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Sayahna, JWRA34, Jagathy, Trivandrum 695014, Kerala, India

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The Sanskrit and Arabic Sources of the *Praśnatantra* Attributed to Nīlakaṇṭha

Martin Gansten

ABSTRACT

The highly popular *Praśnatantra* attributed to Nīlakaṇṭha of Kāśī (fl. late 16th century) and sometimes regarded as the third volume of his *Tājikanīlakaṇṭhī* is shown to depend for its basic structure on an abridged Sanskrit version of the *Kitāb fi l-masāʿil wa-l-aḥkām* by Sahl ibn Bishr (early 9th century), apparently authored by Samarasiṃha in the 13th century, to which quotations primarily from Sanskrit astrological works in the classical Indian style have been added, resulting in a hybrid of Indian and Perso-Arabic interrogational astrology.

1. INTRODUCTION

In 1587, Nīlakaṇṭha Daivajña, astrologer royal (*jyotiṣarāja*) to the emperor Akbar, completed the second volume or *tantra* of his *Tājikanīlakaṇṭhī* (TNK), destined to become the most popular textbook on Tājika or Sanskritized Perso-Arabic astrology up to the present day.¹ The two volumes – an introduction to the subject dealing with its fundamental principles and terminology (the *Samjñātāntra*, ST) and a compendium of techniques for annual prognostication (the *Varṣātāntra*, VT) – appear from a certain amount of overlapping, including passages repeated verbatim, to have been composed as semi-independent works. The style of both, including the metres employed, is similar, and seemingly that of a single author. As previously demonstrated by Ola Wikander and myself, the *Ṣoḍaśayogādhyāya* chapter of the ST is ultimately dependent on far earlier sources, and the same may reasonably be assumed to be true of the ideas expressed in large portions of the text; but the phrasing appears to be entirely that of Nīlakaṇṭha himself.²

A partial draft of this paper was read at the second Perso-Indica conference, Bonn, February 2014.

¹Pingree 1997: 84 f. For the term Tājika and general introductions to Tājika astrology, see Pingree 1981: 97 ff., 1997: 79 ff.; Gansten and Wikander 2011; Gansten 2012. For a brief overview of the history and branches of Indian astrology, see Gansten 2014.

²For the discussion of the *Ṣoḍaśayogādhyāya*, see Gansten and Wikander 2011 and below.

The TNK is defined in academic sources as consisting of these two *tantras*; but the text has often been studied, copied and published along with a third volume, dealing with interrogational astrology and known as the *Praśnatantra* (PT), or sometimes as the *Praśnakaumudī* or *Jyotiṣakaumudī*. The late David Pingree wrote of this text:

But we return to a secure chronology and to the renewed influence [of] *tājika* science with the *Praśnatantra* written by that *Nīlakaṇṭha* who composed the *Tājikanīlakaṇṭhī* in 1587. In the course of this treatise he quotes many verses from earlier works, making it a sort of *nibandha*; his favorite authorities besides the *Tājikas*, are *Pṛthuyāśas* and *Padmaprabha Sūri*.³

Closer inspection of the PT, however, reveals a text so different in style from the TNK that its attribution to *Nīlakaṇṭha*, except as a possible compiler, must be called into question. Indeed, although the text itself does not acknowledge its sources, and only some of its passages are clearly attributed by the commentator, it seems most likely to be wholly a compendium of previous works with no original content added by the redactor. It is my purpose in this paper to demonstrate that the basic framework of the PT is a sequence of verses corresponding closely to an Arabic text composed more than seven centuries earlier and rendered into Sanskrit long before *Nīlakaṇṭha*'s time, apparently by the celebrated *Samarasiṃha*; and that quotations mainly from indigenous Sanskrit works were later woven into this framework in an effort to produce a hybrid of Indian and Perso-Arabic interrogational astrology.

2. STRUCTURE OF THE TEXT

In the absence of a critical edition of the PT, I have relied primarily on the popular edition by *Kedāradatta Jośī* and secondarily on that by *Gaṅgādhara Miśra*.⁴ The edition by *Mahīdhara Śarmā*, used only sparingly, is often textually inferior and contains numerous insertions from yet other works, making the issue of original sources even more tangled.⁵ The orthography of quotations has been tacitly normalized throughout. The *Jośī* edition explicitly attributes the Sanskrit commentary on all three *tantras* to *Viśvanātha* (fl. early 17th century), and the commentarial style does seem to corroborate a single authorship. By contrast, the *Miśra* edition states that traditional commentary exists only for the ST and VT, suggesting at least that *Viśvanātha*'s commentary on the PT has been less widely

³Pingree 1981: 113. The bracketed *of* actually reads *to*, an obvious misprint.

⁴Jośī 2008, Miśra 1988.

⁵Śarmā 2004.

known than that on the other two *tantras*.⁶ In what follows, I shall refer to the author of the Sanskrit commentary published in the Joṣī edition as Viśvanātha.

The many sources of the PT are reflected in the variety of metres used, the predominant ones being, in order, *āryā*, *śloka* and *upajāti*, with occasional stanzas in *pramāṇikā*, *śālinī*, *mālabhāriṇī*, *vasantatilakā*, *mandākrāntā* and *sragdharā*.⁷ The text is divided into four sections, with the use of sources varying from one section to the next. The first section, comprising a general introduction to interrogational astrology, draws primarily on non-Tājika sources; where quotations from Tājika works are used, they include no Arabic-derived vocabulary or distinctive Tājika doctrines, as if in a deliberate attempt to downplay the differences between the two traditions. In keeping with its compilatory nature, the text lacks a formal *maṅgalācaraṇa* or benedictory introduction by the author; but its redactor nevertheless positions himself ideologically near the beginning, following some verses taken from Varāhamihira and other Brahmanical authors, by quoting this traditional statement (1.6):

Knowledge verily approached the Brahman, [saying]: ‘Guard me; I am your treasure. Do not impart me to the envious, the crooked or the wicked: thus will I remain strong.’⁸

Having thus established its Brahmanical credentials in the first section, the text moves on in the second section to deal with *pratyeka-bhāva-praśna*, or questions pertaining to the individual astrological places. This section consists almost exclusively of verses in *āryā* metre dealing with Tājika doctrine, including Sanskritized Arabic terminology. The third section, on *viśeṣa-praśna* or ‘special questions,’ is a more even mix of Tājika and non-Tājika material, with some of the former occurring in *upajāti* metre rather than *āryā*. The fourth section, entitled *prakīrṇaka* or ‘miscellaneous,’ includes a few additional topics of inquiry as well as methods for finding the times of predicted events, annual predictions from the sun’s ingress into Aries, and, finally, thirteen verses in *āryā* metre on Tājika aspect doctrine, including a partially constructed example horoscope.

⁶Miśra 1988: 5.

⁷I use *upajāti* as a generic term for the 11- or 12-syllable metres *indravajrā*, *upendravajrā*, *vaṁśasthā* and *indravaṁśā*, and for any of the frequent combinations of these metres within a stanza, while *āryā* is used to signify the subcategories *āryā*, *gīti*, *udgīti* and *upagīti*, all of which are defined by the morae (*mātrā*) in a half-verse rather than by syllabic count.

⁸*vidyā ha vai brāhmaṇam ājaḡama gopāya mā śevadhīṣ ṭe ’ham asmi / asūyakāyānṛjave śaṭhāya na māṁ brūyā vīryavatī tathā syām //*

The Joṣī edition prefaces this verse with the words *śrutir api*, while the Miśra edition has *smṛtir apy āha*. Both may be considered correct: the verse occurs, with minor variations, in the late *Muktiko-paṇiṣad* as well as in Yāska’s *Nirukta* (2.4), *Vāsiṣṭhadharmasūtra* (2.8) and *Viṣṇusmṛti* (29.9a). I have given the version of the Joṣī edition, correcting only two obvious misprints.

Among the sources identified by the commentator, Varāhamihira's *Bṛhad-yātrā* and the *Ṣaṭpañcāsikā* by his son Pṛthuyāśas (both 6th century) were composed prior to the development of Tājika in India, and the same is probably true of the *Praśnajñāna* or *Āryāsaptati* by Bhaṭṭotpala (or Utpala, late 10th century).⁹ Other non-Tājika works quoted include Padmaprabhasūri's *Bhuvanadīpaka* or *Bhuvanapradīpa* (1164), Caṇḍeśvara's *Praśnavidyā* (late 12th century) and Rāmacandra's *Samarasāra* (ca. 1450). The authorship and date of the liberally quoted *Praśnacintāmaṇi* are unknown to me, but with one exception the verses attributed to this work contain no Tājika terminology; nor does the single verse from the likewise unknown *Jñānamuktāvali*, or the half-verse taken from an unspecified work by 'Yavanācārya.' Eight verses are attributed by the commentator to a *Trailokyaparakāśa*, presumably referring to the Tājika work of that name said to have been authored by Hemaprabhasūri in 1248, but they appear rather to belong to Nārāyaṇadāsa Siddha's *Praśnavaiṣṇava* or *Praśnārṇavaplava*, composed in the early 16th century.¹⁰ Certain Tājika sections in the *upajāti* and *śloka* metres are similarly attributed to a *Praśnadīpaka* or *Praśnapradīpa*, which may perhaps be the work by that name written by Kāśinātha, also in the early 16th century.¹¹ Some of these verses likewise occur in the *Praśnavaiṣṇava*, as do a number of verses not attributed by the commentator. A few additional verses in similar style may plausibly be presumed to derive from an alternative version of the same work.

3. SAMARASIMHA AND THE SANSKRIT URTEXT

The concluding part of the PT – consisting, as just mentioned, of thirteen *āryā* stanzas on the aspects – is highly significant for the question of the sources of the work and their transmission. Both the definitions and the example horoscope given here are also found in the *Ṣoḍaśayogādhyāya* of the ST (2.26–27), where Nīlakaṇṭha has fashioned them in *upajāti* metre. The two versions of the example in particular, including details of phrasing, are too similar for there to be any doubt that one was modelled on the other, or else both based on a common source:

⁹For sources and dates discussed in this paragraph and below, see Pingree 1981.

¹⁰I have been unable to locate these verses in the two editions of the *Trailokyaparakāśa* available to me. Of the *Praśnavaiṣṇava*, I similarly have access to two widely divergent editions: Gauṛa 2003, comprising 383 verses in 12 chapters, and Jhā 1997, with 659 verses in 15 chapters plus 34 verses in an appendix (*pariśiṣṭa*). References below are to the Jhā 1997 edition, as many verses quoted in the PT are not present in Gauṛa 2003.

¹¹Pingree (1981: 112 f.) does not specify whether this *Praśnapradīpa* (not currently available to me) is a Tājika work. The CESS (Pingree 1970–1994: A2, 35) does briefly mention an undated Tājika author named Kāśinātha, distinguishing him – perhaps wrongly – from the author of the *Praśnapradīpa*.

Samjñātāntra

In a question about the acquisition of a wife, Virgo is the ascendant; its ruler Mercury is in Leo with ten degrees; Jupiter is in the [place of] wives [Pisces] with twelve degrees. There is no aspect between them; but if the moon in Sagittarius [or] Taurus with eight or eleven degrees, aspected by both and fast[er than both], taking light from Mercury, passed it on to Jupiter, [the querist] would obtain a wife through [the help of] another.¹²

Praśnatantra

In a question about the acquisition of a wife, in Virgo ascendant, the ruler Mercury is in Leo; in Pisces, its ruler Jupiter. There is no aspect between them; but the fast[er] moon, aspected by both, taking light from Mercury, passed it on to Jupiter. Thus [the querist] would gain a wife by the hand of another.¹³

The ultimate source of this example, as demonstrated elsewhere, is Sahl ibn Bishr's *Kitāb al-aḥkām 'alā n-niṣba al-falakiyya*, also known as the *Introductorium*.¹⁴ What primarily concerns us here, however, is the relative dating of the two Sanskrit versions attributed to Nīlakaṇṭha, to which may be added a third version found in the *Tājikabhūṣaṇa* (TBh) of Gaṇeśa Daivajña (son of Ḍhuṇḍhirāja), a contemporary of Nīlakaṇṭha's in Pārthapura, Mahārāṣṭra.¹⁵ It is entirely possible –

¹²*strilābhapṛcchātanur asti kanyā svāmī budhaḥ siṃhagato daśāṃśaiḥ /
sūryāṃśakair devaguruḥ kalatre dṛṣṭis tayor nāsti mitho 'tha candrah //
cāpe vṛṣe cobhayadrśyamūrṭiḥ śīghro 'ṣṭabhāḡair athavā bhavāṃśaiḥ /
ādāya tejo budhato dadau yaj jīvāya lābhah parataḥ striyāḥ syāt //*

¹³*strilābhasya praśne kanyālagne budhaḥ patiḥ siṃhe /
mīne ca tatpatir gurus tatrānayor na to asti dṛṣṭis tu //
śīghraś candro dvābhyaṃ dṛṣṭo budhāt tan maho nīvā /
jīvāya dadau tadvat parahastād yoṣitaḥ prāptiḥ //*

For these verses to conform to the metre, *tatpatir* should probably read *tatpati-*, and *budhāt tan* read *budhato*. These changes do not substantially affect the meaning. It has been my observation that *mātrāvṛtta* verses are corrupted in transmission more often than verses in metres based on syllabic count.

¹⁴Gansten and Wikander 2011.

¹⁵The version in *Tājikabhūṣaṇa* (4.12) reads:

*kāntā hastagateti pṛcchati tadā kanyāvilagnādhipaḥ
saumyaḥ siṃhagataḥ kalatrabhavane mīne guruḥ saṃsthitah /
dṛṣṭir naiva tayoh śaśī calagatir dvābhyaṃ ca dṛṣṭo budhād
ojaś cārpayad indramantriṇi kalatrāptiḥ parasmād bhavet //*

'When [someone] asks, "[Will I] win my beloved?", Mercury, ruler of Virgo ascendant, is in Leo; Jupiter occupies the house of wives in Pisces. There is no aspect between them; [but] the fast-moving moon is aspected by both, bringing the light from Mercury to Jupiter: he will gain a wife from another.'

even probable – that more Sanskrit versions of the same example exist in other Tājika works.¹⁶

Even initially, the attribution of the PT version of the example to Nīlakaṇṭha appears unlikely for the simple reason that, as noted above, Nīlakaṇṭha is typically happy to quote himself verbatim, so that there would seem to be no reason for him to rework some of his own material – particularly not in the PT, which already contains a great deal of borrowings. We may thus suspect the version of the PT to belong to an earlier Tājika work, and the version found in the ST to be a modified rendering of the same material. In this connection, it is interesting to note that neither the PT nor the TBh mentions any degrees of longitude, but only zodiacal sign positions. The ST, on the other hand, does include degrees of longitude for Mercury and Jupiter, as well as two possible degrees and two possible sign positions for the moon; but these are not the signs and degrees found in the original example by Sahl ibn Bishr. These circumstances suggest that the Arabic original had been rendered into Sanskrit in an abbreviated and simplified form – possibly the one found in the PT – which was then reworked by later Tājika authors. The details of the original being lost, authors who wanted precise figures had to invent their own.¹⁷

The possibility of the *āryā* verse representing an original Sanskrit rendering of Sahl's example is particularly intriguing in view of the fact that Tājika passages in *āryā* metre – comprising some 45% of the PT as a whole, reckoned in syllabic characters (*akṣara*), and the bulk of the work once the identifiable additions from classical Indian texts have been removed – are introduced four times by the commentator Viśvanātha with the phrase *praśnatantra* or *tājikaśāstroktaṣnatantra*, 'in the *Praśnatantra* recounted in the Tājika treatise.' This phrasing suggests that *Praśnatantra* was originally the title not of the present compendium attributed to Nīlakaṇṭha (PT), but of its main Tājika source text. On two further occasions, the

¹⁶Balabhadra in his 1629 work *Hāyanaratna* (1904: 19v) quotes a verse from Yādavasūri's *Tājika-yogasudhānidhi* (1616?) containing a very similar example:

*mīne vilagne gurur arkabhāgaḥ striyāṃ budhau netralavo na dṛṣṭiḥ /
tayoś ca madhye 'drilavaḥ kulīre candras tadānyena sakhe 'ṅganāptiḥ //*

'Jupiter is in Pisces ascendant with twelve degrees, Mercury in Virgo with two degrees: there is no aspect. Between them is the moon in Cancer with seven degrees. Then, friend, [the querist] will gain a wife through another.' (Although the reading *sakhe* 'friend' appears incongruous, it is confirmed by all MSS of the *Hāyanaratna* currently available to me.) Yādavasūri's example differs from the others by exchanging the ascendant and descendant signs, and by placing Mercury in Virgo – though outside the orb of an aspect with Jupiter – rather than in Leo; but it is still conspicuously similar to the example found in Nīlakaṇṭha, Gaṇeśa, and the PT.

¹⁷Similar patterns may be observed in the Indian transmission of other examples from Sahl (cf. ST 2.29–30, 32cd–33; TBh 4.14, 16–17). It may be objected that some figures in the various versions of the present example are still rather close. I believe that the explanation may lie in a common desire on the part of the authors to place the relevant planets in appropriate subdivisions of the zodiacal signs, particularly the so-called terms (*hadda*, from Ar. *ḥadd*).

introductory phrase used by Viśvanātha is *samarasiṃhe* or *tājike samarasiṃhe*, ‘in the Tājika [work by] Samarasiṃha.’ Samarasiṃha, most probably datable to the 13th century and perhaps the earliest author in Sanskrit on Tājika astrology, represents a towering influence on the later tradition; and Viśvanātha’s commentary on the TNK shows him to have been well acquainted with Samarasiṃha’s writings, which he often quotes, thus lending weight to his attribution.¹⁸ It therefore seems at least possible that the Tājika sections of the PT, particularly the parts in *āryā*, represent an earlier Sanskrit work on interrogational astrology with the same name, composed by Samarasiṃha.

Nor is this attribution unsupported: in the *Hāyanaratna*, we find Viśvanātha’s contemporary Balabhadra quoting a number of verses occurring in the PT, including the ones on aspect doctrine that immediately precede our example horoscope, and unequivocally attributing them to Samarasiṃha, whom he also calls the ‘origin’ of these doctrines (*mūlabhūtasya samarasiṃhasya*).¹⁹ It should be noted in this context that Balabhadra had immense respect for Nīlakaṇṭha, who was the older brother of Balabhadra’s *guru* Rāma Daivajña: he calls him ‘the crown jewel in the circle of astrologers’ and, in his frequent quotations, never mentions Nīlakaṇṭha’s name without prefixing it with *śrīmat-*. There can be little doubt that, had Balabhadra in any way associated these verses found in the PT with Nīlakaṇṭha, he would have readily acknowledged it. The hypothesis that Samarasiṃha rather than Nīlakaṇṭha was the author of the original *Praśnatantra* therefore deserves to be taken seriously. If he was, we must also conclude that at least part of the material incorporated into the extant PT from other sources – and perhaps all of it – was added at a later stage, as some of these sources were written centuries after Samarasiṃha; and we must ask why and by whom this was done.

4. THE PRINCIPAL ARABIC SOURCE: SAHL IBN BISHR

When we put this theory to the test by isolating the Tājika *āryā* verses in the PT, eliminating the interpolated material, the suspicions just related are transformed into something altogether more robust. As the excerpts below will show, the resulting text turns out to be a highly condensed Sanskrit rendering of Sahl ibn Bishr’s *Kitāb fi l-masā’il wa-l-aḥkām*, known in Latin as *De interrogationibus*, with some minor additions. This work is often found copied and published along with the *Kitāb al-aḥkām ‘alā n-niṣba al-falakiyya* or *Introductorium* by the same author; and the thirteen verses at the end of the PT are in fact derived from the latter rather than the former. Apart from anything else, this identification proves the underlying unity of the Tājika *āryā* material in the PT, making it

¹⁸For the importance of Samarasiṃha, see Gansten 2012 and forthcoming.

¹⁹*Hāyanaratna* 1904: 9rv contains the verses corresponding to PT 4.49–52; p. 52v has verses corresponding, with minor variations, to PT 2.26–28, 41–42; and p. 58v, to PT 2.96–98.

highly probable that all of it was epitomized in Sanskrit at the same time and by the same hand. With the independent testimonies of Viśvanātha and Balabhadra repeatedly identifying this epitomist as Samarasiṃha, there seems little reason to doubt the attribution, although much of the intermediate transmission remains to be investigated.

Sahl's work is thus the ultimate Arabic source of the bulk of Tājika material found in the PT, concentrated in its two middle sections on *pratyeka-bhāva-praśna* and *viśeṣa-praśna*. The handful of *āryā* verses which deal with Tājika principles while having no apparent parallel in Sahl may derive from other Arabic-language sources – including, as will be discussed below, Ya'qūb ibn Ishāq al-Kindī (ca. 800–ca. 870). I have previously argued for the plausibility of Albrecht Weber's identification – first suggested in 1853 – of al-Kindī with the Tājika authority known in Sanskrit as Khindi or Khindhi. In so doing, I also hypothesized the existence of a medieval compendium of Arabic astrological texts utilized by early Tājika authors and containing excerpts from both Sahl and al-Kindī.²⁰

Like the central portions of the PT, the *Kitāb fi l-masā'il* consists of topics for questions arranged according to the twelve places of the horoscope, followed by a section on additional topics which do not fit as easily into one of these twelve categories. Some of the material has, however, been rearranged in the PT, presumably due to differences between the Arabic and Sanskrit authors' views on the proper symbolism of the horoscopic places. Thus, passages on theft and on travel – which in the *Kitāb fi l-masā'il* belong to the seventh and ninth places, respectively – have been moved by the redactor of the PT to the 'special questions' section (3.1–4; 3.87–114). In addition, a discussion of war, which in Sahl's text likewise belongs to the seventh place, has been relabelled by the commentator of the PT as pertaining to the eighth place (the place of death). Whether this reflects the view of the redactor himself – whom we may now feel entitled to identify as Samarasiṃha – is not clear: none of the actual eighth-place material from the *Kitāb fi l-masā'il* has been preserved in the PT, so that the verses in question (PT 2.86–95), occurring just before the discussion of ninth-place matters, could be construed as belonging to either the seventh or the eighth place.

While a full analysis of the correspondences between the *Kitāb fi l-masā'il* and the *pratyeka-bhāva-praśna* and *viśeṣa-praśna* sections of the PT is beyond the scope of this article, a few representative excerpts will demonstrate both the degree of dependence of the latter on the former and the kinds of distortion that occasionally occur. A full list of corresponding passages is given at the end. In the absence of an Arabic edition, references to Sahl's text are based on the Latin version. As noted already by Viktor Stegemann, twelfth-century Latin translations of Arabic astrological texts are typically so literal as to be acceptable in lieu of

²⁰Gansten 2012.

the originals.²¹ Some variations are of course still to be expected; but these are not likely to affect the overall argument. The numbering of passages in *De interrogationibus* follows that found in the English translation by Benjamin Dykes; translations quoted have been somewhat modified.²²

In the discussion of questions pertaining to the seventh place – namely, marriage and marital relations – in the *pratyeka-bhāva-praśna*, we find two verses dealing with an absconded wife (2.71–72). A comparison with §7.4 of Sahl’s text illustrates the condensed nature of the PT as well as the corruptions:

De interrogationibus

And if you were asked about a woman having gone out from her house due to anger at her husband,²³ whether she would return to her house or not: look at Venus and the sun, which are the signifiers of the man and woman. If Venus were above the earth in an optimal place from the ascendant, and the sun under the earth, announce the return of the woman to her house with a strong delay and duress.

And if the moon, at the hour in which [the woman] exited from her house or at the hour of the question, were already transiting the prevention, that is, after one-half of the [lunar] month, her return to her house will be hastened. And if the moon were increased in light, that is, in the beginning of the [lunar] month, her return will be with slowness.

And if Venus, when [the woman] was exiting from her house, were retrograde and occidental, her return to her house will be of her own accord, voluntary, and penitent. And if

Praśnatantra

[1] [If someone asks:] ‘Will my angry wife return or not?’, then, if the sun is below the earth and Venus has risen above the earth, she will not return;

[3] If the moon is waning, she will come after many days; if the moon is [approaching] full, quickly.

[2] if [Venus is] retrograde, she will come. If the retrograde Venus has gone out

²¹Stegemann 1942: 9.

²²The Latin edition of *De interrogationibus* used for comparison is Locatellus 1493.

²³Dykes 2008: 97 reads ‘due to her husband’s anger.’ However, one of the anonymous reviewers of the present article suggested that the Latin phrase *ira mariti sui* might in fact be read as an objective genitive meaning ‘anger towards her husband.’ Dr Dykes, who, since the publication of his translation from the Latin, has had the opportunity to examine a copy of the Arabic *K. fi l-masā’il* (MS Beinecke 523, p. 96), confirms in a personal communication that this text does support the meaning ‘anger towards her husband,’ whether or not that meaning is reflected in the medieval Latin translation.

[Venus] were oriental, going out from under the rays [of the sun], and retrograde, she will return and her man will be penitent about her leaving [...].²⁴

from under the sun, she is agreeable; otherwise, angry.²⁵

Sahl's first and third paragraphs, both dealing with the conditions of Venus, have been merged by the Indian translator, and the astrological reasoning simplified. The middle paragraph of the Latin (and presumably the Arabic) text states that a waning moon indicates a quick return – most likely because the female moon is approaching a conjunction with the male sun – whereas a waxing moon indicates delay; the Sanskrit paraphrase has it backwards, perhaps because a waxing moon is generally considered more auspicious in Indian astrology. Nevertheless, the PT verses are clearly recognizable as an intended, if imperfect, summary of Sahl's doctrine.

Similarly, the discussion of wealth in the *pratyeka-bhāva-praśna* section of the PT begins with three verses (PT 2.6–8) comprising a highly condensed rephrasing of §2.1–2 of Sahl's text:

De interrogationibus

If you were asked about some wealth which is separated, whether he who asked you would find the wealth or not: look at the ruler of the ascendant and the moon, who are the significators of the one asking, and the sign of wealth and its ruler, which are the significators of wealth.

If the ruler of the ascendant and the moon are joined to the ruler of the house of wealth, or the ruler of the house of wealth is joined to the ruler of the ascendant, or you found the moon bearing away the light from the ruler of the house of wealth to the ruler of the ascendant, or from the ruler of the ascendant to the ruler of the house of wealth, he will attain wealth. Likewise, if Jupiter and Venus, which are benefics, were in the house of wealth, he will find wealth.

Praśnatantra

In a question on gain of wealth,

if the ruler of [the place of] wealth makes an application [*itthaśāla*, from Ar. *ittiṣāl*] to the ruler of the ascendant or to the moon, with a benefic conjunction or aspect, there will be gain.

²⁴Locatellus 1493: 130r.

²⁵*mama grhiṇī ruṣṭā punar eṣyati no vātha bhūmyadhaḥstharavau / bhūparigate ca śukre naiti punar vakrite 'bhyeti / / sūryān nirgataśukre vakre 'pi sameti cānyathā ruṣṭā / kṣiṇendau bahudivasaiḥ pūrṇavidhau ca drutam upaiti / /*

And if there were nothing of those things which I have said, he will find nothing. Indeed if the malefics were in the house of wealth, which is the second from the ascendant, it signifies detriment in the wealth of the house of the question. And if the moon were void in course, then the questioner will not cease to be such until he dies.²⁶

If however you were asked what kind of gain it will be, look at the receiver of the disposition, whether it were the ruler of the ascendant or the ruler of the matter, namely, the one which is heavier: if it were in the ascendant or in the second, he will find and acquire from the works of his own hands. And if it were in the fourth, from the father or from parents or from lands or from real estate. And if it were in the fifth, from children or from others in whom he has trust. [...]²⁷

If malefic planets occupy [the place of] wealth, gain will be far away, or else something unfortunate [will occur]. If the ruler of [the place of] wealth joins with a malefic, the questioner dies; or if the ruler of the ascendant [does so].

In an application between the rulers of the ascendant²⁸ and [the place of] wealth, the questioner will have gain from that one among the places where the slow-moving [planet is located]: [the first place of] body, [the second of] wealth, [the third of] brothers and so on.²⁹

It is particularly noteworthy that the sentence of the PT predicting the death of the questioner, which appears strangely incongruous in a passage dealing with monetary matters, appears to be a corruption of the original, which speaks only of a condition *lasting until* death. It is even possible that a line of the original

²⁶'Void in course' (Lat. *cursu vacua*, translating the Ar. *khalā³ s-sayr*) refers to a situation where the moon will encounter no more aspects while in its current zodiacal sign, traversing as it were an 'empty path.'

²⁷Sahl's text (Locatellus 1493: 128v) goes on to cover all the twelve places of the horoscope.

²⁸Reading *lagnadhanapetthaśāle* for the *dhanadhanapetthaśāle* of the Jośi 2008 edition, which is metrically deficient and conveys no meaning. The Miśra 1988 edition has *dhanadhanapatītthaśāle*, metrically acceptable but equally meaningless; but the Sanskrit text included in a popular English translation (Saxena 2001: 232) does in fact read *lagnadhanapetthaśāle*.

²⁹*dhanalābhasya praśne lagneśenendunātha dhananāthaḥ /
kurute yadītthaśālam śubhayutidrṣṭyā bhavel lābhaḥ //
krūragrahair dhanasthair dūre lābho 'nyad apy aśubham /
krūramuthaśīle dhaneśe praṣṭā mriyate 'thavā vilagneśe //
lagnadhanapetthaśāle mandagatir yatra bhāvānām /
tanudhanasahajādīnām praṣṭus taddvārato lābhaḥ //*

In order to conform to the metre, *krūramuthaśīle* should probably read *krūramuthaśīli-*, which would not substantially affect the meaning.

Arabic was missing from Samarasiṃha's manuscript, or accidentally omitted in translation. Comparison with Sahl's text can thus help explain occasional inconsistencies in the PT.

As a final example, we may compare three verses on the location of lost property from the *viśeṣa-praśna* section of the PT (3.108–110) with §7.17 of *De interrogationibus*:

De interrogationibus

Indeed if you were asked about the place of the stolen goods, look at the angle of the earth [the fourth place] to see if it were Cancer or its triplicity: the stolen goods will be buried near water, and there will be its place. And if it were Aries or its triplicity, it will be in a place of beasts and in a place of fire. Indeed if it were Taurus or its triplicity, it will be in a place of oxen or cows – for Taurus signifies especially a place of cows. And Virgo signifies a place of harvests and grains, and Capricorn a place of sheep. And if it were Gemini or its triplicity, they will be in the residence or in a safe or in a higher place from the ground.

If however the stolen goods were in the house, and you wished to know their place in the house, look at the ruler of the fourth and the planet which was in that same place. If however it were Saturn, they will be in the privy of the house; and in a farther or filthier and deeper and darker place. And if it were Jupiter, it signifies a place of groves and of those praying. And Mars signifies the kitchen or a place of fire. And the sun signifies an enclosed part of the house and a place of sitting of the master of the house. Indeed Venus signifies the place of women's sitting. And Mercury signifies the place of a decorated building, and of books, or the place of grains, and especially in Virgo. And if it were the moon, it will be next to a well or cistern, or place of cleaning. [...] ³⁰

Praśnatantra

In a question on the location of a lost [item], the location of the lost property should be known from the sign – among [the elements] earth, fire, air and water – that is in the fourth [place].

Then it should be known from the planet that occupies the fourth [place] or is ruler of the fourth [place]: if Saturn, [the item is] in a dirty place; if the moon, in water; if Jupiter, in a grove of the gods; if Mars, in the vicinity of fire; if the sun, in the place of the seat of the master of the house; if Venus, in a couch; if Mercury, near books, money, grains [or] a vehicle. ³¹

³⁰Locatellus 1493: 131v.

³¹*naṣṭasthāne praśne turye bhūmyagnivāyujalamadhyaṭ /*

Once again, the PT presents us with a much abridged but substantially correct retelling of Sahl's doctrine. The Sanskrit text retains the standard Perso-Arabic sequence of the planets, based on apparent velocity, favouring it over the classical Indian sequence based on the order of the weekdays. The moon has, however, been moved to follow immediately on Saturn, perhaps because of a connection in the translator's mind between dirt and water.

Two phrases in this passage are particularly worth noting. One is the unusual Sanskrit compound *surārāma* '[pleasure] grove of the gods.' This is not a common designation of a temple, nor have Indian deities typically been worshipped in groves or pleasure gardens. The expression is almost certainly a misunderstanding of Sahl's text, which speaks of groves *and* places of prayer. The other phrase is (in Latin and, presumably, in Arabic) 'a place of sitting belonging to the master of the house.' This has been faithfully translated into Sanskrit as *gṛhādhiśvarāsanasthāna* – so faithfully that the result is actually a little awkward. *Āsana* by itself would be enough to denote a place to sit; *āsanasthāna* has a tautological ring to it that signals an underlying non-Sanskrit phrase. Many similar instances of influences, misunderstandings or 'cultural translations' (such as Arabic wolves being transformed into Indian tigers) could be adduced; but for the present, the above will suffice.

5. OTHER POSSIBLE SOURCES AND UNCERTAIN PASSAGES

As mentioned above, a few passages of the PT, while apparently forming part of Samarasiṃha's *Urtext*, have no obvious parallels in the extant versions of Sahl's work and are most likely derived from other Arabic-language sources. Very possibly, the *Kitāb fi l-masā'il* (or lengthy excerpts from it) had been combined with excerpts from other authors to form an Arabic compendium on interrogational astrology that was the direct source of Samarasiṃha's Sanskrit epitome. Such compendia were not uncommon in the medieval period.

The very first passage of the extant PT attributed by Viśvanātha to Samarasiṃha's original *Praśnatantra*, PT 1.7–10, concerns what is sometimes known as 'considerations before judgement,' that is, factors to be considered by the astrologer before undertaking to interpret a horoscope – in particular, as here, whether the client's intentions are honest or not. While this is a common

yo bhavati rāśir asmāt sthānaṃ jñeyam gatadhanasya //
atha caturthagṛhe turyeśvaro 'tha yaḥ syād grahas tato jñeyam /
mande malinasthāne candre 'mbuni gīṣpatau surārāme //
bhaume vahnisamīpe ravau gṛhādhiśvarāsanasthāne /
talpe śukre saumye pustakavittānnayānapārśve ca //

Again, in order to conform to the metre, *caturthagṛhe* should probably read *turyagṛhe*, with no change of meaning. The Devanāgarī characters *tha* and *ya* are very similar.

enough topic in the medieval and later literature, I have not so far been able to find a precise match for this particular passage. I am also in some doubt concerning PT 1.52–55 and 2.1–5, which deal with fundamental principles of interrogational astrology and may conceivably be based (or partly based) on Sahl's §1.4 and 1.6, respectively, but which are too brief and generic in content for certainty.

In the *pratyeka-bhāva-praśna* section proper, the only passages clearly based on other sources than Sahl occur in the context of questions on pregnancy and childbirth. PT 2.34–36 reads:

In a question on the life and death of children, if the ruler of the twelfth is in an angle aspected by benefics, [and], in the bright fortnight, the moon is conjunct a benefic in the twelfth, [the child] will live. If the ruler of the twelfth is a malefic, combust, conjunct malefics in a cadent place, the child dies as soon as it is born, or in the womb.³²

In a question on knowing the [time of] delivery, leaving off the portions (*aṃśaka*) traversed by the ascendant, one should consider the rest from the amount to be traversed and predict the days by reasoning thus.³³

While I have been unable so far to find an exact match for the first two verses, it may be noted that al-Kindī's *Kitāb fi mudkhal ilā 'ilm an-nujūm*, more popularly known as *Al-arba'ūna bāban* or the *Forty Chapters*, does look to the twelfth place of the horoscope to judge matters following the delivery.³⁴ To my present knowledge it is the only Arabic text on interrogational astrology to do so.

In the third verse, the word *aṃśa[ka]* is ambiguous. It may have the sense of 'degree' (of ecliptical longitude); but it is often used in Sanskrit astrological texts as an abbreviated form of *navāṃśa*, that is, a ninth-part of a zodiacal sign. This all-purpose division so characteristic of classical Indian astrology had been adopted by medieval Perso-Arabic practitioners such as Abū Ma'shar and, indeed, al-Kindī; and the *Forty Chapters* gives these instructions on finding the time remaining in a pregnancy:

³²Reading *cāpoklime yuktaḥ / krūrais tu* for the *cāpoklime 'yuktaḥ / krūras tu* of the Joṣī 2008 and Miśra 1988 editions:

*jīvitamarāṇapraśne bālānām antyape śubhair dṛṣṭe /
kendrasthe sitapakṣe śubhayukte 'ntyē vidhau jīvet //
krūras ced antyapatir dagdhaś cāpoklime yuktaḥ /
krūrais tu jātamātro mriyate bālo 'thavā garbhe //*

The Śarmā 2004 edition has *cāpoklime yutaḥ krūraiḥ / dṛṣṭaś ca*, also metrically acceptable and with the same meaning as suggested here.

³³Reading *anumityaivaṃ* for *anumityevaṃ*: *prasavaajñānapraśne bhuktāl laṅnāṃśakān parityajya /
bhogyād vicintya śeṣān anumityaivaṃ vaded dīvasān //*

³⁴See chapter 21.5 in the annotated translation from the Latin version by Dykes (2011: 226, §544). For the *Forty Chapters* generally, see also Burnett 1993.

If he asks you about the hour of conception, you will note how many ninth-parts of the ascendant have passed by to completion: for, by taking months for individual ninth-parts, it asserts that that much [time] has passed by from the hour of conception up to the time of the question. But how much of the ascendant is left designates the remaining time [until] the birth, as a month is granted to each ninth-part.³⁵

The ninth-parts of the rising sign thus correspond to the nine (solar) months of pregnancy. Al-Kindī adds that if this method seems to indicate more months than can be supposed to remain before delivery, ‘the number of degrees explain the same thing in terms of days.’ PT 2.36 reads like a slightly abridged paraphrase of this passage, also ending with a prediction of days.

Following two interpolated verses in *śloka* metre taken from the *Bhuvanadīpaka*, PT 2.39–40 then address the question of whether the child would be born in the daytime or at night. This very dense passage is most probably based on a somewhat fuller explanation attributed to ‘Umar aṭ-Ṭabarī (d. ca. 815) and preserved in the medieval Latin compendium *Liber novem iudicum*.³⁶ Apart from the *Kitāb al-bāri‘ fi aḥkām an-nujūm* by ‘Alī ibn Abī r-Rijāl (early 11th century), which itself relies substantially on ‘Umar, this is the only Arabic source I have so far seen on the particular topic of delivery by day or night.³⁷ The two passages are best seen side by side:

Liber novem iudicum

Praśnatantra

Whether she would give birth by night or day – ‘Umar

The knowledge of this question must be taken up from the ascendant and its ruler, and also from the star which possesses the east, likewise from the fifth [place] and its ruler. For if all of these signs happened to be masculine, or at least a majority [were] in male

[If] a diurnal sign is in the ascendant by day, and the planet [in the ascendant?] [and] the ruler of the ascendant [are] in a diurnal sign, then birth will be in the daytime; if these are opposite, the reverse. But if [there is] a nocturnal

³⁵Translation based on Dykes (2011a: 225, §540), slightly modified on the basis of the Latin text also included in Liechtenstein 1509: 18v (cf. note 39).

³⁶The *Liber novem iudicum* or *Book of the nine judges* was an expanded version of the earlier *Liber trium iudicum* – the ‘three judges’ being, intriguingly, Sahl, al-Kindī, and ‘Umar. The excerpts from the two latter authors were taken over from the earlier to the later work without change (see Burnett 2006).

³⁷The source utilized by Samarasiṃha was almost certainly based on the work of ‘Umar himself, a Persian and a senior contemporary of Sahl and al-Kindī, rather than on ar-Rijāl, who lived in what is now Tunisia.

signs, the birth really claims a diurnal time. But they being female signs for the most part, they leave it for the night.³⁸
[...]

Lastly, the discernment of the sex undergoes the same judgement. Let the attention of the one judging be led back to the house of children and the moon, even to the ruler of the hour and the lot and its ruler (as was already stated above). [...] ³⁹

ascendant by day, [or] its ruler [is in a diurnal sign?], the strength of that sign ruler should be considered:

similarly the day, hour, masculine sign [or] feminine sign.⁴⁰

The next two verses, PT 2.41–42, are somewhat curious. In technical content they are very close to PT 2.25cd–27ab, which are based on the initial passage of Sahl's treatment of fifth-place questions (§5.1); but the question appears to have been rephrased so as to apply only to the current year, which is mentioned three times in four lines. I expect to have more to say on this topic of reworked material in future.⁴¹ Unlike these verses, the very last passage on pregnancy and children (PT 2.43–44ab) does seem to derive from some source other than Sahl, as yet unidentified:

[In a question] on the knowledge of whether a woman has given birth or not, if the ruler of the fifth place had gone out from behind the sun and approached [heliacal] rising, then this woman is giving birth.⁴²

³⁸ The odd-numbered signs of the zodiac are masculine *and* diurnal; the even-numbered, feminine *and* nocturnal.

³⁹ Translation based on Dykes (2011b: 146 f, §5.25), slightly modified on the basis of the Liechtenstein 1509 edition of the *Liber novem iudicum*. The middle portion, left out here because it is wholly lacking in the Sanskrit version, deals with predictions from a 'lot' (Ar. *sahm*), that is, a mathematically derived zodiacal point.

⁴⁰ Reading *janma syād* with the Śarmā 2004 edition for the unmetrical *janma vācyam* of Jośī 2008 and Miśra 1988:

lagnāntar dinarāśīr divā graho lagnapaś ca dinarāśau /
tad divase janma syād viparīte vyatyayaś caiṣām / /
atha rātrilagnam ahnā tadadhīpatiś cet tu tasya rāśīpateḥ /
balam ūhyam dinahorāpunrāśīstrīgrhe 'py evam / /

The second stanza in particular is extremely terse and of uncertain meaning, and may even be a conflation of two original verses. It is lacking from the Śarmā 2004 edition.

⁴¹ See Gansten (forthcoming).

⁴² Reading *prṣṭhataḥ* (my conjecture) for the similar-looking *ṣaṣṭhapaḥ* 'ruler of the sixth,' which does not make sense in the context. When rising heliacally, the superior planets (Mars, Jupiter and

Likewise, if Jupiter, Mercury and Venus are rising [heliacally] in the midheaven, [the result is] the same.⁴³

Occasional minor discrepancies between the PT and *De interrogationibus* are most likely due to errors in transmission or translation (from Arabic to Sanskrit, Arabic to Latin, or both) rather than textual interpolations; examples include PT 2.53cd–54ab on illness and 2.84–85 on marital infidelity. To illustrate the extent of such discrepancies, the former passage, based on Sahl's §6.1, reads as follows:

De interrogationibus

And if the moon were joined to a retrograde planet, it signifies the long-lastingness of the disease. And if she were joined to a slower planet, it signifies worsening, and it will render him afraid.⁴⁴

Praśnatantra

If a question is asked when the moon has an application [*muthaśila*, from Ar. *muttaṣil*] with a retrograde [planet], [there is] a chronic illness; if an application with a slow [planet], the illness should be known to originate from a previous obstruction of urine.⁴⁵

The astrological conditions and former part of the result are identical; only the latter part differs. In this case we may suspect a translation error, the precise nature of which might suggest itself from an examination of extant Arabic manuscripts of the *Kitāb fi l-masā'il*. On other occasions, as we have seen, the astrological conditions themselves may be garbled, particularly if they are somewhat complex in the original. The important point here is that such occasional discrepancies do not necessarily suggest a source other than Sahl.

Apparent changes or additions may also be due to corruptions in the transmission of the Sanskrit text itself. A case in point is PT 2.88, on the outcome of a battle, which in the majority of editions at my disposal state that the two parties will reach a conciliation if the two planets representing them form 'an application

Saturn) all appear behind the sun in the zodiac (that is, in an earlier degree) and become visible in early morning. The inferior planets (Mercury and Venus) may rise heliacally on either side of the sun, that is, as morning or evening stars. All available editions read *prasūte* 'is giving birth,' although *prasūtā* 'has given birth' might have been expected from the phrasing of the question.

⁴³*sūtāprasūtayuvatijñāne sutapo 'tha prṣṭhataḥ sūryāt /
nīrgatyodayam āyāt tataḥ prasūte ca nārīyam //
atha jīvasaumyaśukrā ākāśe udayinas tathāpy evam /*

The Śarmā 2004 edition reads, implausibly, *bhauma* 'Mars' for *saumya* 'Mercury.' It also reads *ākāśa* for *ākāśe*, in accordance with *sandhi* rules but in violation of the metre.

⁴⁴Locatellus 1493: 129v.

⁴⁵*śaśino vakramuthaśile sthirarogo mandamuthaśile pūrvam /
mūtranirodhād rogopattir jñeyā kṛtapraśne //*

[from] the sixth, third, tenth [or] eleventh [place]'.⁴⁶ This condition is not present in Sahl, who instead speaks of an application by trine or sextile aspect. But the seeming innovation dissolves when we find that other editions and manuscripts preserve the superior reading 'application by sixth or third aspect' (that is, sextile or trine).⁴⁷ PT 3.113–114, on discovering whether a thief is male or female, may merit a brief mention for including a single line not present in the Latin *De interrogationibus*; but the line in question is of a very general nature, stating that if the significator is a female planet in a female sign, or aspected by another female planet, the thief is female; if the reverse, male.⁴⁸ Of greater interest is the fact that while Sahl's text makes use of the decans or 'faces' of the zodiacal signs (known in Indian astrology as *drekkāṇa*, with many orthographic variants) to describe the thief, the PT has transformed these into the more commonly used *navāṃśas*.

The Tājika passages in *upajāti* metre found in the third and fourth sections of the PT appear mostly to be taken from Nārāyaṇadāsa Siddha's *Praśnavaiṣṇava* and are thus later additions not corresponding very closely to any Arabic source text, although a few do bear a certain resemblance to sections of Sahl's work and may conceivably have been based on Samarasiṃha's original summary of it.⁴⁹ Despite their Tājika terminology, some verses seem to depend partly on classical Indian sources.⁵⁰ It seems highly likely to me that only the Tājika passages in *āryā*

⁴⁶ *ṣaṭtridaśāyamuthaśīle dvayoh snehaḥ* (thus in both the Joṣī 2008 and Miśra 1988 editions). It may be relevant that these four astrological places are often grouped together in classical Indian astrology, where they are known as *upacaya* or 'increasing' places.

⁴⁷ *ṣaṭtridyśātha muthaśīle dvayoh snehaḥ* (thus in the Śarmā 2004 edition). The [a]ltha in *dyśātha*, which seems to have deteriorated into *daśāya* due to the similarities of the Devanāgarī characters *tha* and *ya*, is metrically spurious and probably not original.

⁴⁸ *striyo rāśau / strikheṭe stridyṣṭe cauraḥ strī vyatyayāt puruṣaḥ*.

⁴⁹ If this should be the case, we must assume that Samarasiṃha's versions of these sections were later removed from the extant text of the PT by the redactor and replaced with Nārāyaṇadāsa Siddha's, perhaps for reasons of style or clarity. Possible examples here include PT 3.31–33, loosely corresponding to Sahl's *K. fi l-masā'il* §8 (cf. Locatellus 1493: 133v), and PT 3.79–84, similar to §7.13 (Locatellus 1493: 131r).

⁵⁰ For instance, PT 4.37–38ab, on the nature of sexual intercourse:

*śubhetthaśāle himagau catuṣṭaye saukhyātirekaḥ savilāsahāsaḥ /
krūrētthaśāle himagau saroṣe krūrānvite 'bhūt kalaho nṛvadhvoḥ //
pīḍāthavāsīt surate yuvatyā rajo yathāstarkṣam upaiti tadvat /*

are obviously influenced, in both content and form, by Varāhamihira's *Br̥hajjātaka* 4.2 (a fact that did not escape Gaṅgādharma Miśra in commenting on these verses):

*yathāstarāśīr mithunaṃ sameti tathāiva vācyo mithunaprayogaḥ /
asadgrahālokitasamyute 'ste saroṣa iṣṭaiḥ savilāsahāsaḥ //*

While I have not been able to locate a passage exactly corresponding to PT 4.37–40 in the *Praśnavaiṣṇava*, Jhā 1997 contains several very similar passages, including 14.7–8 on food:

*pāpetthaśāle himagau catuṣṭaye krūragrahaiḥ kendravilagnasamsthitaḥ /
kaṣṭāt kadannaṃ madhurājyavarjitaṃ bandhvoādigehe kvacid eti vā na vā //
śubhetthaśāle himagau catuṣṭaye svarkṣocagaiḥ kendragataiḥ śubhagrahaiḥ /
lagneśvare lagnagāte 'py akṛcchrataḥ sukhī subhojyaṃ labhate svamandire //*

metre were actually composed by Samarasiṃha. In the fourth section of the PT, this means the last thirteen verses (PT 4.49–61), derived, as was said above, not from the *Kitāb fi l-masāʿil* but from the same author's introduction to astrology, *Kitāb al-aḥkām ʿalā n-niṣba al-falakiyya*. This last section thus contains no material at all from the principal Arabic source of the PT, suggesting that Samarasiṃha's original *Praśnatantra* may have ended with what is now the third section of the PT, and that the verses based on the *Kitāb al-aḥkām* belong to some other work – where, given their introductory nature, they are perhaps likely to have formed part of the beginning rather than the end of the text. A further indication that the fourth section of the extant PT may represent a later addition is the fact that PT 4.10–14 constitutes a partial repetition of PT 1.45–51, both passages consisting of verses borrowed from Padmaprabhasūri's *Bhuvānadīpaka*.

6. CONCLUSION: WHY A HYBRID TEXT?

A careful examination of the evidence thus leads us to conclude that the original *Praśnatantra* was an abridged version of an Arabic text, based chiefly on Sahl ibn Bishr's ninth-century *Kitāb fi l-masāʿil wa-l-aḥkām* and rendered into Sanskrit by Samarasiṃha in the thirteenth century. To this original version, substantial excerpts mainly from non-Tājika Sanskrit texts, some of which postdate Samarasiṃha by two or three centuries, were eventually added to form the text we know today; and this hybrid version was either the work of, or later attributed to, Nīlakaṇṭha, whose *floruit* lies in the late sixteenth century.

Whether Nīlakaṇṭha was in fact responsible for grafting *praśna* material in the classical Indian style on to Samarasiṃha's work remains an open question. Like the actual writings of Nīlakaṇṭha, the PT was commented on by Viśvanātha, a circumstance which – in addition to providing a *terminus ante quem* in the former half of the seventeenth century – may be read as supporting a common authorship.⁵¹ On the other hand, Viśvanātha nowhere in this commentary mentions Nīlakaṇṭha's name; nor does his contemporary Balabhadra – who, through his *guru* Rāma, younger brother of Nīlakaṇṭha, would presumably have been thoroughly acquainted with the latter's literary production – refer to any other work of his than the ST and VT. In fact, on those occasions when Balabhadra does

⁵¹ Accepting this attribution of the commentary to Viśvanātha as genuine, which (as was said above) seems likely from its style and contents, although it is not as full as his commentary on the TNK. The commentary on the PT, like the text itself, ends rather abruptly and without mention of the author's name. At the very end, however, the commentator refers to a work of his own: *etac cāsmatḥṭe tājjikaratne spaṣṭataraṇi prapañcitam evāvadhāraṇīyam* 'And this should be learnt from the *Tājjikaratna* authored by us, [where it has been] set out more clearly.' Pingree 1981 lists only two works by that name, one authored by Gaṅgādharma in 1653, the other by Cirañjīva probably around 1725; but the title is fairly generic, and it is not uncommon to find references to Tājika works not mentioned by Pingree.

quote Tājika verses found in the now extant PT, he explicitly attributes them to Samarasiṃha. It is entirely possible that Nīlakaṇṭha or one of his students compiled the hybrid PT to complement the two existing *tantras* of the TNK; but it is equally possible that the fact of Viśvanātha having commented on both texts, and perhaps a feeling that Nīlakaṇṭha ought to have written a text on *praśna*, led to his being identified as the author of the PT.

Regardless of who was responsible for the creation of the hybrid text, we may ask ourselves what was the motive behind such an exercise, which contributed nothing new of either form or content. Given the strong tradition of interrogational astrology in India – whether or not it actually originated there, as Pingree believed – a text on this branch of the art would be a natural choice for anyone wishing to produce a hybrid between the classical Indian and Tājika astrological systems; but why should such a hybrid seem desirable?⁵²

On this matter we can only speculate; but we have already touched on one possible motive above, when noting that the compiler seems deliberately to minimize the differences between the two traditions, and wishes to preserve astrology as the intellectual property of the Brahman class. The hybrid PT may thus have been, at least on one level, a bid to legitimize the Tājika tradition by presenting it as just another variation on an orthodox, Sanskritic knowledge system. To a certain extent, such tendencies may be observed even in the earliest works on Tājika; but we may well wonder if these legitimizing strategies would truly have been necessary after more than three centuries of Sanskritized Perso-Arabic astrology.⁵³ On the other hand, the apologetic efforts that preface the works of other Tājika authors of the late sixteenth and early seventeenth centuries, such as Gaṇeśa and Balabhadra, suggest that the need was indeed keenly felt. The reason may perhaps be found both in the personal situations of certain Brahman authors employed at the Muslim court, including Nīlakaṇṭha, and in the increasing tendency towards orthodoxy and tradition characterizing Sanskrit intellectual circles of this period.⁵⁴

⁵²We may in fact compare the PT in this respect with the *Praśnavaiṣṇava* from which it frequently borrows material: the latter is an explicitly syncretic but original work on interrogations which states at the outset (1.2) that it is based on ‘the schools (*mata*) of Varāha[mihira], Tājika and Mukunda’ (*vārāhatājikamukundamataṃ samīkṣya*). (Details of Mukunda and his school are unknown to me.)

⁵³The earliest known attempt in Sanskrit to present classical Indian and Tājika astrology as a single tradition is found in the opening verses of Samarasiṃha’s work, discussed above. For a discussion of this, see Pingree 1997: 80; but cf. also my comments on the topic, and on Pingree’s interpretations (Gansten 2012 and forthcoming).

⁵⁴Discussed, for instance, in Pollock 2009.

7. OVERVIEW OF SANSKRIT AND ARABIC SOURCES FOR THE PRAŚNATANTRA

Verse numbers for the PT (left-hand column) refer to the Joṣī 2008 edition; for the *Praśnavaiṣṇava*, to Jhā 1997. References to Arabic astrological works in the right-hand column follow the paragraph numbering in the translations (from the Latin versions) by Dykes detailed above. Editions of other works are listed under References where available.

<i>Praśnatantra</i>	<i>Sanskrit or Arabic source</i>
1.1–2	Varāhamihira: <i>Bṛhadāyātrā</i> 2.5–6
1.3	Varāhamihira: <i>Bṛhadāyātrā</i> 2.9
1.4	Bhaṭṭotpala: <i>Praśnajñāna</i> 2
1.5	Rāmacandra: <i>Samarasāra</i> 5
1.6	Yāska: <i>Nirukta</i> 2.4, etc. (cf. note 8)
1.7–10	Unidentified; no Tājika content
1.11	Attributed by Viśvanātha to Caṇḍeśvara: <i>Praśnavidyā</i> ; no Tājika content
1.12	Attributed by Viśvanātha to a <i>Jñānamuktāvali</i> ; no Tājika content
1.13–32?	Attributed by Viśvanātha to a [<i>Praśna</i>]cintāmaṇi; non-Tājika content
1.33–42	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 45–54
1.43–44	Prṭhuyāśas: <i>Ṣaṭpañcāśikā</i> 1.3–4
1.45–51	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 60–61, 63–67
1.52–55	Unidentified, but some similarity with <i>K. fi l-masāʿil</i> 1.4; attributed by Viśvanātha to Samarasimha but no technical Tājika content
2.1–5	Partly based on <i>K. fi l-masāʿil</i> 1.6? Tājika content
2.6–7	Sahl: <i>K. fi l-masāʿil</i> 2.1
2.8	Sahl: <i>K. fi l-masāʿil</i> 2.2
2.9–12	Attributed by Viśvanātha to a <i>Praśnadīpaka</i> ; no Tājika content
2.13–16	Sahl: <i>K. fi l-masāʿil</i> 3
2.17	Sahl: <i>K. fi l-masāʿil</i> 4.1
2.18–25ab	Sahl: <i>K. fi l-masāʿil</i> 4.2
2.25cd–27ab	Sahl: <i>K. fi l-masāʿil</i> 5.1
2.27cd	Sahl: <i>K. fi l-masāʿil</i> 5.5
2.28–29	Sahl: <i>K. fi l-masāʿil</i> 5.6
2.30	Unidentified; no Tājika content
2.31–33	Sahl: <i>K. fi l-masāʿil</i> 5.3

<i>Praśnatantra</i>	<i>Sanskrit or Arabic source</i>
2.34–35	Unidentified, but some similarity with al-Kindī: <i>K. fi mudkhal ilā ʿilm an-nujūm</i> 21.5; no technical Tājika content
2.36	Al-Kindī: <i>K. fi mudkhal ilā ʿilm an-nujūm</i> 21.2
2.37–38	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 90
2.39–40	ʿUmar (cf. <i>Liber novem iudicum</i> 5.25)
2.41–42	Reworking of Sahl: <i>K. fi l-masāʿil</i> 5.1?
2.43–44ab	Unidentified
2.44cd–54ab	Sahl: <i>K. fi l-masāʿil</i> 6.1
2.54cd–55ab	Sahl: <i>K. fi l-masāʿil</i> 6.2
2.55cd–56ab	Sahl: <i>K. fi l-masāʿil</i> 6.3
2.56cd–59ab	Sahl: <i>K. fi l-masāʿil</i> 6.5
2.59cd–60ab	Sahl: <i>K. fi l-masāʿil</i> 6.6
2.60cd–61ab	Sahl: <i>K. fi l-masāʿil</i> 6.7
2.61cd–63ab	Sahl: <i>K. fi l-masāʿil</i> 6.8
2.63cd–66ab	Sahl: <i>K. fi l-masāʿil</i> 7.1
2.66cd–67	Sahl: <i>K. fi l-masāʿil</i> 7.2
2.68–70	Sahl: <i>K. fi l-masāʿil</i> 7.3
2.71–72	Sahl: <i>K. fi l-masāʿil</i> 7.4
2.73–76	Sahl: <i>K. fi l-masāʿil</i> 7.5
2.77–80	Sahl: <i>K. fi l-masāʿil</i> 7.6
2.81–85	Sahl: <i>K. fi l-masāʿil</i> 7.7
2.86–95	Sahl: <i>K. fi l-masāʿil</i> 7.8, 7.25
2.96–105	Sahl: <i>K. fi l-masāʿil</i> 9.1
2.106–108	Sahl: <i>K. fi l-masāʿil</i> 9.2
2.109–110	Sahl: <i>K. fi l-masāʿil</i> 10.1
2.111–114	Sahl: <i>K. fi l-masāʿil</i> 10.2–3?
2.115cd–117ab	Sahl: <i>K. fi l-masāʿil</i> 10.2
2.117cd–119	Sahl: <i>K. fi l-masāʿil</i> 10.3
2.120	Sahl: <i>K. fi l-masāʿil</i> 10.4
2.121–122	Sahl: <i>K. fi l-masāʿil</i> 10.7
2.123–125	Sahl: <i>K. fi l-masāʿil</i> 11.1
2.126–127	Sahl: <i>K. fi l-masāʿil</i> 11.2
2.128	Sahl: <i>K. fi l-masāʿil</i> 11.3

<i>Praśnatantra</i>	<i>Sanskrit or Arabic source</i>
2.129–131	Sahl: <i>K. fi l-masāʿil</i> 12.4
3.1–5	Sahl: <i>K. fi l-masāʿil</i> 9.6
3.6–28?	Attributed by Viśvanātha to a [<i>Praśna</i>]cintāmaṇi; no Tājika content
3.29–35	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 8.47–53
3.36	Unidentified; misattributed to Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i>
3.37	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 2.4
3.38	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 2.12
3.39	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 2.11
3.40	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 2.10
3.41	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 3.1
3.42	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 2.17
3.43–49	Attributed by Viśvanātha to a <i>Praśnapradīpa</i> ; near-identical in Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 4.13–15, 17, 29, 32–33
3.50–67?	Attributed by Viśvanātha to a [<i>Praśna</i>]cintāmaṇi; no Tājika content
3.68–75	Attributed by Viśvanātha to a <i>Trailokyaparakāśa</i> ; near-identical in Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 11.1–5, 8–9, 15
3.76–78	Attributed by Viśvanātha to a <i>Praśnacintāmaṇi</i> ; no Tājika content
3.79–84	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 11.36–39, 41, 43
3.85–86	Pṛthuyāśas: <i>Ṣaṭpañcāśikā</i> 6.1–2
3.87–95	Sahl: <i>K. fi l-masāʿil</i> 7.13
3.96–97	Sahl: <i>K. fi l-masāʿil</i> 7.14
3.98–100	Sahl: <i>K. fi l-masāʿil</i> 7.15
3.101–107	Sahl: <i>K. fi l-masāʿil</i> 7.16
3.108–110	Sahl: <i>K. fi l-masāʿil</i> 7.17
3.111–112	Sahl: <i>K. fi l-masāʿil</i> 7.19
3.113–114	Sahl: <i>K. fi l-masāʿil</i> 7.22
3.115–122	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 9.26, 29–33, 35, 49
3.123–129	Attributed by Viśvanātha to a [<i>Praśna</i>]cintāmaṇi; some Tājika content
3.130–133ab	Sahl: <i>K. fi l-masāʿil</i> 13.17
3.133cd–134	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 14.3 (PT 134cd lacking from Jhā 1997 but clearly belonging to the same passage)
3.135–138	Sahl: <i>K. fi l-masāʿil</i> 13.17 (continued)
3.140–141	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 14.10–11
3.142	Unidentified; no Tājika content

<i>Praśnatantra</i>	<i>Sanskrit or Arabic source</i>
3. 143	Unidentified but similar in style to Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> ; Tājika content
3.144–147	Unidentified; no Tājika content
3.148	Bhaṭṭotpala: <i>Praśnajñāna</i> 42
3.149–150	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 14.12–13
3.151–152	Unidentified; no Tājika content
3.153–155	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 99–101
3.156	Unidentified; no Tājika content
3.157	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 107
3.158	Unidentified; no Tājika content
3.159	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 108–109ab
3.160	Unidentified; no Tājika content
3.161–171	Attributed by Viśvanātha to a <i>Praśnadīpaka</i> ; some Tājika content
3.172–179ab	Unidentified; no Tājika content
3.179cd	Attributed by Viśvanātha to a Yavanācārya; no Tājika content
3.180–191	Unidentified; no Tājika content
4.1–3	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 151–152 (conflated), 155–156
4.4–9	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 80–85
4.10–14	Padmaprabhasūri: <i>Bhuvanadīpaka</i> 56, 60–61, 63–64; cf. PT 1.45–51
4.15–24	Bhaṭṭotpala: <i>Praśnajñāna</i> 60–69
4.25–26	Prṭhuyaśas: <i>Ṣaṭpañcāsikā</i> 1.6–7
4.27–29	Bhaṭṭotpala: <i>Praśnajñāna</i> 48, 52–53
4.30–31	Unidentified; no Tājika content
4.32–35	Prṭhuyaśas: <i>Ṣaṭpañcāsikā</i> 7.7–9
4.36	Unidentified; no Tājika content
4.37–40	Unidentified but very similar in style to Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> (cf. 11.12, 11.43, 11.54, 13.19, 13.29, 14.7–8)
4.41–48	Nārāyaṇadāsa Siddha: <i>Praśnavaiṣṇava</i> 13.61, 63, 70–75
4. 49–52	Sahl: <i>K. al-aḥkām</i> 4
4.53–60	Sahl: <i>K. al-aḥkām</i> 5.3–6
4.61	Sahl: <i>K. al-aḥkām</i> 5.8

TEXT EDITIONS

- Brhajjātaka* 1912 Hari Prasanna Chatterjee, ed. (1912). *The Brhajjātaka of Varāha Mihira*. Allahabad: The Pāṇini Office. The translator's ordained name was Swami Vijnanananda. References are to the 2nd edition, Delhi: Oriental Books Reprint Corporation, 1979.
- De interrogationibus* Girolamo Salio, ed. (1493). *Liber quadripartiti Ptholemei...*[includes *Zahel De interrogationibus*]. Venetys: per Bonetum locatellu[m].
- Locatellus 1493
- Hāyanaratna* 1904 *Hāyanaratnam* (1904). Bombay: Khemraj Shrikrishnadass.
- Liber novem iudicum* *Liber novem iudicum in iudiciis astrorum* (1509). Venetiis: ex officina Petri Liechtenstein.
- Liechtenstein 1509
- Praśnatantra* See *Tājikanīlakaṅṭhī*.
- Praśnavaiṣṇava* Jhā 1997 Umākānta Jhā (1997). *Praśna Vaiṣṇavaḥ. Text with Hindi Translation and Commentary*. Dillī: Nāga Prakāśaka.
- Praśnavaiṣṇava* Gauṛa 2003 Guruprasāda Gauṛa (2003). *Praśnavaiṣṇavaḥ, Text with Hindi Translation and Commentary*. Dillī: Caukhambā Surabhārati Prakāśana.
- Tājikabhūṣaṇa* 2005 Sītārāma Śāstrī (2005). *Tājikabhūṣaṇa. Text with Hindi Paraphrase*. Bām̄bāī: Khemraj Shrikrishnadass.
- Tājikanīlakaṅṭhī* Miśra 1988 Gaṅgādhara Miśra and Madhukānta Jhā (1988). *Tājikanīlakaṅṭhī, Text with Hindi Translation and Commentary*. Haridāsa-saṃskṛta-granthamālā. Vārāṇasī: Caukhambā Amarabhārati Prakāśana.
- Tājikanīlakaṅṭhī* Saxena 2001 D. P. Saxena (2001). *Tajik Nilkanthi. Text and Translation*. Delhi: Ranjan Publications.
- Tājikanīlakaṅṭhī* Śarmā 2004 Mahīdhara Śarmā (2004). *Tājikanīlakaṅṭhī. Text with Hindi Translation and Commentary*. Mumbai: Khemraj Shrikrishnadass.
- Tājikanīlakaṅṭhī* Jośī 2008 Kedāradatta Jośī (2008). *Tājikanīlakaṅṭhī. Text with Hindi Translation and Commentary*. Dillī: Motilal Banarsidass.
- Trailokyaparakāśa* Ram Sarup Sharma (1946). *Trailokya Prakasha of Shri Hemaprabha Suri. Edited with Hindi Commentary*. Lahore: Kushala Astrological Research Institute.
- Sharma 1946
- Trailokyaparakāśa* Jain 2005 Bhagvāndāsji Jain (2005). *Śrī Trailokya Prakāśa. Text and Hindi*. Dillī: Oriyaṅṭal Buk Senṭar.

SECONDARY LITERATURE AND TRANSLATIONS

- Burnett, Charles (1993). "Al-Kindī on Judicial Astrology: "The Forty Chapters"". In: *Arabic Sciences and Philosophy* 3, pp. 77–117.
- (2006). "A Hermetic Programme of Astrology and Divination in Mid-twelfth-century Aragon: The Hidden Preface in the *Liber Novem Iudicum*". In: *Magic and the Classical Tradition*. Ed. by Charles Burnett and W. F. Ryan. London: Warburg Institute, pp. 99–118.
- Dykes, Benjamin N. (2008). *Works of Sahl & Māshā'allāh*. Golden Valley, Minnesota: Cazimi Press.
- (2011a). *The Book of the Nine Judges*. Golden Valley, Minnesota: Cazimi Press.
- (2011b). *The Forty Chapters of al-Kindī*. Golden Valley, Minnesota: Cazimi Press.
- Gansten, Martin (2010). *Astrology and Astronomy (Jyotiṣa)*. In: *Brill's Encyclopedia of Hinduism*. Ed. by Knut A. Jacobsen et al. Vol. 2. Leiden: Brill, pp. 281–94.
- (2012). "Some Early Authorities Cited by Tājika Author". In: *Indo-Iranian Journal* 55.4, pp. 307–19.
- (forthcoming). "Samarasiṃha and the Early Transmission of Tājika Astrology". In:
- Gansten, Martin and Ola Wikander (2011). "Sahl and the Tājika Yogas: Indian Transformations of Arabic Astrology". In: *Annals of Science* 68.4, pp. 531–46.
- Pingree, David E. (1970–1994). *A Census of the Exact Sciences in Sanskrit*. Philadelphia: American Philosophical Society. 5v., but unfinished at the time of the author's death in 2005.
- (1981). *Jyotiḥśāstra: Astral and Mathematical Literature*. Vol. 6.4. A history of Indian literature. Wiesbaden: Harrassowitz.
- (1997). *From Astral Omens to Astrology: from Babylon to Bīkāner*. Vol. LXXVIII. Serie Orientale Roma. Rome: Istituto Italiano per L'Africa e L'Oriente.
- Pollock, Sheldon (2009). "Future Philology? The Fate of a Soft Science in a Hard World". In: *Critical Inquiry*, pp. 931–61.
- Stegemann, Viktor, ed. (1942). *Dorotheos von Sidon und das sogenannte Introductorium des Sahl ibn Biṣr*. Vol. XI. Monographien des Archiv Orientální. Prag/Praha: Orientalisches Institut in Prag.

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