निमीलति	<sup>9</sup> तस्मिंस	<sup>13</sup> ∘स:
<sup>2</sup> ०एण	<sup>6</sup> आशयस्तत्त्	<sup>10</sup> व्याप्ते	ा. <sup>14</sup> सन्धी
ेर्ज ³विकसति	जाशपत्तापु <sup>7</sup> चेतन०	ज्यात <sup>11</sup> प्राणिनः	तु.चा <sup>15</sup> जत्रुनी
		<sup>12</sup> प्रस्वपन्ति	9
<sup>4</sup> स्वपतस्तु	<sup>४</sup> अतस्	≔प्रस्वपान्त	$^{16}$ समुदाहृते

# Notes on readings

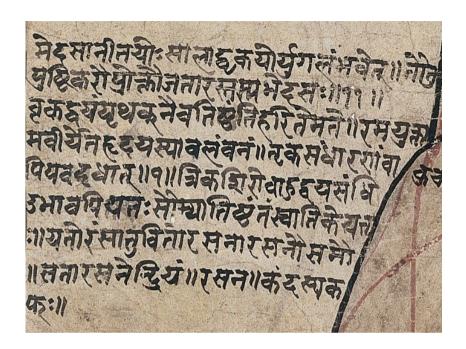
16 This appears most likely to be an error in taking down dictation.

This passage represents *Bhāvaprakāśa*, pūrvakhaṇḍa, bhāga 1, prakaraṇa 3 garbhaprakarana, verses 75–77ab (KSS, p. 27).

#### **Translation**

- p. 75 The heart is similar to a lotus, facing downwards. On waking up, it blooms; on sleeping, it closes up.
- p. 76 That is the resting place of the soul. It is the supreme location of the consciousness. And so, when it is suffused with torpor, living creatures fall asleep.
- 77ab The collarbones are defined as the junctions of the chest and the shoulders.

# Text E



# Transcription

मेदसानीतयोः  $^1$  सालाद्  $^2$ वृकयोर्युगलं भवेत्॥ तौ तु पुष्टिकरौ प्रोक्तौ जतारस्तस्य  $^3$  भेदसः  $^4$ ॥ ११॥ वृकद्वयं  $^5$  पृथक् नैव तिष्ठंति हिरते  $^6$  मते॥ रमयुक्ता मवीर्येत  $^7$  हृदयस्यावलंवनं  $^8$ ॥ तृकसंधारणं  $^9$  वा  $^{10}$  पि पवदधात्  $^{11}$ ॥ १॥  $^{12}$ ित्रक  $^{13}$  शिरोवाहुद्वयसंधि  $^{14}$  उभाविप यतः  $^{15}$  सौम्या  $^{16}$  तिष्ठंतं  $^{17}$  स्वातिके  $^{18}$  यतः ॥ यतो रंसात्त्वितो  $^{19}$  रसनारसनौ समौ ॥  $^{20}$ लता  $^{21}$  रसनेन्द्रियं॥ रसन  $^{22}$ ॥ कंदस्यक फः  $^{23}$ ॥

#### KSS edition readings:

$^1$ मेदःशोनितयोः	<sup>7</sup> रसयुक्तात्मवीर्येण	<sup>13</sup> त्रिकं	$^{18}$ चान्तिके
$^2$ साराद्	<sup>8</sup> ॰लम्बनम्	$^{14}$ शिरोबाहुद्वयसंधिः	<sup>19</sup> रसान्विजानीतो
<sup>3</sup> जठरस्थस्य	<sup>9</sup> त्रिक॰	<sup>15</sup> ततः	<sup>20</sup> [पुष्प॰]
<sup>4</sup> मेदसः	<sup>10</sup> चा ॰	$^{16}$ सौम्यौ	<sup>21</sup> रसना
<sup>5</sup> [ <b>व्</b> 塞॰]	$^{11}$ विदधात्यवलम्बनः	<sup>17</sup> तिष्ठतञ्	<sup>22</sup> रसनः
<sup>6</sup> [हारीते]	$^{12}\left[ $ पुष्पचिह्नाङ्कितम् $ ight]$		<sup>23</sup> कण्ठस्थ ॰

## Notes on readings

- 5 This line is not found in the KSS edition, and the emendations are my own. The *Bhāvaprakāśa* does elsewhere include a reference of this type to the *Hārītasaṃhitā* (e.g., *madhyakhaṇḍa*, *prakaraṇa* 8, *cikitsāprakaraṇa*, v. 59). The line is translated in square brackets below.
- 12, 20 These explanatory Notes are marked with a small flower sign in the KSS edition. This siglum is not explained in the preliminary matter of the edition.

This passage represents *Bhāvaprakāśa*, *pūrvakhaṇḍa*, *bhāga* 1, *prakaraṇa* 3 *garbhaprakaraṇa*, verses 83 and 130–31 KSS, pp. 27, 36.

#### **Translation**

- 83 The two kidneys come from the essence of fat and blood. They are said to provide nourishment for the fat in the belly. [In the opinion of Harita, the two kidneys do not stand separately.]
- 130 'Prop (अवलम्बन)' is the one that brings about the propping up of the heart, by its own power together with chyle (रस), and it also holds the upper back (त्रिक) together.

  The 'upper back' is the junction of the head and the two arms.
- 131 The tongue and 'saliva (रसन)'are equivalent because they make known tastes. They are both of the nature of Soma and they are located close to each other.

'Tongue (रसना)' means the sense organ of taste; 'Saliva (रसनः)' means the phlegm located in the throat.

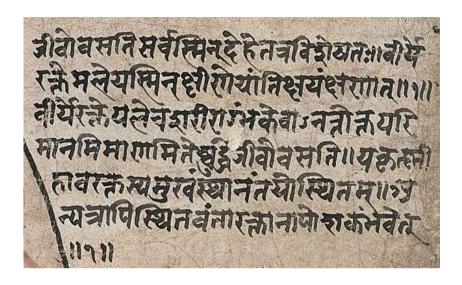
#### **Remarks**

The purpose of verses 130 and 131 is to give definitions of two of the sub-types of phlegm, namely 'prop' and 'saliva'. The full five sub-types of phlegm are क्रेंदन, अवलम्बन, रसन, स्नेहन and श्लेषण. It is puzzling that just two of the definitions should be selectively reproduced here in Text E, and the rationale for providing these particular definitions is not obvious.

Being 'of the nature of Soma', mentioned in verse 131, means that they share the qualities and values of wetness, vegetation, coolness, and invigoration. This is in contrast to the polar opposite value of fieriness or being of the nature of Agni. <sup>27</sup>

<sup>&</sup>lt;sup>27</sup>See Wujastyk 2004a for a discussion of this generic dual classification.

#### Text F



# Transcription

जीवो वसित सर्वस्मिन्देहे तत्र विशेषतः॥ वीर्ये रक्ते मले यस्मिन् क्षीणे यांति  $^1$  क्षयं  $^2$  क्षणात्॥ १॥  $^3$ वीर्ये रक्ते पले  $^4$  च शरीरारंभके वाऽनन्तोक्तपरि  $^5$  मानिमि  $^6$ माणिमिते  $^4$  खुद्धे  $^7$  जीवो वसित॥  $^8$  यकृत्स्री हा व  $^9$  रक्तस्य मुखं  $^{10}$  स्थानंतयो  $^{11}$  स्थितम्॥ अन्यत्रापि  $^{12}$  स्थितवंता  $^{13}$  रक्ताना  $^{14}$  पोशकं  $^{15}$  भवेत्॥ १॥

#### KSS edition readings:

$^{1}$ याति	<sup>5</sup> वाग्भटोक्तपरि <i>॰</i>	<sup>9</sup> च	<sup>13</sup> संस्थितवतां
<sup>2</sup> क्षणम	<sup>6</sup> मानमि ॰] om.	<sup>10</sup> मुख्य	<sup>14</sup> ॰आं
<sup>3</sup> [पुष्पचिह्नाङ्कितम्]	<sup>7</sup> शुद्धे	<sup>11</sup> °योः	<sup>15</sup> पोषकं
<sup>4</sup> मले	<sup>8</sup> omission	<sup>12</sup> अन्यत्र	

# Notes on readings

- 2 The KSS edition reads क्षन at this point, but क्षय, with our painting, when the verse is repeated at v. 198. I suspect this is a misprint in the KSS edition at v. 141, since the Hindī paraphrase assumes क्षय.
- 3 See the notes to footnote 12 on text E above.
- 6 Scribal dittography, or possibly a correction of the retroflex nasal, but without deleting the error.

This passage represents *Bhāvaprakāśa*, pūrvakhaṇḍa, bhāga 1, prakaraṇa 3 garbhaprakaraṇa, verse 141 and accompanying texts (KSS, p. 37). Verse 141 itself is repeated at v. 198 (KSS, p. 52).

#### Translation

 $\frac{141}{198}$  Life dwells in the whole body, and especially in the virility, in the blood, in the waste. Being diminished in these, it is instantly destroyed (क्षयं).

## [Addendum:]

Life dwells in the virility, in the blood, and in the waste, that are pure when the body is first made, and in the quantity according to the metabolic process described by Vāgbhaṭa. Not in the corrupted and aged ones, because the instructions about bloodletting might then be pointless.

141 And the principal location of blood is the liver and the spleen. Located in them, it nourishes the bloods that are positioned elsewhere.

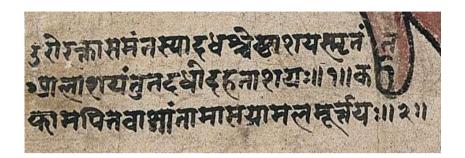
#### Remarks

Once again, verses that are widely separated in this chapter of the *Bhāvaprakāśa* are reproduced in the painting without their original contexts. The first part of this text, in its location at v. 198, is part of the *Bhāvaprakāśa*'s description of semen. The second passage is taken from a description of the formation and metabolism of blood, a description that is itself part of a larger enumeration of the seven elements (धातु): chyle, blood, muscle, fat, bone, marrow, and semen.<sup>28</sup>

The addendum to the first passage is an aside addressing a concern that if life is present in blood, then blood-letting might be dangerous. The argument is that life is fully present in the blood of the body in its pristine and original state. But blood can become corrupted and old, and then blood-letting is worthwhile.

<sup>&</sup>lt;sup>28</sup>See Wujastyk 2003a, introduction for further description, and Maas forthcoming for a recent critical discussion of the historical evolution of this listing.

#### Text G



# Transcription

उरो रक्तासमं $^1$  तस्याद् $^2$  अधश्वेष्ठाशय $^3$  स्मृतं आलाशयं $^4$  तु तदधो $^5$  दहनाशयः $^6$ ॥१॥ क फामिपत्तवाशांताम $^7$  आसया मलमूर्त्तयः $^8$ ॥२॥

KSS edition readings:

 $^1$  ॰ रक्ताशयस्  $^3$  अधः श्लेष्माशयः  $^5$  ॰ अधस्  $^7$  ॰ वातानां  $^2$  तस्माद्  $^4$  आमाशयस्  $^6$  तिल्लिङ्गं चरकोऽवदत्  $^8$  मलमूत्रयोः

# Notes on readings

6 This is not just a variant reading, of course, but a replacement word for an elided *pāda*. It is likely to be a *saut du même au même* from तदधों to तदधः in v. 215, with 'दहनाअयः' being a semantically valid alternate reading for 'पवनाअयः' in the original.

This passage represents *Bhāvaprakāśa*, pūrvakhanda, bhāga 1, prakaraṇa 3 garbhaprakaraṇa, verses 213, 217 (KSS, p. 54).

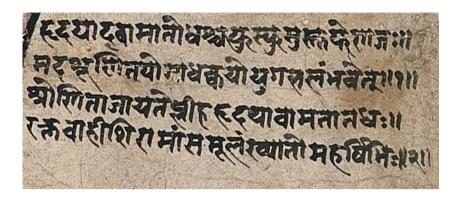
#### **Translation**

- 213 The chest is the receptacle of blood. The receptacle for phlegm is considered to be below it. Below that is the receptacle for digestive residues, whose details Caraka described.
- 217 The receptacles of phlegm, digestive residues, bile, wind, and of waste and urine....

#### Remarks

The extract from v. 217 is incomplete. The passage of which it forms part is a list of the locations and receptacles in the body of various substances. This verse explains that the receptacles listed occur in men and women, and that there are three further receptacles – breasts and uterus – in the bodies of women. It is related – but not identical – to Vāgbhaṭa's <code>Aṣṭāngahṛdayasaṃhitā</code>, ch. 2 Śārīrasthāna, v. 11 Kuṃṭe and Navare 1902, p. 198.

## Text H



# Transcription

हृदयाद् वामतो धश्च फुस्फुसुस् $^1$  तु $^2$  फेणजः $^3$ ॥ मदशूणितयो $^4$  †मा $^5$  धक्कयो $^6$  युगललं $^7$  भवेत्॥१॥ श्रोणिता $^8$  जायते स्नीह $^9$  हृदया $^{10}$  वामतात् $^{11}$  अधः॥ रक्तवाहीशिरामां $^{12}$  स मुलं ख्यातो महर्षिभिः॥२॥

#### KSS edition readings:

U			
$^{1}$ फुप्फुसो	$^4$ मेदःशोनितयोः	<sup>7</sup> युगलं	$^{10}$ हृदयाद्
<sup>2</sup> रक्त °	<sup>5</sup> साराद्	<sup>8</sup> शोनिताज्	$^{11}$ वामतो
<sup>3</sup> फेनजः	<sup>6</sup> व <b>क्र</b> योर	<sup>9</sup> स्रीहा	<sup>12</sup> ॰वाहिशिराणां

## Notes on readings

- 7 Dittography. But if taken as a misreading for संभवेत्, then it would be evidence that the scribe could not possibly know Sanskrit.
- 10 The word order in the KSS edition is: 'वामतो हृदयादधः'
- 12 In the KSS edition, this is the first half of the *pāda* whose second half is the first line of text H.

This passage represents *Bhāvaprakāśa*, pūrvakhanḍa, bhāga 1, prakaraṇa 3 garbhaprakaraṇa, parts of verses 79, 80 and 83 (KSS, p. 27).

#### Translation

80cd Below and to the left of the heart is the left lung (*pupphusa*). It is made of blood and foam.

83ab The two kidneys are made of the essence of fat and blood.

79cd The spleen is made of blood. It is below and to the left of the heart. 80ab The wise call it the root of the ducts that carry blood.

#### Remarks

The exact referent of the *pupphusa* (v. 80cd) is not completely clear. It means 'lung' but not necessarily one of a pair of symmetrical organs. The right 'lung' is called *kloman*. Neither organ is involved in breathing.<sup>29</sup>

The subject of verse 80ab, continuing from 79cd, is the spleen.

<sup>&</sup>lt;sup>29</sup>For further discussion on this, see Wujastyk 2003a, p. 271 n. 18 et passim.

#### Text I

# महंते श्रावर्यधीकार्बाउराजानुवीरशः। इसर्गेद्वाउनयार्द्यनामायः योजनं। तेत्रश्रवरामानांद्वेद्वरश्रेष्ठकार्वता सुखनेहजवायूनमिकेकर श्रावरोते॥ ॥

# Transcription

महंते $^1$  श्रावयं $^2$  प्रोक्ता $^3$  कंडराजातु $^4$  षोडशः। प्रसर†कुंचनयोर् $^5$  दृषू $^6$  नासा $^7$  प्रयोजनं। नेत्रश्रवणसानां $^8$  द्वे द्वे रन्ध्रे प्रकीर्त्तिता $^9$  मुखमेहजवापूनम् $^{10}$  इकैल $^{11}$  र न्ध्र $^{12}$  उच्यते॥॥

KSS edition readings:

$^{1}$ महत्यः	$^4$ कण्डरास्तास्तु	<sup>7</sup> तासां	$^{10}$ ॰मेहनपायूनाम्
<sup>2</sup> स्नावयः	<sup>5</sup> प्रसारणाकुञ्चनयोर्	<sup>8</sup> ॰नासानां	$^{11}$ एकैकं
<sup>3</sup> ॰ <b>का</b> :	<sup>6</sup> दृष्टं	<sup>9</sup> ॰ <b>की</b> र्तिते	<sup>12</sup> ॰म्

# Notes on readings

8 Haplography.

This passage represents *Bhāvaprakāśa*, pūrvakhaṇḍa, bhāga 1, prakaraṇa 3 garbhaprakaraṇa, verses 269 and 267 (KSS, p. 69).

#### **Translation**

- 269 The large sinews are called tendons and there are sixteen of them. Their purpose is observed to be extension and contraction.
- 267 Each of the eyes, ears and nose has two obvious orifices. The mouth, urinary organ and rectum is each said to have one orifice.

# Text J

दशमंग्राक्षेत्रीक्षंत्रातित्वार्गाविद्व। जाजानीतृशिक्षाक्षामामामापुद्वगैहि हिणशामानिक्तारिक्तारिक्षवीर्ग्यवनुधारश्राशाक्षास्ययव्यमानस्ययथासनानि काभवेत्॥शायवामानस्यश्रक्षस्यर्भत्तंवनधास्तव।

# Transcription

दशमं मस्तके प्रोक्तं रंध्रानितु $^1$  नृणां विदुं $^2$ । जालानी तु शिला†स्नाय $^3$  मांसास्थाम $^4$  उद्धरंति $^5$ 

हि॥१॥ मानि  $^6$  चत्वारि चत्वारि †सर्वार्ण्यव  $^7$  तु  $^8$  षोडशः  $^9$ ॥ क्षीरस्य पच्यमानस्य यथा संतानि

का भवेत्॥२॥पच्यमानस्य ग्रुक्रस्य $^{10}$  रजसं $^{11}$  च तथा स्तव $^{12}$ ।

## KSS edition readings:

$^{1}$ रन्ध्राणीति	$^4$ मांसास्थ्नाम्	<sup>7</sup> ए <b>व</b>	$^{10}$ शुक्रस्य
<sup>2</sup> विदुः	<sup>5</sup> उद्भवन्ति	<sup>8</sup> च	<sup>11</sup> रजसश
<sup>3</sup> शिरास्नायु॰	<sup>6</sup> तानि	<sup>9</sup> षोडश	<sup>12</sup> त्वचः े

# Notes on readings

5 Appears to be a genuine variant, rather than scribal error.

This passage represents *Bhāvaprakāśa*, pūrvakhaṇḍa, bhāga 1, prakaraṇa 3 garbhaprakarana, from verses 270, 273 and 279 (KSS, p. 70).

#### Translation

- 270ab The tenth is said to be in the head. These are the orifices that men are said to have, according to the wise.
  - 273 The webs support the ducts, sinews, muscles, and bones. There are four fours, sixteen in all.
  - 279 A layer forms on the surface of milk when it is being cooked. In just the same way, the skin is formed out of semen and menstrual blood as they mature.

#### Remarks

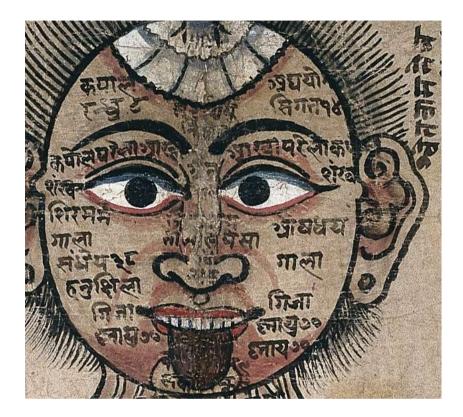
Verse 270ab is a continuation of the list of orifices begun in Text I. Perhaps the text was intended to be read across the painting.

The anatomical identity of the 'webs' (jāla) is uncertain.

Verse 279 uses the same word पच्यमान for both 'cook' and 'mature'. Menstrual blood (*rajas*) is the female analogue of male sperm; it is the fertile contribution of the woman to the child's conception.<sup>30</sup>

<sup>&</sup>lt;sup>30</sup>Das 2003 explores this topic further.

#### Face



## Transcription

The labels are translated where possible. Some are in Sanskrit, but several are in Middle Indo-Aryan (MIA) or New-Indo Aryan (NIA). MIA and NIA terms have been checked in Turner 1966–85, but no pattern of linguistic or geographic distribution is obvious.

Clockwise from the top centre:

अघयोगसिगत १४ आसीपरेलाक <sup>31</sup> eyelash/lid... शंस्र temple श्वेतवामनेत्र white left eye [vertically, above ear]

<sup>&</sup>lt;sup>31</sup>The ई vowel is faint, so possibly आसा॰.

औषधय herbs [?]

गाला cheek (NIA ←Skt. galla, gaṇḍa)

गिजा gums

†ष्नायु ७० sinews [presumed स्नायु?] 70

†ष्नाय ७० sinews 70

[text on tongue and nose illegible]

 † जा पु ७०
 sinews 70

 गिजा gums
 gums

 हनुक्षिला jaw ?
 junctions

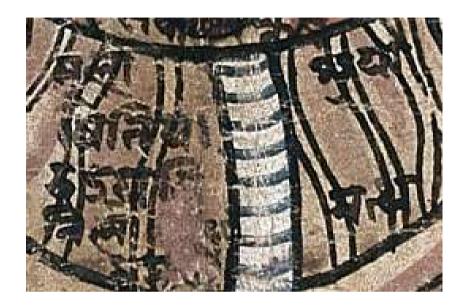
 गाला cheek

शिरमर्म lethal point at a duct

शंख temple

कपोलपरेला आ†सी cheek-eyelash-eye कपाल रन्ध्र ८ 8 fissures in the skull

# **Throat**

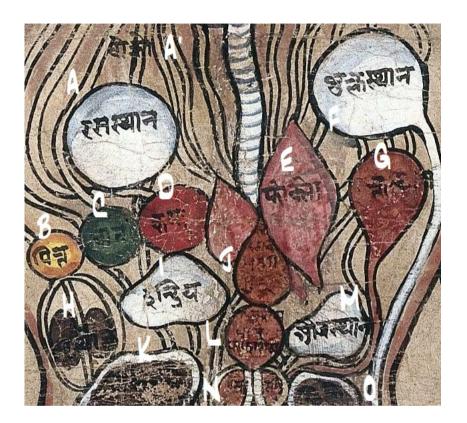


The text in this part of the painting is unclear.

# Left column

# Right column

# Torso



ʻlungʻ <sup>32</sup>
)

<sup>&</sup>lt;sup>32</sup>As first suggested by Das 2003, p. 77, n. 249. See Turner 1966–85, #8391 for parallel New Indo-Aryan forms generally meaning 'vacuous, void, hole, space' and the suggestion that these may originate from a similar series of words in Dravidian documented by Burrow and Emeneau 1984, #4452.

<sup>&</sup>lt;sup>33</sup>I do not see evidence for the reading रक्तस्थान suspected by Das 2003, p. 77, n. 249.

```
इन्द्रिय
ı
                  senses
J
     illegible
Κ
     illegible
L
     illegible
M
     औजस्थान
                  place of energy (Skt. ओजस)
     illegible
Ν
     illegible
0
```

Further location names that might be expected on the torso include स्नीहन् (spleen), वृक्कौ (kidneys), यकृत् (liver), क्रोमन्, पुप्फुस, हृदय (heart), and perhaps आहारस्थान (place of food).

The text labels in the painting here do not closely follow lists of organs in this part of the body given in the *Bhāvaprakāśa* (e.g., *prakaraṇa* 3, vv. 75–83).

The colour-coding of these locations or receptacles in the body merit further investigation. For example, the receptacle of bile, पित्त is yellow, in accordance with its description, e.g., in *Bhāvaprakāśa prakaraṇa* 3, v. 120. This accords with the parallel concept of phlegm in the Greek tradition as a yellow choler (structurally opposed in Aristotelian humoral theory to black bile or Gk. *melancholia*). Historical phonology and the law of mora permit the suggestion that पित्त may be connected with पीत 'yellow'.<sup>34</sup>

The location of phlegm is red, which contradicts *Bhāvaprakāśa prakaraṇa* 3, v. 126, where it is described as white. The location of wind is green, but no colour is attached to wind in the *Bhāvaprakāśa* (e.g, *prakaraṇa* 3, vv. 102–19).

By comparison, the *Suśrutasaṃhitā* describes the ducts (śirā) that transport fluids in the body as being coloured according to what they carry: those carrying wind are tawny, those carrying bile are dark blue, those carrying phlegm are white, and those carrying blood are red:

In that context, those that carry wind are tawny; these ducts  $(\sin \bar{a})$  are filled with air. Because of bile they are hot and dark blue, and because of phlegm they are cool, white, and steady. Those ducts that carry blood are red, not too hot or too cool.<sup>35</sup>

तत्रारुणा वातवहाः पूर्यन्ते वायुना सिराः॥ पित्तादुष्णाञ्च नीलाञ्च श्रीता गौर्यः स्थिराः कफात्॥ असुग्वहास्तु रोहिण्यः श्रिरा नात्युष्णशीतलाः॥

<sup>&</sup>lt;sup>34</sup>Mayrhofer 1953–1972, ii, p. 279, noted that, '[pittám] urspünglich dasselbe Wort wie *pītaḥ* "gelb"'. Later (1986– , ii, p. 131) he still considered it possible that the words are cognate, although the history of *pittam* was, 'Nicht aufgeklärt'.

<sup>&</sup>lt;sup>35</sup>Suśrutasamhitā śā.7.18 (Ācārya 1915, p. 294):

In the same chapter, the *Suśrutasaṃhitā* presents two important metaphors, one agricultural and one botanical, to describe the flow of these fluids in the body through the 700 ducts, starting from their root in the navel:

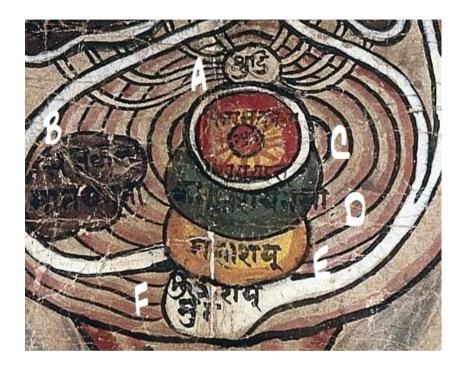
There are seven-hundred ducts. This body is irrigated by these, just like a garden by water channels, and a field by ditches. And it is assisted by special contractions and expansions. Their ramifications are like those of the veins on the leaf of a tree. Their root is the navel. From there, they spread out upwards, downwards and horizontally.<sup>36</sup>

This passage establishes that the *Suśrutasaṃhitā* does not use a concept of fluid circulation, but rather works with a system of centripetal fluid distribution starting from the navel.

<sup>&</sup>lt;sup>36</sup> Suśrutasaṃhitā śā.7.3 (Ācārya 1915, p. 293):

सप्त सिराञ्चतानि भवन्ति; याभिरिदं ञरीरमाराम इव जलहारिणीभिः केदार इव च कुल्याभिरुपस्निह्यतेऽनुगृह्यते चाकुञ्चनप्रसारणादिभिर्विञेषैः; द्रृमपत्रसेवनीनामिव तासां प्रतानाः; तासां नाभिर्मुलं, ततश्च प्रसरन्त्युर्ध्वमधस्तिर्यक च॥

# Belly



Α	†शुडि (or शुद्रि ?)	navel? <sup>37</sup>
В	<del>।</del> तत्यस्कल <b>ुवत</b> …नुम+	
C	illegible	पक्काशय, अग्नि?
D	†ऋ_ यसमा	[?]
Ε	मलाशय्	receptacle of impurities
F	+मत्रा [?] अयम	receptacle of urine [?]

For comparison, the <code>Suśrutasaṃhit</code>ā enumerates seven receptacles (<code>āśayas</code>) in the male body,  $^{38}$ 

वाताशय receptacle of wind पित्ताशय receptacle of bile

<sup>&</sup>lt;sup>37</sup>Cf. Turner 1966–85 #12516; cf. #5858 tunda.

 $<sup>^{38}</sup>Su\acute{s}rutasamhit\bar{a}$ śā.5.8 (Ācārya 1915, p. 282):

आज्ञयास्तु वाताज्ञयः, पित्ताज्ञयः, श्लेष्माज्ञयो, रक्ताज्ञय, आमाज्ञयः, पक्वाज्ञयो, मूत्राज्ञयः, स्त्रीणां गर्भाज्ञयोऽष्टम इति

স্লेष्माशय receptacle of phlegm रक्ताशय receptacle of blood आमाशय receptacle of raw matter पक्ताशय receptacle of digested food मूत्राशय receptacle of urine and an eighth in the female body गर्भाशय receptacle of the foetus

The Bhāvaprakāśa adds the following receptacles:<sup>39</sup>

उरोरक्ताशय receptacle of chest-blood पाचकाशय receptacle of the digester अग्न्याशय receptacle of fire and in the female body स्तन्याशयौ receptacles of breast milk

In Bhāvamiśra's account, these receptacles are arranged vertically in the body, starting with the receptacle for chest-blood, below which is that of phlegm, then raw matter, cooked food, and the organ called ग्रहणी that is also the receptacle of the digester. It is above the receptacle of cooked food. The receptacle of fire is above the navel, in a central location. Above that is the organ called तिल, sometimes translated 'lung'. This is a difficult word to explain, and it refers to an organ that is difficult to identify. I have noted elsewhere that the Dalhaṇa, the twelfth-century commentator on the <code>Suśrutasaṃhitā</code>, seems to have been the first author to equate तिल (क) with कोमन् <sup>40</sup> In ayurvedic anatomy, the two

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अथाशयानाह

उरोरक्ताशयस्तस्मादधः श्लेष्माशयः स्मृतः

आमाशयस्तु तदधस्तिङ्गङ्गं चरकोऽवदत् २१३

आमाशयादधः पक्ताशयाद्धर्ध्वन्तु या कला

ग्रहणी नामिका सैव कथितः पाचकाशयः २१४

ऊर्ध्वमग्न्याशयो नाभेर्मध्यभागे व्यवस्थितः

तस्योपरि तिलं जेयं तदधः पवनाशयः २१५

पक्ताशयस्तु तदधः स एव तु मलाशयः

तदधः कथितो वस्तिः स हि मूत्राशयो मतः २१६

...

धरा गर्भाशयः प्रोक्तः पित्तपक्ताशयान्तरे

स्तनौ प्रवद्गौ तावेव वधैः स्तन्याशयौ मतौ २१८
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<sup>&</sup>lt;sup>39</sup>Bhāvaprakāśa prakarana 3 (garbhaprakarana), vv. 213–18.

<sup>&</sup>lt;sup>40</sup>Wujastyk 2003a, p. 271, n. 23, referring to Dalhana's comments on *Suśrutasamhitā* 3.4.31 and 2.9.18. Cf. Meulenbeld 1974, pp. 457–8.

lungs have different names, *pupphusa* and *kloman*. Early ayurvedic literature does not make it clear either that their identity or their involvement in respiration were recognized. The *tila* may be connected rather with the body's heat, or else moisture and thirst, or else the secretions of the blood.<sup>41</sup>

It is possible that the word is explainable as a derivative of an Indo-Aryan reconstructed word \* $tilik\bar{a}$  that also accounts for a NIA cognate series meaning 'spleen'. <sup>42</sup>

It is also worth considering the possibility of a lexical connection with 'heart' from the Persian *dil*, either by historical etymology or by horizontal contamination in the medieval period. <sup>43</sup>

Below the निल is the receptacle of wind. Below that is the receptacle of cooked food, and the same is the case for the receptacle of impurities. Below that is the bladder, the receptacle for urine. In women's bodies, the womb or receptacle for the foetus lies between the receptacles of bile and digested food. When the breasts are engorged, they are thought of as the receptacles for breast milk.<sup>44</sup>

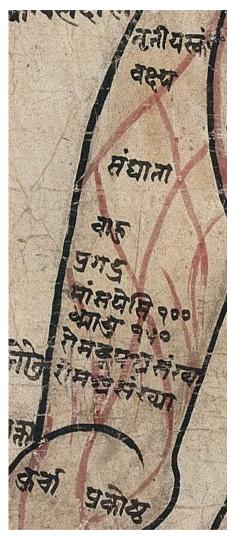
 $<sup>^{41}</sup>$  Wujastyk 2003a, pp. 271, 276. Cf. Müller 1955, Dasgupta 1969, p. 288, n. 1, and Das 2003, pp. 213–5, 562.

 $<sup>^{42}</sup>$ Turner 1966–85, #5834 sub \*tilikā 'spleen'. A connection with MIA  $pilih\bar{a}\leftarrow pl\bar{\imath}h\acute{a}n$  is there considered unlikely.

<sup>43</sup>Steingass 1892, p. 531: دل dil 'The heart, mind, soul;' etc. See also Wujastyk 2003a, pp. 271, 276; the diagram reproduced on p. 273, from Muralīdharaśarman's nineteenth-century edition of the Suśrutasaṃhitā, calls the organ ਫਿਲ rather than ਰਿਲ (Muralīdharaśarman 1895–1899, v. 2, frontispiece).

<sup>&</sup>lt;sup>44</sup>Cf. the description of the receptacles of the body presented by Śārṅgadhara (14th century), and translated by Wujastyk 2003a, pp. 271 f..

## Left arm



तृतीयस्कंध third shoulder

वक्ष्य [?] (वक्षस् chest?)

संघाता aggregate bone

वाह् arm

प्रगद्र

मांसपेसि १०० 100 flesh muscles

ष्नायु १५० 150 sinews

रोमकूप असंख्या uncountable hair follicles

रोम असंख्या uncountable hairs

कुर्चा प्रकोष्ठ extremity (कूर्च) forearm

#### Left hand



The top of the palm: †हाकाले/हाक्यालो/हाक्यालें. The right hand shows, more clearly, हाकालो.

The fingers have, from left to right, the initial letters of their names क, अ, म, त, and अं, standing for:

किनष्ठा little finger अनामिका nameless finger मध्यमा middle finger तर्जनी scolding finger अंगुष्ठ thumb

The top joints of the fingers are labelled त. Perhaps this stands for तरिता which has a lexical meaning of 'fore-finger' but perhaps could be understood as 'top joint of the finger'.

# Right arm



Details the same as the left arm.

# Right hand



Details the same as the left hand.

## Loins



## Top centre

शुक्रमार्ग pathway of semen [writing on penis] [illegible]

#### Left-hand column

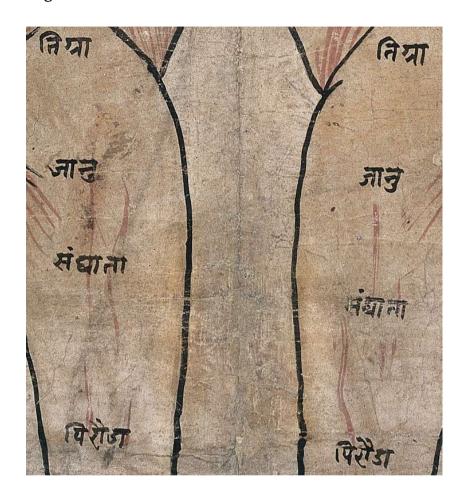
कुकुंदर cavities of the loins मासपेसि १०० <sup>45</sup> (Skt. मांसपेजी) flesh-muscle 100 ध्मायु १५० (Skt. धमनी?) pipes 150 रोमकूप असंख्या countless hair-wells (follicles) रोम असंख्या countless hairs

### Right-hand column

The same as left-hand column.

<sup>&</sup>lt;sup>45</sup>'मांसपेसि १००' in the right column.

# Legs



Each leg has the following four labels:

तिग्रा [?] जानु knee संघाता aggregate bone परौडा [?]

#### **Feet**



Each foot has the following four labels:

above the ankle: †गोलिंगथा† (Not कुल्फ, गुल्फ 'ankle' as

might be expected.)

below the ankle: †पैनालो†

above the heel: †कुर्कुवा† (for कूर्च?)

above each toe: अ for अङ्गली 'finger or toe'.

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