Samarasiṃha and the Early Transmission of Tājika Astrology

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Abstract

One of the earliest preserved Sanskrit works on Perso-Arabic (Tājika) astrology, the thirteenth-century Karmaprakāśa of Samarasiṃha (also known as the Manusya-jātaka, Tājikatantrasāra or Gaṇakabhūṣaṇa), is examined with particular attention to subgenre, distinctive content and likely Arabic-language sources. On the basis of a comparison of the extant text of the Karmaprakāśa with excerpts attributed to Samarasiṃha by later Tājika writers, conclusions are drawn with regard to other works, now lost or misattributed, by the same author.

Keywords

Samarasiṃha – astrology – Indian astrology – Tājika astrology – astral sciences

1 Introduction

Very little is known of the early history of Tājika or Perso-Arabic astrology in India. Due to the false dichotomy that still persists between the astrology of South Asia and so-called western astrology—a term commonly but counter-intuitively used to include not only ancient Mesopotamia and Egypt, but also Sasanian Persia and the Arabic-speaking world of the Islamic Golden Age—the comparatively few historians who devote themselves to studying the development of horoscopic astrology are typically familiar with sources in Greek, Latin and/or Arabic, but not with the vast body of relevant Sanskrit literature. In the twentieth century, the one major exception to this rule was the late David Pingree (1933–2005), whose outstanding contributions, particularly in...
the realm of data collection, provide a solid ground for future scholarship. Even Pingree, however, published only some fifteen pages on Tajika astrology, of which a mere three pages concern its earliest phase. Prior to Pingree, the only western scholar to have written on Tajika was Albrecht Weber, in a single article dating from the mid-nineteenth century and based on limited data.

Broadly speaking, Tajika is a Sanskritized version of Arabic-language astrology, sharing a Hellenistic core with pre-Islamic Indian jyotisha but comprising a number of additional doctrines which either had never reached India before or else had not survived there. The Arabic tradition itself was, in fact, an amalgam of astrological teachings and procedures borrowed from cultural areas that had preserved and developed the Hellenistic heritage in slightly different forms—notably Persia, but also Byzantium, Syria, and indeed India. Even after being translated into Sanskrit and to some extent adapted to Indian conditions, this new type of astrology differed sharply enough from the established one to form a separate school rather than merging with it. Most noticeably, Tajika throughout its history has been, and remains today, largely synonymous with the casting of anniversary horoscopes, a prognostic technique known as varṣaphala or ‘results of the year’—often referred to in the European literature as annual revolutions or, more recently, as ‘solar returns’—and not previously known in India. On the interpretation of actual nativities or birth horoscopes, by contrast, Tajika literature as a whole has little to say, so that Pingree’s repeated designation of the tradition as a genethlialogical one must be considered somewhat misleading.

The name Tajika (or Tājaka), generally understood to mean ‘Persian’, is derived from the Persian tāzīg meaning ‘Arab’, based in its turn on the Arabic tribal name Ṭayyi’. Synonyms used in Tajika works include Yavana (properly ‘Greek’, ultimately derived from Ἰάϝινες, but used in this period of any foreign culture from the northwest), Turuška (‘Turkish’), and Tārtīyika/Tārtīyaka, possibly meaning ‘Tataric’ in the generalized sense of ‘Muslim’. Although the area did not succumb to Muslim rule until the early fourteenth century, Sanskrit literature as well as inscriptions provide evidence for frequent contacts between Indians and Tajikas along the west coast of India (present-day Gujarat) in the period 700 to 1300 CE—including military engagements,

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1 Pingree 1981a: 97–100; 1997: 79–90. There are also entries for individual Tajika authors in the five published volumes of Pingree’s Census of the Exact Sciences in Sanskrit (cess, 1970–94), corrections to a few of which are found in Gansten 2017.

2 Weber 1853: 236–287.

3 Pingree 1981a: 97; 1997: 79 f., 85 (‘one of the most common systems of genethlialogy in use in the sub-continent’), 87. It is not clear how many systems of genethlialogy Pingree considered to exist in India.
but predominantly trade connections. The Indians most actively engaged in such exchanges would have been Jains, who dominated the areas of finance and coinage in the region, as well as members of Hindu mercantile or Baniyā communities. The Jains in particular often became, by extension, intermediaries between Perso-Arabic and Sanskrit traditions of knowledge.

The fluidity seen in designations of ethno-linguistic groups also has a bearing on the question of the language in which the non-Indian source texts of Tājika were composed—a problem which Pingree, by his own admission, left unresolved. The question was at least partially answered some years after his demise by the identification of Sahl ibn Bishr (former half of the ninth century) as one of the most important sources of Tājika doctrine. Ethnically a Persian Jew, Sahl wrote in Arabic, as did the Persian ‘Umar ibn al-Farrukhān aṭ-Ṭabarī (fl. 762 to after 812) and the ‘philosopher of the Arabs’, Yaʿqūb ibn Ishāq al-Kindī (d. after 862)—both of whom were later identified as probable contributing sources, alongside Sahl, for the Tājika work Praśnatantra. Although the latter is customarily attributed to the sixteenth-century Brahman author Nilakaṇṭha Daivajña of Varanasi, closer examination of the extant text and of its early seventeenth-century commentary by Viśvanātha Daivajña has shown it to be little more than a collage (possibly but not necessarily put together by Nilakaṇṭha), the central part of which was apparently a much earlier Sanskrit epitome of Arabic writings by the authors just named. The name of

4 See Pingree 1981b.
5 See Plofker 2010.
6 See Pingree 1997: 79 f.
7 See Gansten and Wikander 2011.
8 An anonymous reviewer of the present article expressed surprise at the idea of an Indian author reading and translating directly from Arabic, something the reviewer felt would indicate an ‘unusually capable polyglot’ because normally ‘Arabic texts make their way to the Sanskrit scientists via Persian or even via conversational renderings in Urdu’. Setting aside the question of how apt the designation ‘Urdu’ might be in the historical context discussed here, there seems to me little reason to suppose that a presumed native speaker of an Apabhraṃśa such as Old Gujarati would require markedly greater linguistic skills to master Arabic than Persian. It is also a historical fact that Arabic was the predominant language of Muslim scholarship during the period under consideration. Persian did indeed become the official language of the Delhi Sultanate and, later, the Mughal Empire, as well as a South Asian lingua franca; but the Sanskrit authors in question were still living under the Hindu rule of the Vāghelās. As remarked by Pingree (1997: 80), the fact of a few Sanskrit renderings of Arabic terminology conforming to Persian pronunciation may simply indicate ‘that the Indians learned how to read Arabic texts from speakers of Persian’.
9 The beginnings of this attribution are unknown, but it is conspicuous by its absence from the writings of Balabhadra, who studied under Nilakaṇṭha’s younger brother Rāma and who quotes copiously from Nilakaṇṭha’s Samyjāṭaṭantra and Varsaṭantra in his 1649 Hāyanaratna; cf. section 5 below. It was, however, accepted by Pingree (1970–94 A3: 180, 1981a: 113).
the epitomist—mentioned by Viṣvanātha in passing, as a matter of common knowledge—was Samarasiṃha.\textsuperscript{10}

The dependence of Tājika doctrine on these ninth-century Arabic-language writers gives us an approximate \textit{terminus post quem} for the beginning of the Indian tradition. A provisional \textit{terminus ante quem} is indicated by the estimated dates of the two earliest preserved Sanskrit works in the field. The \textit{Trailokyaprakāśa} of the Jain scholar Hemaprabhasūri is claimed on uncertain grounds to have been authored around 1248, which could make it the very first; but the oldest dated manuscript of this text was copied more than two centuries later.\textsuperscript{11} Of the author himself nothing definite is known except that his guru, named several times in the text, was one Devendrasūri. The suffix \textit{sūri} in this context probably indicates leadership of a lineage (\textit{gaccha}) within the Śvetāmbara sect; the benedictory invocation being addressed to the Jina Pārśvanātha could possibly suggest this to be the now defunct Upakeśagaccha, which was unique in tracing its origin to Pārśvanātha.\textsuperscript{12}

The other potentially earliest preserved work on Tājika—dated by Pingree to any time between 1060 and 1365, with a possible date of 1274 based on a report of a single manuscript copied in 1293—was authored by Samarasiṃha, who traces his ancestry through the Prāgvāṭa clan (\textit{anvaya}).\textsuperscript{13} This is a mixed Jain and Hindu kinship group, known today as Porwad or Porwal and generally considered to form part of the non-Brahman Baniyā or merchant caste. Despite the high social standing that Samarasiṃha claims for his family, it thus appears that, contrary to the assertions of later Tājika authors, he was not a

\textsuperscript{10} For details, see Gansten 2014 and sections 5–6 below.

\textsuperscript{11} Pingree 1981a: 112, stating only that Hemaprabhasūri ‘is generally alleged’ to have written the \textit{Trailokyaprakāśa} in 1248. H. D. Velankar (1944: 165) likewise states that the work was ‘composed in Saṁ. 1305’ (≈ 1248 CE), with R. S. Sharma in his edition of the text (1946: xvi) vaguely suggesting that Velankar’s dating was based ‘perhaps on the authority of some manuscript’.

\textsuperscript{12} The \textit{Ūkeśagacchacaritra} by Kakkasūri, apparently written in the fourteenth century but extant only in a single modern manuscript discovered by John Cort in 2008 (see Cort 2008; Qvarnström 2018), relates (vv. 354–385) an incident where the Jain guru Jambunāga, founder of a sublineage within the Upakeśagaccha, successfully matches his skills in annual prognostication (\textit{varṣaphala}) against that of Brahman astrologers. I am indebted to Olle Qvarnström and Sven Ekelin for bringing this passage to my attention.

\textsuperscript{13} Pingree 1997: 81, qualifying the deceptively plain statement in Pingree 1981a: 97 that ‘[t]he earliest author on \textit{tājika} in Sanskrit was Samarasiṃha of the Prāgvāṭakula, who wrote his Gaṇakabhūṣaṇa or \textit{Tājikatantrasāra} or \textit{Karmaprakāśikā} in Gujarāt in 1274’. We can, however, be certain that Samarasiṃha wrote at least some works, probably including the one discussed here, before the composition of Tejahsimha’s \textit{Daivajñālāṃkṛti}, which is securely dated to 1337 (see section 3.5 below for details).
Brahman.14 About two generations after his presumed floruit, another Prāgvāṭa author on Tājika, Tejaḥsiṃha, even refers to himself as ‘the son of a Śūdra’, asking that readers not disregard his work on that account.15

Regardless of whose work was earlier, Samarasiṃha appears from the later literature to have been incomparably more influential. In fact, Samarasiṃha may have been the bottleneck through which most if not all of later Tājika tradition can be traced: his distinctive misreadings of Arabic source texts are copied over and over by later authors and never challenged;16 his definitions and examples are continually cited, alluded to, and imitated; and his authority is acknowledged both explicitly and implicitly. Balabhadra, in rather grander phrasing than I have used here, repeatedly refers to Samarasiṃha as ‘anointed to the rank of a sage (ṛṣi) among Tājika authors’17—an expression suggesting that he regards the later tradition as an exegesis of and elaboration on Samarasiṃha’s statements, just as the religio-philosophical systems of Mīmāṃśa and Vedānta constitute exegeses of the words of the Vedic ṛṣis. Similarly, in a gloss at the very beginning of the Tājikanīlakaṇṭhī, Viśvanātha as a matter of course identifies Samarasiṃha as the authority on which that work rests, with the words: ‘Why? Because Samarasiṃha has said so.’18 On several later points of debate, he remarks: ‘There is no agreement [on this matter], as Samarasiṃha has said nothing [about it].’19 A careful study of Samarasiṃha and his literary output is thus a priority in the historiography of astrology in India. I propose in this article to make a beginning, in two stages: first, by a detailed analysis of the only work by Samarasiṃha preserved in what is believed to be its entirety; and second, by examining fragments from and information about other writings attributed to Samarasiṃha by later Tājika authors.

14 Cf. note 140. The identification of Samarasiṃha as a Brahman was mistakenly endorsed, on the authority of Balabhadra (1649), in Gansten 2012a.
15 For more details on Tejaḥsiṃha, see section 3.5 below and Gansten 2017: 118–123. It has been suggested to me that Tejaḥsiṃha’s self-designation śūdra- should properly read kṣudra- ‘lowly’, as the Prāgvāṭa community would be better regarded as Vaiśyas than Śūdras. Even if manuscript evidence could be found to support this conjecture, however, it would still corroborate the non-Brahman status of the Prāgvāṭas.
16 See section 3.1 below.
17 Hāyanaratna 1.6: tājikakartṛṣu ṛṣisthānābhīṣiktena samarasiṃhena; 2.1: ṛṣisthānābhīṣiktasamarasiṃhavirodhāt; 4.2: ṛṣisthānābhīṣiktasamarasiṃhavākye. Text and section numbers of the Hāyanaratna here and below refer to my forthcoming edition.
18 Ad Saṃjñātantra 1.2: kutah samarasiṃhenoktatvāt.
19 Ad Saṃjñātantra 2.55, 58–60; 3.24: saṃmatir nāsti samarasiṃhenānuktatvāt.
The *Karmaprakāśa*: Scope and Outlook

The only work of Samarasiṃha’s discussed in modern scholarship—which is to say, almost exclusively, by Pingree—is that provisionally dated to 1274, known under at least four different titles as the *Manuṣyajātaka*, *Karmaprakāśa* (or *prakāśikā*), *Tājikatantrasāra* or *Gaṇakabhūṣaṇa*. Although titles of Sanskrit works are often fluid, we may note the unusual absence of eponyms from this list. The designation in most common use seems to be *Manuṣyajātaka*, although Pingree preferred *Tājikatantrasāra*. This text is currently available to me in five manuscripts, three of them incomplete, and two printed editions, of which one is little more than a reprint of the other. The editions include the late commentary of Nārāyaṇa[bhaṭṭa] Sāmudrika, the *Daivajñasaṃtoṣanī* or *Karmaprakāśikāvṛtti*, which is further available to me in two separate manuscripts lacking Samarasiṃha’s original text. The colophons found in several of these text witnesses use the titles *Tājikatantrasāra*, *Manuṣyajātaka* and *Karmaprakāśa* synonymously, confirming that these refer to the same work.

A close reading of the introductory and concluding sections of this work reveals several suggestive points. The text opens with the following three stanzas:

Bowing to Vāc, Gaṇapati, the foremost among the planets, that witness of actions whose attributes are imperceptible, and my teacher, I light a small lamp [called] *Light on Actions* from the *Great Lamp [Illuminating] the Tājika Teaching* composed by Śrī Khindika.

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20 Comparable instances include Vāmana’s *Vāmanatājika*, also known as *Tājikasāroddhāra* and *Varṣatantra*, and Keśava’s *Tājikapaddhati*, also known as *Varṣapaddhati*, *Varṣaphalapaddhati*, *Keśavapaddhati* and *Tājikakeśavī*, both probably dating to the fifteenth century. The absence of a simple eponym such as “*Samarasiṃhatājika*” for the present work may conceivably be due to the existence of a previous composition already known under such a title, and may in turn have contributed to the authorship of this later work falling into partial oblivion; cf. section 6 below.

21 Pingree (1970–94 A.3: 166b, 1981a: 97) gives the author’s *floruit* as ca. 1725. I am not aware of the existence of any earlier commentary on the *Karmaprakāśa*.

22 This and other verses quoted below from the *Karmaprakāśa* refer to the 1886–87 edition unless otherwise stated. The orthography has been tacitly normalized, and variant readings are given only when they substantially affect the meaning. For *grahavargamukhyam*, Pingree (1997: 80) reads *grhakarmamukhyam*, which is almost certainly a corruption (possibly present in the 1866 Meraṭha edition referred to in Pingree 1981a: 97, which I have not
Extracting the best from that ocean of astrology which is the entire doctrine established by Śrī Garga and other sages and celebrated by Satya and other [Brahmans], made into the Tājika doctrine by Romaka and other ancient Yavanas, and bowing to the lotus feet of my teacher, I shall explain that which is always astounding to embodied beings, the flavours of food and so forth.\(^23\)

Homage to that powerful something which all learned men call action (\textit{karman}) [and which] spiritual men [call] unfathomable [but] certain and of most manifest result; homage, moreover, to those great ones who

\(^{23}\) śrīgargādimunipraṇītam akhilaṃ satyādibhiḥ kīrtitam
śāstraṃ tājakaśāstram ādyayavanair yad romakādyaiḥ kṛtam |
taddhorājaladher udasya paramaṃ natvā padābyaṃ guror
vakṣye bhogarasāditas tanubhṛtāṃ nityaṃ camatkarikām ||

For \textit{tājakaśāstram}, MS N and the editions read \textit{jātakaśāstram} (a common metathesis), while Pingree 1997: 80 reads \textit{jātukasāram}, probably a mistaken emendation of the latter variant. MS S and K₂ lack the verse, and the \textit{Daivajñasaṃtoṣaṇī} offers no guidance. Pingree's reading would give the meaning: ‘the entire doctrine […] the essence of which is nativities and which was authored by Romaka and other ancient Yavanas’. My translation of the latter phrase again differs from that of Pingree, who interprets \textit{ādyayavanair} […] \textit{romakādyaiḥ} as ‘by the ancient Greeks (Yavanas) and Romans’. \textit{Romakādyaiḥ} being a \textit{bahuvrīhi} compound, the phrase by this understanding of the two terms would in fact give the unlikely meaning ‘by the Roman(s) and other ancient Greeks’ (cf. Gaṇeśa Daivajña’s reworking of this stanza, note 119). Pingree further translates \textit{bhogarasāditas} as ‘for the enjoyment and savoring’, but the suffix -\textit{tas} does not express purpose, nor is \textit{rasa} an action noun. Prediction (or ‘postdiction’) of the details of meals, including the flavours of the dishes served, is in fact a recurring feature of both Arabic and Tājika astrological works, though not one found in the extant text of the \textit{Karmaprakāśa}; cf. the discussion in section 4 below. The 1886–87 edition reads \textit{moga} for \textit{bhoga}, wrongly emended to \textit{moda} in the 1915–16 edition.
have set down the canons in which expert astrologers behold it as clearly as people [behold] their image in a spotless mirror!24

The first conclusion that can be drawn from this introduction is that Karmaprakāśa or Light on Actions is the original title of Samarasiṃha’s work. We may note, indeed, the repeated emphasis on karman in these verses, which also serve as a mangalācaraṇa or benedictory invocation. In addition to his choice of title, Samarasiṃha pays homage to an abstract ‘witness of actions’ (karmasākṣin)—a rather unusual phrase in such a context, and one that strikes a personal note in comparison with the more standard salutations addressed to the goddess of speech, the remover of obstacles, the planetary deities (represented here by the foremost celestial body, the sun), and the guru. The ineffable force of karman and its power to mould men’s destinies is again the subject of the third verse. Although a belief in karman is a central tenet of all the major Indic religions, the paramount significance accorded it here may suggest a Jain influence on the author of the Karmaprakāśa—not surprisingly, given the probable time and place of its composition.25 The absence of any reference to Jain tīrthaṃkaras, however, makes it unlikely that Samarasiṃha himself identified as a Jain.

Among the other common designations of the Karmaprakāśa, the one most often encountered is Manuṣyajātaka or Human Nativities. Although this title is not found in the text proper but only in its colophons, the Karmaprakāśa, unlike most later Tājika works, does fall squarely in the jātaka or genethlialogy genre, as we shall see below—a fact emphasized by Samarasiṃha in its closing verses.26 In 20.8–9, just before the Karmaprakāśa ends with a brief account of Samarasiṃha’s family tree, he offers this conclusion:

24 yat karmety abhidhīyate ’khilabudhair durbdham ādhyātmikair atyāsannaphalam dh drvam balavate kasmācid asmai namah |
yad vā yadvihitāgmeṣu ganakaśreṣṭhaiḥ sphutam drṣyate |
rūpaṃ nirmanaladarpanesv iva jainas tebhya mahadbhyo namah ||
Some text witnesses read kila for ’khila’; the Daivajñasaṃtoṣaṇī appears to make allowance for both variants: ahhilaḥ budhaḥ yat karma iti abhidhīyate kila iti niścayena.

25 A slightly more speculative possibility, not incompatible with that of Jain influence, is that the ‘witness of actions whose attributes are imperceptible’ refer to the Islamic conceptions of Allāh as essentially unknowable and as the judge of all human actions on the Last Day. A deity thus conceived may have seemed relevant to Samarasiṃha particularly if he had studied with a Muslim teacher (cf. note 22), and we may note that the phrase occurs in immediate proximity to guruṃ.

26 This circumstance lends some indirect support to the reading jātakasāram in verse 1.2 (cf. note 23), though perhaps not enough to convince.
Born from the oyster of my words that was nourished by a drop of the water of meaning from the large cluster of lotus flowers that is the Great Teaching composed by Śrī Khindika, these very pearls of the results of men’s nativities will by their merits [or: strands] become a necklace gracing the breast of connoisseurs.27

Learned men! If you seek to know the results of nativities, like a treasure to increase your fame, that fixed and unchanging [fate] should be understood to have been extracted from the Tājika teaching.28

Aside from the somewhat unusual imagery (giving credence to the hypothesis that the text was composed in the vicinity of the Gulf of Kutch, long known for its pearl fishing),29 the identification of the Karmaprakāśa as a jātaka work is

27 śrīkhindikoktagurutantramahābjavṛndā 
arthodabindum upajīvya maduktiśuktyā |
 jātaṃ nṛjanmaphalamauktikam etad eva 
labdhā guṇaiḥ sahṛdayorasi hāralīlam ||

This stanza has been imperfectly preserved in the available text witnesses, perhaps because its intricate imagery was not fully understood. The reading tantramahābja is my emendation: the editions and two of the mss (K₁, K₂) read tantram ihābja; the third mss containing the stanza (N), tantram ihābdhi. Alternative emendations would be tantramahābhra or tantramahābda, transforming the metaphor from 'cluster of lotus flowers' to 'mass of clouds'; cf. note 29. The mss likewise read arthodā for arthodha; K₃ and N read yuktyā for śuktyā; K₁ and K₂ read vāṃtaṃ ‘ejected’ for jātaṃ ‘born’, perhaps equally acceptable, and etad etal for etad eva; all the mss read guṇaṃ for guṇaiḥ; and the editions read labdhvā for labdhā (the latter to be understood here as the periphrastic future). As no commentary is available for this verse, Nārāyaṇabhaṭṭa’s preferred readings are unknown.

28 jijñāsatha janmaphalam nidhim iva yadi kīrtivṛddhaye vibudhāḥ |
tan niyatanirvikalpaṃ tājikatantroddhṛtaṃ kalpyam ||

Here, the editions read jijñāsyē for jijñāsatha; ms N reads jijñāsur atra. Kalpyam is my emendation for the kalpam of all available witnesses.

29 The trope of pearls forming from drops of (rain)water trapped inside an oyster is, however, itself an established one in Indian poetry. Warder (1972–2011 V: 202, 692) instances two stanzas, taken from the Jain author Śīlāṅka and from Acalasiṃha, respectively (the latter translation modified):

vastūpāśrayasaundaryād apūrvaguṇam āpnuyāt |
svacchāṃ mauktikatām eti śuktimadhyaqataṃ jalam ||

‘Extraordinary qualities may be obtained from the beauty of recourse to a subject; pure water becomes a pearl when inside an oyster.’ (This stanza in turn recalls Kālidāsa’s Mālavikāgnimitra 1.6, which speaks explicitly of water from a cloud; I am indebted to Andrew Ollett for this observation.)

janaḥ punyair yāyāj jaladhijalabhāvaṃ jalamucam 
tathāvastham cainam vidadhati śubhaiḥ śuktivadane |
particularly noteworthy because, as noted above, Tājika has for many centuries been chiefly associated not with jātaka but rather with annual prognosis (varṣaphala, which is derived from and subordinate to the nativity) and interrogations (praśna). Indeed, Balabhadra quotes a stanza, attributed to Samarasiṃha himself, that explicitly contrasts Tājika with jātaka:

In general, [true] understanding does not shine forth for men in [considering] the results of genethlialogy (jātaka), which are applied to long times. Therefore, the annual results proclaimed by Tājika are elucidated here.30

A pastiche of this stanza also occurs in what has, since the seventeenth century, been the most popular Tājika textbook of all: the Tājikanilakanṭhī completed by Nilakaṇṭha Daivajña in 1587.31 This work illustrates what has just been said: the former of its two volumes (Saṃjñātantra) deals with basic principles and terminology, the latter (Varṣatantra) with annual prognosis. As already noted, a third volume spuriously attributed to Nilakaṇṭha, the Praśnatantra, is wholly dedicated to interrogations, but there is no volume on natal horoscopy.32 We shall return below to the stanza just quoted and to the possible significance of Samarasiṃha’s repeated emphasis on nativities in the closing verses of the Karmapraṇakāśa.

Of the two remaining alternative titles of this work, Tājikatantrasāra or The Essence of Tājika Teachings seems to reflect Samarasiṃha’s claim of having extracted the choicest part of the writings of his Tājika predecessors (1.1–2), while Gaṇakabhūṣaṇa or The Astrologer’s Ornament may possibly allude to the image of the pearl necklace (20.8). These two passages—enclosing, as it were,

\[
tatas tāṃ śreyobhiḥ parinatim asau vindati yayā
tavicīṃ tanvan pīnastaniḥdṛi tavāyaṃ vilasati ||
\]

‘A person through merits may become water in the ocean; in this state he is transformed through good deeds into a cloud; then in the mouth of an oyster he finds through better ones that maturity through which, [as a pearl necklace] spreading lustre, he sports here on your heart which has full breasts.’

30 Quoted in Hāyanaratna 1.2. See quotation ‘a’, p. 121 below, for the Sanskrit text.
31 Varṣatantra 1.1; cf. quotation ‘b’, p. 121 below. References to the Tājikanilakanṭhī (Saṃjñātantra and Varṣatantra), as well as the received text of the Praśnatantra, follow the Jośī (2008) edition. The term pastiche is used here and below not in a pejorative sense, but to signify an imitation comprising both content and style (by verbatim borrowing and/or use of closely synonymous phraseology).
32 For the textual history and antecedents of the Praśnatantra, already touched upon above, see Gansten 2014 and sections 5–6 below.
Samarasimha’s work between them—are also significant in that they reiterate the fact of the dependence of the Karmaprakāśa on one particular source: the Gurutājikatantradīpa or Great Lamp [Illuminating] the Tājika Teaching (or, in the shorter version of the name, the Gurutantra or Great Teaching) of Khindika. Neither this work nor its author has been clearly identified; and while Samaraṃsiṃha, writing in Sanskrit, gives it a Sanskrit title, we do not know with certainty in what language the text itself was written. Pingree believed it to have been a work translated from Arabic or Persian into Sanskrit some decades before Samaraṃsiṃha composed his digest of it and claimed, unfortunately without giving details, that quotations from the [Guru]tājikatantradīpa occur in later Tājika texts. On the other hand, Balabhadra—admittedly some four centuries after the presumed date of the Karmaprakāśa—was unaware of any earlier Sanskrit sources and believed Samaraṃsiṃha to have translated a Tājika work directly from ‘the Persian language’ (which he seems not to distinguish from Arabic) into Sanskrit.

The possible identity of Khindi[ka] (the suffix appears to have been added here for purely metrical reasons) or Khindhi, who is mentioned as an authority by several later Tājika authors, has been discussed elsewhere. Briefly, pace Pingree, there seems to be no reason to believe this name to be derived from a Persian or Arabic (al)-Hindī, and in fact the linguistic evidence of the preserved corpus of Sanskritized Tājika terminology militates against the supposed sound change $h > kh$ and rather supports Albrecht Weber’s original

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33 Pingree 1997: 81 (omitting Guru- from the title). In my relatively extensive researches into Tājika literature, I have not so far come across any quotations attributed to the Gurutājikatantradīpa, Tājikatantradīpa, or Gurutantra. References to, if not quotations from, ‘Khindika’ do occur; but a simple point that nevertheless deserves to be made here is that Tājika writings, like many branches of Sanskrit literature, are often pseudepigraphic. Such references need therefore no more be genuine than those to supposedly ancient, but in fact wholly fictitious, authorities such as Hillāja (cf. Gansten 2012a and note 134 below).

34 Hāyanarātna 1.2; for the full quotation, see note 140 below. Unlike Samaraṃsiṃha, Balabhadra, whose patron was Shāh Shujā’, lived and worked in the Persian-speaking mi-liu of the Mughal court. Although his writings make use of more than two dozen technical Tājika terms derived from Arabic, he never mentions that language by name but rather refers explicitly to all Tājika terminology as ‘Persian’, instancing the word ikkavāla (Arabic iqbal). Minkowski (2014: 117) similarly speaks of Tājika as ‘Persianate astrology in Sanskrit, including “exotic” Persian technical terms for features not found in siddhāntic astrology’. Persian does, of course, contain many Arabic loanwords, but only two Tājika technical terms known to me are of actual Persian origin (those, too, transmitted via Arabic sources): hillāja and khattakhutta, both of which were soon mistaken for personal names (cf. note 134).
identification, not mentioned by Pingree, of Khindi with the Yaʿqūb ibn Ishāq al-Kindī mentioned above.\textsuperscript{35}

In addition to ‘Khindika’, Samarasimha in his opening stanzas refers to three authorities by name, two Indian and one Yavana. The former are the ancient and semi-mythical Garga and Satya, presumably mentioned separately as representing the categories of sages (muni) and ordinary (Brahman) authors, respectively.\textsuperscript{36} Romaka or ‘the Roman’, likewise considered ancient (ādya), may—if accepted as a historical person—refer either to a Hellenistic author whose works were preserved in Arabic or to a Byzantine author.\textsuperscript{37} The tendency towards hybridization that has been noted in later Tājika authors is thus present to some extent even in the Karmaprakāśa.\textsuperscript{38} Nevertheless, a close examination of the Karmaprakāśa reveals that Pingree’s view of Tājika as essentially Indian astrology, with Perso-Arabic elements added to it, is incorrect.\textsuperscript{39} The actual situation, as we shall see below, is the reverse: Perso-Arabic material comprises the bulk both of the Karmaprakāśa and of the Indian tradition of Tājika generally, while indigenous astrological sources and concepts are employed only sparingly.

\section{Sources, Structure and Content}

Despite Samarasimha’s repeated statements about his primary source, all sections of the Karmaprakāśa that I have so far been able to trace are in fact derived from authors other than ‘Khindika’. The importance for the Tājika tradition of Sahl ibn Bishr, whose name to my knowledge is never mentioned

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{35} See Gansten 2012a for the full argument. For Pingree’s views, see Pingree 1970–94 A2: 80a; 1981a: 97; and 1997: 80, where the certainty of the earlier statements has been softened with a ‘probably’. For Weber’s views, see Weber 1853: 249. Pingree’s belief that ‘Khindika’ had composed a work in Sanskrit naturally rests on his identification of this author as an otherwise unknown ‘Indian’ (al-Hindī) rather than as the Arab al-Kindī.
\item \textsuperscript{36} For Garga and Satya, see Pingree 1978 and 1981 \textit{passim}.
\item \textsuperscript{37} The self-identification of the Byzantines as Romans (\textit{ρωμαῖοι}) was carried over into Arabic as \textit{ar-rūm}. The Byzantine astrologer of greatest importance for the Arabic tradition was Theophilus the Philosopher (695–785), known in Arabic as Thūfīl ibn Thūmā, from Edessa in present-day Turkey (near Harrān, known for its enduring tradition of Greek science and philosophy, Hermeticism and astral religion). See Pingree 2001: 13–20; Dykes and Gramaglia 2017.
\item \textsuperscript{38} For hybrids of classical (pre-Islamic) Indian and Tājika astrology, cf. Gansten 2014.
\item \textsuperscript{39} Pingree 1997: 81, also echoed by Minkowski (2004: 330), who states that Tājika is ‘a Persianized version of Indian astrology […] Sanskritic Jyotiṣ [sic] astrology with some distinctive, imported features’.
\end{itemize}
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by any Sanskrit author, has been demonstrated before; as we shall see, Sahl is also one of the sources of the Karmaprakāśa. To account for the apparent Tājika misattributions of Sahl’s works, I have previously hypothesized the existence of a medieval compendium of astrological texts containing excerpts from Sahl, al-Kindī, and possibly other Arabic-language authors, and mistakenly credited to al-Kindī alone.40 A variation on this scenario would be a compendium actually compiled by al-Kindī from earlier sources, including Sahl. Such a compendium could be the text referred to by Samarasiṃha as the Gurutantra or Gurutājikatantradīpa, which would explain his apparently contradictory identification of his sources both as this one particular work by ‘Khindika’ and as the entire ‘ocean of astrology’ authored by ‘ancient Yavanas’. If this hypothesis is correct, the Guru- of the title (somewhat unusual, though not unprecedented, in the sense ‘great’) likely translates al-kabīr, commonly occurring in titles of Arabic astrological works.41

The Karmaprakāśa consists of twenty chapters comprising nearly 400 stanzas in a profusion of metres, the number of stanzas in a chapter varying from 6 to 54.42 The structure of the text appears to be a truncated version of a pattern common to many Arabic-language textbooks, being loosely based on the twelve astrological places or houses. It should be noted in this regard that while the topics of such textbooks are often demarcated according to the significations of the twelve places, the sequential arrangement of those places is occasionally adjusted so as to group related topics together (for example, social eminence and wealth), or to make chronological sense in the context of a life reading (for example, by considering marriage before children, or by deferring the consideration of death to the end).

The text is thus divisible into five main sections. Chapters 1–4 deal with introductory matters and definitions; chapters 5–13 concern various aspects of the body, its health and life, relating to the first house of the horoscope (but including material on illness and death, which might more properly have been assigned to the sixth and eighth houses, respectively); chapters 14–16 discuss matters of livelihood, wealth and poverty, relating to the second house (but including material on occupation and status that might have been assigned to the tenth); and chapters 17 and 18 concern siblings and parents, relating to the third and fourth house, respectively. Finally, and somewhat abruptly, chapters

40 Gansten 2012a.
41 See Sezgin 1979 passim.
42 Although the metres used are chiefly syllabic, including śloka, pañcachāmara, upajāti, śālini, svāgata, mālahārini, jaladharamālā, toṭaka, drutavilambita, puspitāgrā, praharṣiṇi, vasantaṭilekā, mālini, mandākrāntā, śikhariṇi, sārdulavikrīḍita and sragdharā, a limited number of stanzas in varieties of the moraic ārya metre are also present.
19 and 20 contain a discussion of female nativities and ‘miscellaneous’. There are no chapters relating to the topics of the remaining horoscopic places, including marriage (the seventh house), children (fifth), travels and religion (ninth), friends (eleventh) and enemies (twelfth). A closer examination of each of the five sections of the Karmaprakāśa will be helpful in determining the sources employed by Samarasiṃha. For the sake of convenience, I shall use the printed editions (identically numbered) to refer to chapters and verses, although their readings will sometimes be corrected on the basis of manuscript evidence.

3.1 Introductory Matters (Chapters 1–4)

From the order in which it is arranged, chapter 1—Rāśyadhikāra ‘On the zodiacal signs’—appears to be based largely on Sahl ibn Bishr’s popular introduction to astrology, although it is a highly condensed rendering. Indeed, as will be discussed further below, the introductory material found in the first four chapters of the Karmaprakāśa may be twice abridged. Among the distinguishing Graeco-Arabic doctrines related, particular mention may be made of the imperfectly transmitted characterizations of the signs as hot, cold, moist and dry (1.8); the via combusta (1.9); the system of five zodiacal dignities (pañcavargī), complete with a model of point values (1.11–23); the so-called blind degrees (1.25–28); and the four kinds of planetary rejoicing (1.30). The zodiacal melothesia immediately following the maṅgalācaraṇa (1.4), not from Sahl’s Introduction, is too brief for its source to be identified.

The discussion of the five dignities, which in the Arabic sources are invariably domicile, exaltation, triplicity, term and decan (or ‘face’), appears to derive from a source that also included the use of the Indian navāṃśa or ninth-part. This zodiacal division—presumably introduced into the Arabic astrological synthesis through the Persian tradition rather than directly from Indian astrologers, given the designation nawbahra (from Middle Persian *nō bahr) used in Arabic—is found, for instance, in the writings of al-Kindi and Abū Ma’shar (787–886), but not in Sahl. The Karmaprakāśa (1.11) has replaced decans (generally known in Indian astrology as dṛkāṇa or dreškāṇa, with variants) with the navāṃśa in its list of dignities; but in 1.20 the dṛkāṇa is

43 Chapter titles vary slightly between text witnesses; I have used those of the printed editions.
44 Sahl’s work is known under several Arabic titles, including K. al-ḥkām ‘alā n-niṣba al-falakīya: see Ullmann 1972: 309ff.; Sezgin 1979: 125 ff. I shall refer to it below simply as the Introduction; references to particular passages will follow the forthcoming translation by Dykes.
45 See Panaino 1993: 427.
nevertheless introduced and briefly explained. The passage 1.20–23 displays the beginnings of the confusion surrounding triplicities, decans and navāṃśas that characterizes later Tājika literature, and includes two slightly different rulership schemes for the triplicities.46

Chapter 2, Grahādhikāra ‘On the planets’, seems partly to depend on Indian sources, with mention of the four Hindu social classes (varṇa) and the three humours (doṣa) of Āyurveda (2.1–5, 9). These verses are arranged topically; but in 2.6–8 they are complemented by descriptions clearly of Perso-Arabic origin, arranged by planet in the so-called Chaldean order from Saturn to the moon, rather than the order employed in classical Indian texts (based on the days of the week), and again including the fourfold qualities of hot, cold, moist and dry—alien to Āyurveda but used in Graeco-Arabic (Yūnānī) medicine. Although the brevity and generic nature of the passage make identification of the source text difficult, Sahl’s Introduction can be ruled out. The latter part of the chapter, dealing with planetary aspects, does appear to be a mix of material from Sahl’s work (2.10–14) and another, as yet unidentified Arabic source (2.15–16).47

Chapter 3, Ṣoḍaśayogādhikāra ‘On the sixteen configurations’, is the earliest extant description in Sanskrit of this important Tājika doctrine, derived from Sahl, and largely agrees with the later versions of it discussed at length elsewhere.48 Although a detailed comparison may bring to light other features of interest, the most important point to note here is that the list of configurations in the Karmaprakāśa, like later Tājika sources, includes the spurious tambīra-yoga (from Ar. ṭabīʿa)49 in the fourteenth place and ends with duraḥpha (Ar.

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46 For a detailed discussion of this topic, see Gansten 2018.
47 For a comprehensive discussion of Tājika aspect doctrine, particularly as found in Samarasimha, and its antecedents, see Gansten 2018.
48 Gansten and Wikander 2011. Two minor terminological differences may deserve mention. First, mutthaśila (Ar. muttaṣīl), which in later Tājika tradition is used synonymously with itthaśāla (Ar. ittiṣāl) to refer to any applying aspect—that is, one approaching completion—is reserved by Karmaprakāśa 3.4 for such an aspect when partile (occurring within one degree). Second, while supporting the later Tājika reinterpretation of kambūla (Ar. qabūl) as an applying aspect involving the moon and two other planets (3.9), the Karmaprakāśa also (9.17; 20.3) employs the form makabūla (Ar. maqabūl) from the same root, in what may or may not be the original sense of ‘reception’—that is, of one planet applying to another while occupying the latter’s sign of domicile or other zodiacal dignity.
49 The Sanskritized forms of this and other Arabic-derived terms vary even within the Karmaprakāśa, often for metrical reasons. Tambīra-yoga arose as a ‘creative misunderstanding’ from the mistaken splitting of Sahl’s single phrase dufʿa t-tadbīr wa-t-ṭabīʿa ‘committing disposition and nature’; for the full argument, see Gansten and Wikander 2011: 533 ff.
ḍuʿf ‘weakness’), thus excluding Sahl’s sixteenth heading ḥwāl al-qamar ‘conditions of the moon’. On the one hand, the presence of this distinctive error strongly suggests that later Tājika accounts of the ṣoḍaśayogas all ultimately depend on Samarasiṃha. On the other hand, the Karmaprakāśa omits the illustrative examples of certain configurations or conditions which are found both in Sahl’s ninth-century original and in Tājika works of the sixteenth and seventeenth centuries. One such example—the only one, to my present knowledge, of which Samarasiṃha’s version is preserved—has been discussed in some detail elsewhere; another may be adduced here by way of illustration.

Sahl

An example of that is a question about the Sultan: and the Ascendant was Libra, and Venus (who was the lord of the Ascendant and the indicator for the one asking) was in 10° of Aries, and the Moon (who was the lord of the Midheaven and the indicator for the Sultan) in 12° of Taurus, so they were not looking at each other; and Jupiter was in 15° of Cancer, in the angle of the Midheaven, and the Moon and Venus connecting with him. So Jupiter was collecting their light in the angle, in the place of the sought thing: it indicated victory based on the assistance of a sage or man entering between them: they will come to terms through him.

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50 The term is given as durapha in Karmaprakāśa 3.2, durapha or durāpha in 3.16.
51 See Gansten and Wikander 2011: 536 f., Gansten 2014: 104 ff. This example, dealing with naql or nakta-yoga, is found in Sahl’s Introduction 3.25–27; Praśnatantra 4.58–60 (Samarasiṃha’s version); Samjñātantra 2.26–27 (Nilakaṇṭha’s version); and Gaṇeṣa’s Tājikabhūṣaṇa 4.12. The latter two sources are roughly contemporaneous, and an influence either way is unlikely. While the Tājikayogasudhānidhi of Yādavasūri (for whom see Gansten 2017: 125–128) may be somewhat later, it gives no sign of being influenced by either Gaṇeṣa or Nilakaṇṭha. As noted in Gansten 2014 (n. 16), this work offers a slightly different example of nakta-yoga (6.15, quoted in Hāyanaratna 3.5), though still involving the same topic of marriage and the same three planets. A subsequent examination of mss of the Tājikayogasudhānidhi reveals, however, that Sahl’s original version is in fact added briefly as a variant in the next verse (6.16). The major differences between Sahl’s version and those of the Tājika writers concern the degrees of longitude assigned to the planets involved and the sign occupied by the moon. The reason for this appears to be that Samarasiṃha simplified his examples by excluding such data, leaving later authors the options of doing the same (Gaṇeṣa’s choice) or of inventing their own degree and sign positions (Nilakaṇṭha’s and Yādavasūri’s choice).

52 This example was omitted, presumably by oversight, from the edition and translation of Sahl’s text in Stegemann 1942, as well as from the translation in Dykes 2008 (though it is present in the Latin text; see Zahel 123v). As a consequence, Gansten and Wikander (2011: 537), briefly alluding to it, mistakenly state that it does not derive from Sahl.

53 Introduction 3.29–30, translation taken from Dykes (forthcoming), slightly modified.
Nilakaṇṭha

If Venus, ruling the Libra ascendant in a question on attaining kingship, is in Aries with sixteen degrees, and the moon, ruler of [the place of] kingship, is in Taurus with six degrees, there is no aspect between them. But [if] Jupiter, slower than both and placed in Cancer with ten degrees, aspecting both within its orb, gave the light of the faster moon to Venus, one should consider and predict that [the querent] will attain his position through a counsellor.a

Gaṇeśa

Venus, ruling the Libra ascendant in [a question on] attaining kingship, was in Aries; the moon, ruler of [the place of] kingship, was in Taurus: there was no aspect between them. Jupiter, slower than both and placed in the middle, aspecting [them] within its orb and taking the light from the faster moon, gave it to Venus: before long [the querent] attains a lofty position by the agreement of a good counsellor.b

Yādavasūri

The ascendant was Libra; Venus was placed in Aries with twenty [degrees], and the moon in Taurus with four: there was no aspect between them. Jupiter in Cancer at twelve [degrees], taking the light from the moon, gave it [to Venus]: [the querent] attains royal authority through a counsellor.c

The three Sanskrit versions are strikingly similar; but while there can be no doubt that the Mughal-era authors all ultimately depend for their example on Sahl, there are sufficient differences between the Arabic and Sanskrit versions to assume that the latter derive from a common, intermediate version rather
than directly from the Introduction. For Samarasiṃha to constitute this crucial link between Sahl and the later Tājika tradition, we have to posit another, perhaps fuller work authored by him, containing both the erroneous division of the yogas and the examples lacking from the Karmaprakāśa. We shall return to this scenario below.

Chapter 4, Dvātriṃśatsahamādhikāra ‘On the thirty-two sahamas’, is a list of so-called lots (Ar. sahm, translating κλῆρος), derived by measuring the longitudinal distance between two predefined points in a horoscope (typically two planets) and projecting it from a third point (typically the ascendant degree). The lots constitute a method of assigning concrete meanings to different areas of the zodiac, and may have begun as an alternative to the twelve-house system; as the number of lots increased during the medieval period, their significations often grew more specific. The exact list of lots given in this chapter is not, to my present knowledge, found in any single Arabic author, a circumstance strengthening the hypothesis that Samarasiṃha’s source text was a compendium of astrological works. The great majority of the lots listed in the Karmaprakāśa are, however, found in several Arabic-language sources of the eighth and ninth centuries—either in wholly identical form or slightly corrupt or simplified (for instance by omitting variants, including but not limited to variations between a diurnal and a nocturnal formula), but still clearly recognizable. The Arabic authors whose lists of lots display the closest parallels to the Karmaprakāśa are Abū Ma’shar and ‘Imrān ibn Aḥmad.

One such difference is the mistaken notion, common to all three Tājika authors, that the slowest-moving planet in the jāmiʿa/yamayā configuration should occupy an intermediate degree with regard to the other two planets involved (within their respective zodiacal signs). This mistake may have arisen either from an analogy with the fastest-moving planet in the previous configuration (naql/nakta) or from an over-literary reading of Sahl’s description of the outcome (‘a sage or man entering between them’ [my emphasis]). As seen from Sahl’s original, both the faster-moving planets in a jāmiʿa must in fact occupy earlier degrees in order to form applying aspects (approaching the ideal angular distance) with the planet ‘collecting their light’.

See the discussion in Brennan 2017: 511–534.

This ‘Imrān, who may or may not be identical with ‘Alī ibn Ahmad al-‘Imrānī (d. 955), is the otherwise unknown author of a K. fihi aḥkām majmūʿa min kutub al-hukamāʾ (Book of Judgements According to a Selection of Books by the Wise). References below to lots in this work (henceforth, ‘Imrān) and to Abū Ma’shar’s K. al-Mudkhal [al-kabīr] ilā ‘ilm aḥkām an-nujūm (Mudkhal) are based on manuscript sources. In the case of ‘Imrān, whose lots are given in tabulated form, references are to page, column and row; for Mudkhal, the last figure refers to the number of the lot listed, rather than to the line or paragraph. Additional references will be made to Abū Ma’shar’s own abridged version, Mukhtaṣar al-mudkhal or K. al-Mudkhal aṣ-ṣaghīr (Mukhtaṣar).
Even disregarding slight variations between the initial list (4.1) and the subsequent delineation of formulae (4.2–6), the lots in the *Karmaprakāśa* appear somewhat disarranged, though not so much so as to obscure the underlying structure entirely:

| 1. Fortune   | 2. Knowledge | 3. Love   | 4. Valour  |
|--------------|--------------|-----------|-----------|
| 5. Renown    | 6. Wealth    | 7. Bondage| 8. Father |
| 9. Mother    | 10. Brothers | 11. Expansion| 12. Wife |
| 13. Death    | 14. Journeys | 15. Desire| 16. King  |
| 17. Enemies  | 18. Sons     | 19. Daughters| 20. Work |
| 21. Forbearance | 22. Dignity | 23. Life  | 24. Illness|
| 25. Friends  | 26. Marriage | 27. Learning| 28. Faith |
| 29. Strength | 30. Body     | 31. Business| 32. Work of the hands|

Items 1–5 and 7 constitute the so-called planetary lots, of which I have translated the Sanskrit names of the first and most important one (*punya, sukrta*) rather freely as ‘fortune’ to agree with its well-known designation in other languages (*κλῆρος τῆς τύχης*, *sahm as-saʿāda*, *pars fortunae*); the sense of the Sanskrit is undoubtedly that of merit accumulated in previous lifetimes, manifesting as good fortune in the present. This lot appears from the earliest times to have been associated with the moon. The following one, correspondingly identified with the sun, is known in Greek as *κλῆρος τοῦ δαίμονος*, rendered in Arabic as *sahm al-ghayb*—probably in the sense of ‘the unseen’, understood in its turn by the Indian translator as ‘[spiritual] knowledge’. From these two lots were derived two others, those of love and necessity, forming a tetrad found in several Hellenistic and early Arabic sources.57 The latter pair, of which only the lot of love is found in the *Karmaprakāśa*, was eventually associated with Venus and Mercury, respectively, and alternative formulae for them

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57 See, e.g., *Carm. astr.* fragment 11 E 3; Vett. Val. 11 16, 14 11; *Lib. Arist.* 111 xii 1–2. (*Carm. astr.* is preserved in an interpolated Arabic translation via Middle Persian in addition to fragments of the original Greek; an improved English translation was recently published by Dykes 2017. The Arabic original of *Lib. Arist.* was probably authored by Māshā‘allāh ibn Athārī, d. ca. 815; an English translation from the Latin is found in Dykes 2009.) Additionally, the group of four lots is mentioned in Macr. *Sat.* I 19,17 (transl. Kaster 2011: 267 ff.): ‘The Egyptians also use the caduceus’ significance to explain people’s horoscope (“genesis” it’s called), saying that four gods attend a human being as it’s born, Deity [Daimôn], Chance [Tykhê], Love [Erôs], and Necessity [Anangkê] [...]’ For a detailed study of these lots, see Greenbaum 2016: 279–388. Burnett and Pingree (*Lib. Arist. loc. cit.*) note that Sahl associates these four lots, along with a fifth of friendship (different from the one in the *Karmaprakāśa*), with the Persian astrologer known as al-Andarzaghar.
were devised that involved these two planets. Similar formulae were then devised for the remaining planets, producing the lots here called valour (Mars), bondage (Saturn), and—with some variation—renown (Jupiter).\textsuperscript{58} The presence of the original calculation of the lot of love indicates a fairly early source for at least some of the lots in the \textit{Karmaprakāśa}.

Next follows a series of lots which may be assumed originally to have been arranged in order of the horoscopic houses to which their significations may be said to correspond (a common schema): wealth relates to the second house, brothers to the third, father and mother to the fourth; the lot of ‘expansion’ (\textit{vibhūti}) is properly that of offspring (\textit{sahm al-wuld}), seemingly misunderstood: the Arabic root \textit{wld} ‘bring forth’ overlaps to some extent in meaning with Sanskrit \textit{vi-vibhū}, belonging to the fifth house; wife and desire relate to the seventh house,\textsuperscript{59} death to the eighth, journeys to the ninth, the king (or, perhaps more relevant in a nativity, kingship)\textsuperscript{60} to the tenth, and enemies to the twelfth. While the ‘planetary’ lots are often assigned to the first house, the sixth and eleventh houses are not represented in this list.

The remaining lots—including those of illness (sixth house) and friends (eleventh house)—appear to have been added more or less haphazardly to this list, perhaps from several sources. The lots of sons, daughters, work, life, and marriage are again standard lots found in several Arabic-language sources. The lot of illness appears to be a mere variant on that of work, while the lot of illness is surely a corrupt version of the lot of the destroying planet

\begin{footnotesize}
\begin{enumerate}
\item These alternative and additional formulae are found in Paul of Alexandria, who claims to cite them from the lost work \textit{Panaretus}; see Paul. Al. 23 (transl. Greenbaum 2001: 41–44; Holden 2012: 41–46). Although they are not, to my present knowledge, found in the Tājika tradition, Nilakaṇṭha (\textit{Samjñātantra 3.7}) states—unlike the \textit{Karmaprakāśa}, and possibly as a result of misunderstanding—that the lot of love, which he calls that of friends (\textit{mitra}), should be projected from Venus rather than from the ascendant. The Jupiter lot was originally derived from the lot of the daimon or \textit{sahm al-ghayb} and commonly called the lot of victory (\textit{kλῆρος τῆς νίκης}, \textit{sahm aẓ-zafar}), but the \textit{Karmaprakāśa} derives it from the lot of fortune and calls the result ‘renown’ (\textit{yaśas}). Some Arabic sources do in fact include this second variety in addition to the first—notably Abū Ma’shar (\textit{Mudkhal viii 6,77}), who calls it the lot of success (\textit{sahm an-nujḥ}).
\item The lot called ‘wife’ in this list and ‘others’ wives (\textit{anyadāra}) by Nilakaṇṭha (\textit{Samjñātantra 3.16), taken from Saturn to Venus, is known in Arabic as \textit{sahm at-tawājī [ar-rijāl] ‘the lot of marriage [for men]’. Although the lot here called ‘desire’ (\textit{āśā}), taken from Venus to Saturn, is commonly known in Arabic sources as the lot of marriage for women (\textit{sahm at-tawājī an-nisā’}), \textit{Lib. Arist. 111 vii 1.6} gives it the more sexualized designation \textit{pars incestus et fornicationis}. The source of the \textit{Karmaprakāśa} may have shared this tradition.
\item This lot is commonly known in Arabic sources as \textit{sahm ash-sharaf} ‘the lot of nobility’. Nilakaṇṭha (\textit{Samjñātantra 3.22, 10}) calls it \textit{gurutā} ‘dignity’, using the synonym \textit{gaurava} for the lot called \textit{gurutā} (no. 22) in the \textit{Karmaprakāśa}.
\end{enumerate}
\end{footnotesize}
(κλῆρος αναιρέτου, sahm al-kawkab al-qattāl).\(^{61}\) The lot of forbearance is given in other Tājīka sources as a double lot—that of quarrel and that of forbearance or forgiveness—which seems to confirm its identity with the Arabic lot of disputes and opponents (sahm al-khuṣūmāt wa-l-mukhāsimīn).\(^{62}\) The lot of learning is less common: it is found only in the works of Abū Maʿshar (and possibly, in corrupt form, in that of ʿImrān).\(^{63}\) The same authors give a ‘lot of authority and of what the native does’, immediately followed by a ‘lot of manual workers and trades’.\(^{64}\) These two lots seem to have been conflated in the Karmaprakāśa, where the name of the last lot corresponds to the latter, but the formula used to the former. It thus seems likely that Samarasiṃha’s source text depended on one of these authors (the more well-known of which was certainly Abū Maʿshar) for at least part of its list of lots. The remaining five lots of the Karmaprakāśa—those of dignity, faith, friends, strength, and body (the last three of which share their formula with the lot of renown)—have no parallels in any Arabic source known to me.\(^{65}\)

Of these 32 lots, all but two are present in what has become the most widespread list of Tājīka sahamas, compiled some three centuries later by Nilakaṇṭha and comprising 50 items.\(^{66}\) The two Karmaprakāśa lots absent from Nilakaṇṭha’s list are what may be called duplicates, sharing a formula for calculation with one or more other lots of different name and signification; of Nilakaṇṭha’s remaining 20 lots, four are likewise duplicates. But what most concerns us here is the fact that Balabhadra, relaying Nilakaṇṭha’s list in his Hāyanaratna, quotes Samarasiṃha on the formulae of two lots that are absent

\(^{61}\) This lot is properly taken from the ruler of the ascendant to the moon by day, the reverse by night, whereas the Karmaprakāśa counts from the moon to the ascendant itself, day and night. See Rhet. v 77 (ccag viii 4: 199; an English translation is available as Holden 2009a); Mudkhal viii 6,53; Mukhtaṣar 6,37.

\(^{62}\) See Mudkhal viii 6,49; Samjñātantra 3.13.

\(^{63}\) See Mudkhal viii 6,59; ʿImrān 184 A 8. This lot, taken from Saturn to Jupiter by day and reversed at night, is unusual in that it is projected from Mercury rather than from the ascendant.

\(^{64}\) For the former lot (sahm as-sulṭān wa-ayy ʿamal yaʾmalu al-mawlūd), see Mudkhal viii 6,69; Mukhtaṣar 6,49; ʿImrān 183 B 11; for the latter (sahm al-ʿummāl bi-yadayhim wa-t-tijārāt), Mudkhal viii 6,70; ʿImrān 183 B 12.

\(^{65}\) The lot of dignity (gurutā) is taken by day from the moon to Jupiter and projected from the sun; by night, from the sun to Jupiter and projected from the moon. The lot of faith (śraddhā), also called that of mental impressions (vāsanā), is taken from Venus to Mars, apparently both day and night. The planets involved suggest that the lot may originally have been associated with marital fidelity rather than religious faith; I am indebted to Konrad Klawikowski, MA, for this observation.

\(^{66}\) Samjñātantra 3.5–24 (though differing from the Karmaprakāśa in 4 cases out of 30 on whether or not a given formula should be reversed in a nocturnal nativity).
from the *Karmaprakāśa*. Other such lots, not mentioned by Balabhadra, may of course exist. In the light of this finding, it seems advisable to treat with some caution Pingree’s assumption that the seeming ‘growth in the number of lots indicates that new Arab/Persian sources were constantly being tapped by the Indian *tājikīs* [sic].

### 3.2 Body, Health and Life (Chapters 5–13)

Following this introductory section, chapter 5, *Niṣekādhikāra* ‘On impregnation’, sets out the doctrine generally known in western literature as the trutine of Hermes, positing an astrological correlation between the times of conception and birth—the ascendant degree in one being the ecliptical longitude of the moon in the other, and vice versa. This in turn makes it possible to adjust an approximate ascendant and its concomitant time of birth. The average duration of a normal pregnancy is assumed to be 273 days or exactly ten sidereal months, with a maximum deviation of a fortnight either way. The antecedents of this doctrine, ascribed by Hellenistic writers to Petosiris, are quite

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67 The two quotations, found in *Hāyanaratna* 4.3, concern the lots of ability (*sāmartha*) and of affliction (*saṃtāpa*), numbering 8 and 34, respectively, in Nilakantha’s list. The partial stanzas are both in *āryā* metre:

\[sāmarthyasahamam ahi ca lagnapater bhūsataṃ niśi vilomam | [...]\] saṃtāpa -

\[saḥamam aharṇiśam indor maṇḍāntaṃ saṣṭhataḥ pāṭah ||

That these stanzas do not belong to a variant text of the *Karmaprakāśa* but to a different work by Samarasiṃha is strongly suggested by a third partial quotation in the same section of the *Hāyanaratna*, dealing with a lot that does occur in the *Karmaprakāśa*. This is the lot of wealth, a definition of which (also in *āryā* metre) is quoted by Balabhadra:

\[ [... ] arthasahamam dvitīyāḍhīpāt | dvitīyān ca dinarātram [... ]\]

The corresponding definition in *Karmaprakāśa* 4.2, while identical in content, is in *sārdulavikṛḍita* metre and very differently phrased:

\[ [... ] dhanam sveśād dhanāntam saḍā ||

68 Pingree 1997: 89. The superficially regular derivation *tājikin* is not attested in any sources but was invented by Pingree. Like many Sanskrit *vṛddhi*-derivatives (e.g., *jaina*, *bauddha*, *sāṃkhya*), the noun *tājika* is consistently used of both doctrine and practitioner, the distinction to be determined by grammatical gender and, above all, context.

69 Latin *trutina* (from *τρυτάνη*) ‘balance, pair of scales’. In the research literature the trutine is sometimes referred to as the ‘rule of Petosiris’.

70 In this context, ‘conception’ does not, of course, refer to fertilization of the ovum (conception in the modern medical sense), but rather to the time of seminal ejection. It is the interval between this moment and birth that is estimated at an average of 273 days, or 39 weeks.
ancient: the average value of \(273\frac{1}{3}\) days for the gestational period is known from Babylonian astrological sources.\(^{71}\)

The distinctive form in which the calculations are presented in the *Karmaprakāśa*, including the conversion of twelve-degree segments into twenty-four half-degrees to facilitate the reckoning of hours in a nychthemeron, is almost certainly derived from Abū Bakr al-Ḥasan ibn al-Khaṣīb’s late ninth-century *Kitāb al-mawālīd*, thus providing us with our second identifiable Arabic source text. In the absence of an Arabic edition of the *K. al-mawālīd*, I have based my comments here and below on its early thirteenth-century Latin translation *De nativitatibus*.\(^{72}\) While a careful comparison between the extant manuscripts of the Arabic text and those of the *Karmaprakāśa* might bring further details to light, such an exercise is beyond the scope of the present article; and as the instances below will show, the Sanskrit and Latin texts are generally so similar as to leave their common origin in little doubt.

Verse 5.7 appears to be a somewhat garbled version of the related doctrine known in Arabic as *an-namūdār* (from the Persian; generally Latinized as *animodar*), too brief for the immediate source to be identified.\(^{73}\) Chapters 6 and 7—*Ariṣṭādhikāra* ‘On fatality’ and *Ariṣṭabhaṅgādhikāra* ‘On cancellation of fatality’ (alternatively called *Jīvananirṇayādhikāra* ‘On the determination of life’)—are also closely based on Abū Bakr, with some of the material arranged slightly differently than in the Latin version.\(^{74}\) These chapters describe the division of nativities into four categories: those who are born dead or die immediately after birth; those who die in childhood; those who die young; and those who attain a full span of life—each with its own astrological criteria. This discussion is followed by material on the specific kinds and times of childhood illnesses according to the decans of the zodiacal signs, on the examination of the moon’s position on certain days following birth, and on the nativities of children abandoned by their parents. The *Karmaprakāśa* section on decans (6.16–23) is garbled and disorganized; interestingly, the same is true of the Latin versions of Abū Bakr’s work, suggesting corruptions occurring very early in the

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\(^{71}\) The opinion of Petosiris is reported in Antiochus 21, on which all surviving sources are based; see Porph. *Isag.* 38 (CCAG V 4: 210; an English translation is found in Holden 2009b) and Heph. 11 1,2; 111 10,5. For the Babylonian material, see Rochberg 1998: 73–76; for a full treatment of the ancient doctrine, Frommhold 2004: 70–172; for the figures of Nechepso(s) and Petosiris, Heilen 2015: 539–562 and Brennan 2017: 72–77.

\(^{72}\) Albubather, 1501 edition (translation dating to ca. 1218). The section relevant for the trutin of Hermes is chapter 3; an English rendering of the Latin is found in Dykes 2010: 91–93.

\(^{73}\) The Persian meaning of *namūdār* is ‘proof, model’. For the origin of the animodar doctrine, see Ptol. *Tetr.* 111 3.

\(^{74}\) See Albubather 9–10; Dykes 2010: 113–124.
manuscript tradition, prior to the east-west diffusion. Chapter 7 invokes the authority of a certain ‘Durvīthasa’; as confirmed by *De nativitatibus*, the name refers to Dorotheus of Sidon.

The brief chapter 8, *Śarīrādhikāra* ‘On the body’, details the physical characteristics of a native on the basis of the ruler of the (ascending?) decan. While the descriptions of the seven planets (largely a reiteration of 2.6–8) are too general for their source to be positively identified, the material is not based on the works of Sahl or Abū Bakr already discussed. The text (8.1) states that it is taken from ‘Yavana’ or possibly ‘the Yavanas’; the order in which the planets are presented, from Saturn to the moon, confirms an extra-Indian origin.

Chapter 9, *Āyurdāyādhikāra* ‘On the length of life’, is a faithful if condensed rendering of Abū Bakr’s version of longevity procedures based on the ἀφέτης or, to use the term most common in western literature since medieval times, the hyleg. These are similar to but not identical with procedures presented by other medieval Arabic-language authors, all largely resting on Persian astrological tradition and constituting varying syntheses of the doctrines of Ptolemy, Dorotheus and Vettius Valens. As in Abū Bakr, while the selection of the chief significator of life or *hillāja* (Ar. *hīlāj*, from Persian *hīlāg*), is explained in some detail in the *Karmaprakāśa*, there is no mathematical elucidation on calculating its directed motion (ἀφεσις) to the killing points. This is presumably why the technical Arabic term for such motion—*tasyīr*, met with in some later Tājika texts as *tāsīra*—is not found in the *Karmaprakāśa*. We do, however, find the important term khattakhutta (via Ar. *kadkhudāh* from Middle Persian, translating οἰκοδεσπότης), designating the planet having authority over the *hillāja* and determining the approximate years of life allotted to the native.

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75 See Albubather 9; Dykes 2010: 122 f. *Karmaprakāśa* 6.23 explicitly notes that the results for Virgo and Pisces have been omitted in their entirety (*noktāni kanyājaṣayoḥ phalāni*), which is true of the Latin editions as well.

76 Albubather 12 (6r): *Dixit Dorochius*. Later Tājika sources—including a passage from Nilakanṭha’s *jyotisa* section of the *Toḍarānanda* (1572), quoted by Balabhadra in *Hāyanaratna* 1.2; cf. note 134 below—mention an otherwise unknown authority called Durmukha (‘Ugly-faced’ or ‘Foul-mouthed’); this unflattering epithet could possibly represent a corruption of the foreign name, perhaps through scribal attempts at correction.

77 Albubather 12–13; Dykes 2010: 125–134.

78 For a discussion of the ἀφέτης doctrine, see Gansten 2012b. The relevant ancient sources are Ptol. *Tetr.* III 11, Vett. Val. III 3, and *Carm. astr.* III 11.

79 The Middle Persian form is *hīlāg*, Arabized as *hilāj*—not, as consistently assumed by Pingree (1976: 235–245; 1981a: 83, 97 f.; 1997: 83, 90; etc.), *haylāj*: as noted by Kunitzsch (1977: 49), medieval European transcriptions (*hylech*, *alhileg*, etc.), like the Sanskrit, all reflect a pronunciation with *i* rather than *ay*.

80 *Al-kadkhudāh* was commonly rendered in medieval Latin as *alcochoden*, with many variants.
The list of greater, middle and lesser years given by the seven planets when they fulfil this office (9.20) deviates slightly from the standard figures according to all available text witnesses; but the figure of 39½ for the middle years of the sun and moon does agree with Abū Bakr’s text.81

Chapter 10, Daśānayanādhikāra ‘On the calculation of periods’, begins (10.1–3) as a summary of the next section of the Kitāb al-mawālīd, on the directed motion of the ascendant through the terms (hadda, from Ar. ḥadd) and the aspects of the planets.82 These verses include Abū Bakr’s example of the ascendant being directed through the terms of Mercury, once using the technical designation kisimā (from Ar. qisma ‘division’) for such a period, but otherwise the generic Sanskrit word daśā. For the rest of the chapter, however, the daśās described are not based on directions (tasyīr, ἀφεσις), but rather on the so-called fardārāt, a mathematically far less demanding system probably of medieval Persian origin.83 No variant of the word fardār occurs in the Sanskrit text, nor is there any indication that the transition from one prognostic method to the other is at all intentional; the impression given is rather that of a misunderstanding. The fardārāt are not described by Abū Bakr, so that the passage discussing them must have been excerpted from some other, as yet unidentified Perso-Arabic source.84 The order in which the results of each planet’s period are described is the classical Indian one (following the days of the week).

81 The middle years of a planet are typically half the sum of its greater and lesser years (which in the case of the sun are 120 and 19, respectively, and for the moon, 108 and 25), but Abū Bakr uses a different formula for the sun and moon, adding half the greater years to the lesser and then dividing the sum by two. Abū Maʿshar’s Mudkhal (11 8) and the Latin translation of his Mukhtaṣar (iii 6, Burnett et al. 1994: 80 ff.) agree with the resulting figure of 39½ years for both the luminaries, while Kūshyār ibn Labbān’s tenth-century K. al-mudkhal fī sināʿat aḥkām an-nujūm (iii 6, Yano 1997: 178 f.) accepts it for the sun but keeps the standard figure 66½ for the moon. The Karmaprakāśa further assigns Jupiter 43½ years like Saturn, rather than the standard 45½, and rounds the 40½ years of Mars to 40.

82 Albubather 14; Dykes 2010: 135–138. For the terms in Tājika tradition, see Gansten 2018.

83 The fardārāt or firdārāt, with variants, are planetary periods of fixed lengths forming cycles of varying magnitudes, the least of which—totalling 75 years—is used for nativities, while greater cycles are applied to world events (mundane astrology). Both the etymology and the origin of the technique itself are unclear; see Kunitzsch 1979: 48 f. (justifiably characterizing the common derivation of the word from περίοδος—still upheld in Pingree 1997: 74, albeit with a softening ‘apparently’—as ‘pure conjecture’). Cf. also Burnett and al-Hamdi 1991/92, especially 299–302 on the transmission from Persian to early Arabic sources.

84 The planetary periods for a daytime nativity are given in a non-standard order (the north and south nodes of the moon intervening between Mercury and the moon itself); but thus far I have been unable to find a corresponding deviation in any Arabic source. It seems most likely to be an error originating with Samarasimha.
suggesting that this passage was reworked by Samarasiṃha rather than taken directly from a source text. We may further note the use of the technical term *dalīla* (Ar. *dalīl*) in the sense of ‘signification’ or ‘significator’, introduced here (10.8) and occurring frequently in following chapters.

Chapter 11, *Niḍhanādhiṅkāra* ‘On the end [of life]’, makes a return to the topic of the *hillāja* and discusses how to establish the precise time of death using Indian calendric parameters, though still without explaining the mathematical procedures properly underlying the method of direction. It also describes how to predict the cause of death, or of a brush with death (*apamṛtyu*)—‘by illness or by iron’—from the planet afflicting the *hillāja*. While this method appears to be derived from Ptolemy, the intermediary Perso-Arabic source is as yet unidentified. The text attributes the doctrine simply to ‘Yavana’; like the similarly attributed chapter 8 above, it is also very short—with its six verses in fact the shortest chapter of the *Karmaprakāśa*.

By contrast, chapter 12, *Doṣādhiṅkāra* ‘On defects’, is the longest chapter of the work, and is clearly based on Abū Bakr’s extensive list of astrological correlatives for various illnesses. Despite its length, the *Karmaprakāśa* chapter is only a partial summary of the material in the *K. al-mawālīd*, but the sequence of the material is largely the same, dealing in order with illnesses of the eyes, ears and tongue (including speech defects); hunchbacks; leprosy and other skin ailments; madness and idiocy; epilepsy and sharp pains (*śūla*, possibly a misunderstanding: the Latin version has paralysis); ailments of the heart, belly and spleen; bilious disease; impotence, genital deformity, sexual misconduct and excessive lust; hemorrhoids and boils; dwarfism; baldness; bad breath; bodily weakness; broken limbs; injuries to hands and legs; and general methods for determining the parts of the body vulnerable to illness as well as the time of its onset. Particular note may be made of the concept of ‘black bile’ (*kṛṣṇapitta*, 12.30), not found in pre-Islamic Indian medicine.

The first few verses of chapter 13, *Prakṛtyadhikāra* ‘On [the native’s] nature’, bring us back to the topic of directions through the terms begun in chapter 10. Based on the same section of Abū Bakr’s work, they clearly demonstrate Samarasiṃha’s lack of understanding of the mechanics of direction (*tasyīr*). Abū Bakr’s example nativity has 1° Gemini (expressed in ordinal numbers as the ‘second degree’) on the ascendant, with 5° of the terms of Mercury therefore yet to rise; he converts these 5° of ecliptical longitude into 4°40’

85  Cf. Ptol. *Tetr.* iv 9. For an overview of astrological prognostication of the length of life in classical antiquity, see Heilen 2015: 984–1021.
86  Albubather 53–89; Dykes 2010: 234–259.
of oblique ascension, which he equates with four years and eight months.\textsuperscript{87} Samarasimha’s version has no ascensional degrees but simply puts the longitude of the ascendant at $4^\circ40'$ Gemini and equates this with four years and eight months elapsed (not remaining) of Mercury’s period.

The remainder of the chapter is based on the immediately following section of the \textit{K. al-mawālīd}, treating the moral character of the native.\textsuperscript{88} Some parts of this section found in the available Latin editions of \textit{De nativitatibus} are missing in the \textit{Karmaprakāśa}; interestingly, most of these are also absent from a manuscript of \textit{De nativitatibus} dated 1458–59 (now in the Biblioteka Jagiellońska, Krakow), referenced by Dykes.\textsuperscript{89} As it stands, the \textit{Karmaprakāśa} (13.5–26) lists, in order, planetary configurations for courage, cowardice, irascibility, forbearance, shamelessness, bashfulness, eloquence, compassion, deceit and mendacity; further, for becoming a jester or entertainer, robber, thief, adulterer or adulteress, or a faithful husband; and finally, for generosity and greed.

3.3 \textit{Livelihood, Wealth and Poverty (Chapters 14–16)}

The \textit{Karmaprakāśa}’s main source of material on psycho-physical constitution, life and health is thus Abū Bakr, just as the main source of its introductory matters is Sahl ibn Bishr. The sources of the next section are less clear-cut. Chapters 14 and 15 both cover matters of wealth and occupation, the latter in greater detail, but still with some overlap, as reflected in the similar headings: chapter 14 is labelled \textit{Upajīvikādhikāra} ‘On subsistence’ or \textit{Karmapratyayādhikāra} ‘On the understanding of work’; chapter 15, \textit{Ājīvikādhikāra} ‘On livelihood’ or \textit{Hastakarmādhiṅkāra} ‘On the work of the hands’. The latter is in fact based on Abū Bakr, setting out methods for determining the general nature of a native’s work and his level of professional success as well as particular configurations for a variety of occupations: vendors of musk and perfumes, dyes, fruit and

\textsuperscript{87} The Latin edition actually has 4 degrees 4 minutes, using Arabic numerals; but as noted by Dykes 2010: 136 (n. 639), the correct figure has to be $4^\circ40'$ to agree with the conversion into 4 years and 8 months. \textit{Karmaprakāśa} 13.2 confirms both the number of degrees and minutes and the corresponding measure of time:

\begin{verbatim}
[...] haddabhāgā vedā yutāḥ kharṣutibhiḥ kalābhīḥ |
tataśamkhyaikābdāni sahaśṭamāsaiś ca ṭvārī [...] 
\end{verbatim}

Assuming a tropical zodiac, the figure $4^\circ40'$ would be correct for a geographical latitude around $28^\circ$ N, such as southern Iran (Abū Bakr was a Persian), whereas $4^\circ04'$ would require a latitude around $45^\circ$ N.

\textsuperscript{88} Albubather 15–52; Dykes 2010: 139–163.

\textsuperscript{89} MS BJ 793 I1; see Dykes 2010: xx. The chapters not found in this Latin MS are numbered 24–30 in Albubather (1501); the material omitted from the \textit{Karmaprakāśa} corresponds to chapters 23–31.
bark; farmers; merchants in various types of coarse or fine cloth including silk, wool and camel hair, or in lentils and grains such as barley, wheat, sesame and rice; those who deal in leather goods or in camels, donkeys, cows, horses, goats and other quadrupeds; sellers of, or workers in, pearls and gold; and craftsmen or labourers such as weavers, makers of woollen goods, carpenters and metalworkers, shoemakers, dyers, diggers, sailors, makers of tools and weapons, entertainers, physicians, hunters, fishermen and fowlers—all variously subdivided.90

For Chapters 14 and 16 (the latter entitled Dāridryādhikāra ‘On poverty’) I have thus far been unable to find any clear parallel texts, though the content as such is fairly detailed and conforms to standard patterns of medieval Perso-Arabic astrological discourse—prominently featuring term and triplicity rulers, sect factors, syzygies, orientality and occidentality, and the lots of fortune and wealth. Given the underlying textual confusion suggested by the available Latin versions, the question of whether these chapters are based on authentic sections of Abū Bakr’s text, subsequently lost in the western transmission, must, for the present, remain open.

The opening stanza of chapter 14 as given by the available text witnesses is, in its former half, almost certainly corrupt:

Wealth is the foundation here [in the world]; prior to that is the work undertaken. To elucidate that, he explained an opinion. There is a description (varṇanā). If the moon, coming out from under the sun, [forms] a muthaśila with the ruler of the terms of the previous last phase (tīthi), that [ruler] indicates the work.91

However, Nārāyaṇabhaṭṭa’s commentary implies a somewhat different reading. Text witnesses of the Daivajñasaṃtoṣaṇī (14.1) give two variant paraphrases, one fuller, the other seemingly abridged or incomplete:

90 Albubather 90–128; Dykes 2010: 294–324.
91 Karmapratikṣa 14.1 (found in mss K₁, K₂ and N, besides the editions):

artho hi mūlam iha tasya purāttakarma
tadvyaktaye matam abhāṣata varṇanāsti |
candro gatāntatithihaddabhujā dineśān
nirgatya cen muthaśilaḥ sa hi karmadarśi ||

The ‘previous last phase’ is the full or new moon (the last tīthi of the bright or dark half of the month, respectively) most nearly preceding the nativity; a muthaśila is an applying aspect.
Here, indeed, wealth is the foundation of a man. The cause of that wealth is the work previously undertaken, [that is], acquired. To elucidate, that is, clarify that, the preceptor Varṇana stated [his] opinion.92

Property is the foundation of a man. To elucidate that, he stated the opinion of the preceptor Varṇana.93

This meaning, which implies the reading varṇanasya for varṇanāsti—understanding Varṇana as a proper name—seems preferable to that of the received text. Even with this emendation, however, the half-stanza does give the impression of being rather awkwardly based on a non-Sanskrit original.

No author with a name approximating Varṇana is known from either Indian or Arabic sources, although the name could conceivably be a corruption of an Arabicized form of 'Hermes'.94 The doctrine of the moon's first application following the prenatal syzygy indicating the native's work is found in several sources, though without mention of the ruler of the terms.95 In any case, the phrase 'he explained', used not only by the commentator but in the text itself, was most likely taken over directly from an Arabic original: Indian astrological works very rarely attribute doctrines to particular authors (with the exception of deities or semi-divine sages).

3.4 **Siblings and Parents (Chapters 17–18)**

The next two chapters relate to one astrological place each: chapter 17 is named Sahajādhikāra 'On siblings' (belonging to the third place) and chapter 18, Pitrorariṣṭādhikāra 'On the fatality of the parents', although it does in fact treat the matter of parents (belonging to the fourth place) somewhat more broadly. Both chapters are, once more, based on Abū Bakr.96 Apart from consistently reinterpreting Abū Bakr’s use of triplicities as referring to...
the navāṃśa, chapter 17 is of interest chiefly for including a reference that is also present in the Krakow manuscript of De nativitatisibus but omitted from the printed edition. The last verse of the chapter refers to an otherwise unknown authority by the name Kuttha- or Kucchasena, called Albucate in Salio’s translation.

In chapter 18 we encounter the first instances of the word musallaha or muśallaha, derived from the Arabic muthallatha ‘triangle, triplicity’; 18.7 uses musallaha and navāṃśa in parallel, confirming that they are to be understood as synonyms. The same stanza includes two unusual expressions (va­jraha, saravilagna) for which I cannot provide satisfactory etymologies but which are taken by Nārāyaṇabhaṭṭa to refer to dvādaśāṃśas or twelfth-parts (δωδεκατημόρια)—an ancient zodiacal division, though not among those enumerated in the opening chapter of the Karmaprakāśa. Although the stanza appears to draw together a number of separate indications discussed by Abū Bakr in the chapters relating to parents, these do include, in the Latin translation, the twelfth-parts (duodenaria).

While this tendency to summarize and abbreviate sometimes obscures the relation of the Sanskrit text to its sources, parts of chapter 18 may derive from material preserved in the Krakow manuscript but absent from the Latin edition. The chapter ends with a verse summarizing in the form of a universal rule what in Abū Bakr’s text is a particular anecdote about the astrologer Abū l-ʿAnbas aṣ-Ṣaimarī (Latinized as Alanbes) meant to illustrate

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97 Dykes (2010: 201) hesitatingly paraphrases the Biblioteka Jagiellońska MS as saying that ‘the brothers will do the bad works of kings’. Karmaprakāśa 17.12 states that the native’s brothers will be nṛpakṣepakāḥ ‘overthrowers (or, possibly, revilers) of kings’.

98 K₁ and K₂ give kuchasenaḥ; N and the editions, kutthasenaḥ. (Kuccha- or kuttha- is required by the metre; ch for th is a common error in manuscripts.) The Sanskritized and Latinized versions could possibly refer to different parts of the Arabic name, Albu- rendering abū and indicating a hyionymic (similar to Albubather for Abū Bakr, or Albumasar for Abū Maʿshar) and ‘Kutthasena’ being a Sanskrit rendering of the personal name (ism). But the similarity between kuttha and cate suggests another possible, if more speculative, scenario involving a double textual corruption: in Arabic, ibn for abū, transforming the hyionymic into a patronymic; and in Sanskrit, sena (‘army’, a common last component in princely Sanskrit names) for sūnu ‘son’, translating that patronymic. The exact name that would correspond to kutthasena or cate in such a scenario is uncertain; elsewhere in the Karmaprakāśa (3.2, 13, 16), kuttha is used to render Ar. quwwa (f.) ‘strength’.

99 For vajraha, K₂ and N read vajjasa and vajjaha, respectively. For the roles of the musallaha/navāṃśa, dvādaśāṃśa and other zodiacal subdivisions in Samarasiṃha and later Tājika tradition, see Gansten 2018.
the broader principle of using directions or *tasyīr* to find the parents’ time of death, though neither Abū l-ʿAnbas nor directions are mentioned in the Sanskrit text.

### 3.5 Female Nativities and ‘Miscellaneous’ (Chapters 19–20)

At this point in the *Karmaprakāśa*, the connection to Abū Bakr’s *K. al-mawālīd* breaks off, and the last two chapters do not relate to particular horoscopic houses. Instead, chapter 19 is entitled *Strījātakādhikāra* ‘On female nativities’. Although this is a more common topic in classical Indian astrological works (where it is often assigned separate chapters) than in Greek or Perso-Arabic ones, the *Karmaprakāśa* explicitly relies on non-Indian, as yet unidentified sources. Verse 19.1 states that while the principles outlined for men with regard to length of life and similar topics apply equally to the nativities of women, Yavana or the Yavanas have laid down five topics peculiar to women: the husband’s position and affection for his wife, children, virtue, and happiness. The remaining stanzas confirm by repeated use of lots and triplicity rulers that Samarasiṃha’s immediate source is an Arabic one.

Despite its name, chapter 20, *Miśraprakīrṇādhikāra* ‘On diverse and miscellaneous matters’, is in fact largely homogenous. Up to the last four verses, which eulogize the work itself (20.8–9) and outline Samarasiṃha’s paternal ancestry (20.10–11), it presents a succinct classification of nativities into four groups with respect to wealth and social standing: those who are fortunate or unfortunate, respectively, throughout life, and those who go from misfortune to fortune or vice versa. According to the text (20.7), this basic model of stratification was included to resolve the confusion of methods presented by previous authors in connection with occupations. The earliest Arabic work in which it is found is ‘Umar ibn al-Farrukhān aṭ-Ṭabarī’s (d. ca. 815) own *Kitāb al-mawālīd*—likewise preserved in Latin translation under the generic title *De nativitatibus*—which thus becomes our last identifiable Arabic source text.

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100 Albubather 161 (misprinted as 191); Dykes 2010: 215–216. The Latinized word used for ‘direction’ is *athazir* (from Ar. *at-tasyīr*).

101 For ‘female nativities’ (*strījātaka*) in early Indian astrology, see Pingree 1978: I 27–37; for examples from classical texts, cf. Varāhamihira’s *Bṛhajjātaka* 24; Kalyāṇavarman’s *Sārāvalī* 46; Vaidyanātha’s *Jātakapārijāta* 16; etc. Sezgin (1979: 145) mentions a single Arabic work of possible relevance to this topic, though I have not seen it: Abū Ma’shar’s *K. mawālīd ar-rijāl wa-n-nisāʾ* (Book on the Nativities of Men and Women).

102 For the relevant passage in Latin translation, see Omar 111 1; for an English rendering of the Latin, Dykes 2010: 47 f. ‘Umar himself attributes his fourfold stratification to ‘the philosopher’ in a hitherto unidentified *Book of Allegories*; as noted by Dykes (loc. cit. n. 224), it bears a certain resemblance to the model of the so-called *Liber Aristotilis*.
Samarasiṃha’s account of his family lineage—from the royal minister Caṇḍasiṃha through Śobhanadeva and Sāmanta to Kumārasiṃha—is remarkable chiefly for omitting both his own name (at least in full) and his date. As noted above, Samarasiṃha is dated by Pingree to any time between 1060 and 1365, an estimate based on his great-great-grandfather serving a king of the Caulukya dynasty. This argument clearly rests on the reading caulukyakṣītipāla at Karmaprakāśa 20.10, which is almost certainly correct, although the printed editions and two of three manuscripts available to me give the variant reading trailokyakṣītipāla ‘king of the three worlds’—tritely grandiose but worthless from the point of view of historical information.103 Tejaḥsiṃha, whose precise relationship (if any) to Samarasiṃha is unknown but who belonged to the same Prāgvāṭa community, likewise claimed a family connection with the Caulukyas in a ministerial capacity.104 As Tejaḥsiṃha is not only known to have written a commentary on a work by Samarasiṃha, but also borrows from the latter in his Daivajñālāṃkṛti, authored in 1337, we can safely assume that Samarasiṃha wrote no later than the early fourteenth century, and very possibly earlier.105 The 1274 date suggested for the Karmaprakāśa by one of Pingree’s sources is thus quite plausible.

Although Samarasiṃha’s name is not explicitly given in the Karmaprakāśa, the very last verse (20.11) does contain a punning allusion to it, referring to the author as Smara, the god of love, extracting the perfume from the pericarp of the lotus flower of Tājika for the pleasure of astrologer bees.106 While there is

103 The reading caulukyakṣītipāla is supported by ms N, trailokyakṣītipāla by K₁ and K₂. The remaining mss (or the parts of them available to me) do not contain the stanza in question.
104 For Tejaḥsiṃha, see Gansten 2017: 118–123, correcting the information provided by Pingree (1970–94 A3: 89; 1981a: 99; 1997: 82).
105 Tejaḥsiṃha’s role as commentator on Samarasiṃha, not mentioned in any of Pingree’s publications, is referred to in passing by Balabhadra (Hāyanaratna 5.1: āha samarasiṃhah [...] taṭṭīkākṛt tejaḥsiṃho ‘pi). For an instance of Tejaḥsiṃha borrowing from Samarasiṃha, see the comment on quotation ‘b’, p. 121 below. It also seems pertinent to note that Daivajñālāṃkṛti is synonymous with Gaṇakabhūṣana (one of the alternative titles of the Karmaprakāśa), both meaning The Astrologer’s Ornament.
106 Karmaprakāśa 20.11cd:.

tatsūnunā gaṇakabhirgamude smareṇa
gandho ‘byudaddhriyata tājikapadmakośāt ||

Traditional imagery of Smara or Kāma includes both flowers and bees, forming the arrows and string, respectively, of the deity’s bow. Tājikapadmakośa is also the name of a non-theoretical work predicting the outcomes of the placements of the planets in the twelve horoscopic houses in an annual revolution figure, authored by the Brahman Govardhana, probably in the sixteenth century; very possibly the choice of title reflects the author’s acquaintance with the Karmaprakāśa.
no doubt that his actual name was Samarasiṃha (‘a lion in battle’), the difference in pronunciation between this and Smarasiṃha (‘a lion in love[making]’) would have been minimal, and the latter variant is occasionally met with in Tājika literature.107

4 An Incomplete Text?

Although Samarasiṃha is unambiguous in naming the Gurutājikatantradīpa or Gurutantra (Great Teaching) by ‘Khindika’ as his source, we can thus discern at least five actual main sources for the Karmaprakāśa: Sahl ibn Bishr (chapters 1 and 3); Abū Ma’shar or, less likely, ‘Imrān ibn Aḥmad (chapter 4); Abū Bakr (chapters 5–7, 9–10, 12–13, 15 and 17–18); ‘Umar aṭ-Ṭabarī (chapter 20); and one or more Arabic authors so far unidentified (chapters 8, 11, 14, 16 and 19). In addition, occasional verses in several chapters have unknown Arabic sources, and chapter 2 depends largely on Indian material, also unidentified. The combination of several Arabic source texts supports the hypothesis that the Great Teaching was an Arabic compendium of astrology compiled by or attributed to al-Kindī. All identified authors whose dates are known belong to the ninth century, indicating that such a compendium may have been created not much later. Chapters 8, 11 and 19, all based on unidentified Arabic material, invoke the authority of ‘Yavana’, and while the Sanskrit word was by this time used indiscriminately to refer to any western foreigner—including Persians and Arabs—the possibility that it is employed here in the original sense of ‘Greek’, perhaps to render the Arabic yūnān with the same origin and meaning, is certainly worth considering, particularly as one of these chapters describes a distinctively Ptolemaic doctrine not discussed by most medieval Arabic sources.108

As already noted, the list of topics covered by the Karmaprakāśa appears to be incomplete. The order of the material based on Abū Bakr largely agrees with the Latin edition of De nativitatibus, swelling the section relating to the

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107 Such readings are secure for metrical reasons. The Tājikamuktāvali (v. 41) of Tuka Jyotirvid (fl. 1549–50) and its probable autocommentary Tājikamuktāvalitippani (3.39), both quoted by Balabhadrā without distinction (Hāyanaratna 7.2, 2.3), use the form smarasiṃha. (For these works and their author, not discussed by Pingree, see Gangsten 2017: 123–125.)

108 For Arabic translations and reception of the works of Ptolemy, see Sezgin 1979: 41–48. A commentary on Ptol. Tetr., no longer extant, is attributed to ‘Umar aṭ-Ṭabarī, who, as already seen, is one of the likely sources of the Karmaprakāśa. It would thus be quite possible for Ptolemaic ideas to have found their way into a compendium used by Samarasiṃha.
first horoscopic house with discussions of illnesses and occupations—otherwise belonging to the sixth and tenth houses, respectively—immediately prior to the section on wealth (second house).  

109 These sections are followed in the *Karmaprakāśa* by chapters on the third and fourth houses, as seen above; but the remaining six houses are conspicuously absent. The chapters in *De nativitatibus* corresponding to those houses cover the topics of children, marriage and sexual relations, circumstances of death, journeys, friends, and enemies, none of which is discussed in the *Karmaprakāśa*.  

110 That Samarasiṃha should have considered such topics—several of which have been mainstays of astrological consultations since antiquity—of insufficient interest to merit inclusion in his text is almost inconceivable, and we are thus left with two alternatives: either Samarasiṃha lacked access to material (from Abū Bakr or any other Arabic-language source) dealing with the house topics in question, or else the version of the *Karmaprakāśa* that has come down to us is incomplete, with a number of chapters missing between what are now chapters 18 and 19. For such a loss of text to leave no trace in the form of variant readings in the extant witnesses, it would have had to occur very early in the transmission history.

At present we have no way of determining with certainty which is the more likely alternative; but we may note a further omission, which could indicate that the text we have is not the complete *Karmaprakāśa*. As described above, Samarasiṃha states in the opening verses of the work that he will explain astounding things, including ‘[the prediction of] the flavours of food’. Discussions on food or meals—with headings like *bhojyavicāra* or *bhojanacintā*—are common in later Tājika texts, though they typically occur in the context either of interrogations or of day-to-day predictions within an annual prognosis.  

111 These sections are always found near the end of the respective works; the same is true of the treatment of meals in Sahl’s *Kitāb fi l-masāʾil wa-l-aḥkām*, on which the Tājika material is partly based.  

112 If the *Karmaprakāśa* did originally contain a section on food, it very possibly followed the same pattern

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109 This agreement between the *Karmaprakāśa* and *De nativitatibus* demonstrates that the sequential arrangement of topics dates back to an Arabic source common to both eastern and western transmissions, and possibly to Abū Bakr himself. While retaining this arrangement, the Latin edition carries separate headings for the sixth and tenth places—chiefly, it seems, for the sake of formal completeness, as very little material is actually included under these headings.

110 The circumstances of death are briefly touched upon, as noted above, but not in relation to the eighth place of the horoscope, and the material does not derive from Abū Bakr.

111 For examples, see *Prāśnatantra* 3:130–143; *Tājikasāra* 4:92–94; Nilakaṇṭha’s *Varṣatantra* 18:36–47; *Tājikabhūṣaṇa* 8.25; *Prāśnavaiṣṇava* 14.1–11; *Hāyanaratna* 8.12.

112 See chapter 18 in the translation included in Dykes (forthcoming).
(though this does not help us to understand the relevance of a discussion of food in a treatise on genethlialogy). Pingree, while stating that the topic ‘evidently did not have much attraction for the older Greek astrologers’, gives a valuable list of Hellenistic, classical Indian and Byzantine sources, some of the latter based largely on Arabic works; but in the absence of an actual treatment of the topic by Samarasiṃha, speculation on his possible sources is pointless.

5 Samarasiṃha’s Authorship Reflected in Later Sources

Following its initial chapters on general principles, the Karmaprakāśa is thus exclusively concerned with genethlialogy or natal astrology. There is no trace of the annual prognostication (varṣaphala) with which later Tājika tradition is more or less synonymous, nor of its other chief topic, interrogations (praśna). This difference in content between the Karmaprakāśa and subsequent Tājika literature is particularly striking in view of the authority that Samarasiṃha’s name commands among later generations of authors; and when we examine the actual references to Samarasiṃha found in the works of these authors, what we find is, with very few exceptions, passages that do not belong to the Karmaprakāśa at all. One such instance has already been noted above.

I have previously demonstrated that the popular Praśnatantra, commonly but mistakenly attributed to Nīlakaṇṭha, has for its core some 170 stanzas in āryā metre comprising a Sanskrit epitome chiefly of Sahl ibn Bishr’s work on interrogations (K. fi l-masāʾil wa-l-ahkām), with some additions from his Introduction and from one or two other Arabic-language sources. This Sanskrit epitome is attributed by the commentator Viśvanātha to Samarasiṃha, an attribution indirectly supported by Viśvanātha’s junior contemporary Balabhadra, who in his Hāyanaratna quotes several of the same stanzas from ‘Samarasiṃha’, without mentioning the title of the work. Not one of these 170 stanzas forms part of the Karmaprakāśa as we have it, nor are they limited to the topics noted above as missing from that text (such as marriage or children). More decisively, the Praśnatantra material attributable to Samarasiṃha is metrically uniform and

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113 Pingree 1978: 383 f.
114 See note 67.
115 See Gansten 2014.
refers repeatedly to astrological interrogations, whereas the *Karmaprakāśa* is metrically highly varied and concerns itself only with genethlialogy. We are thus left to conclude that the original version of the *Praśnatantra* was a separate work on interrogations authored in Sanskrit by Samarasiṃha on the basis of Arabic source texts. The extant text of the *Praśnatantra*—with additions from both Tājika and non-Tājika works, some as late as the sixteenth century—is widely published; Samarasiṃha's original text may or may not have included stanzas no longer present.

Apart from the *Praśnatantra*, the two main sources of quotations from Samarasiṃha are, to my present knowledge, Balabhadra’s *Hāyanaratna* on annual prognostication and Viśvanātha’s *Prakāśikā* commentary on Nilakaṇṭha’s *Tājikanīlakaṇṭhī*. All three sources raise important questions, particularly when examined together. The stanzas quoted from Samarasiṃha by Balabhadra fall into two categories: those addressing fundamental concepts and definitions applicable to all branches of Tājika astrology, and those dealing specifically with annual prognostication or *vārsa-phala*. Both types of quotation are also found in Viśvanātha’s commentary. Intriguingly, although Balabhadra quotes no verses explicitly on the subject of interrogations or *praśna*, several of the verses he does quote also appear, with minor variations, in the *Praśnatantra*, which is concerned almost exclusively with *praśna*. In one such instance, the received text of the *Praśnatantra* does in fact read rather

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116 All stanzas attributed to Samarasiṃha by Viśvanātha are in *āryā* metre. Similarly, out of 138 full or partial stanzas attributed to Samarasiṃha (with no title mentioned) in Balabhadra’s *Hāyanaratna*, 137 are in *āryā* and a single stanza (in section 5.2) in *śloka* metre. This one exception seems highly likely to be a misattribution, of which there are other instances in the *Hāyanaratna*. Both authors also quote from the *Karmaprakāśa*, giving the title as *Manuṣyajātaka*; see section 6 below.

117 For the metres used in the *Karmaprakāśa*, see note 42.

118 The portions of the extant *Praśnatantra* attributable to Samarasiṃha comprise verses 1.7–10, 52–55; 2.1–8, 13–29, 31–36, 39–131; 3.1–5, 87–114, 130–132; and 4.49–61. See Gansten 2014 for details.

119 The *Tājikabhūṣaṇa*, while not quoting Samarasiṃha directly, displays a familiarity with his work by including (in 1.3) a pastiche of *Karmaprakāśa* 1.2 (for which cf. note 23 above):

\[
\text{gargādyair yavanaiś ca romakamukhaiḥ satyādibhiḥ kīrtitaṃ śāstraṃ tājikasaṃjñakaṃ niravadhiṃ tadvāridhiṃ dustaram |}
\text{etat tājikabhūṣaṇam navatarā tartum samarthaḥ tarir vyaktārtham vimalaktīvākīlāsathākarnānukīrṇam bhrṣam ||}
\]

‘The doctrine known as Tājika is celebrated by Garga and other [sages], by the Yavanas headed by Romaka, and by Satya and other [Brahmans]. This *Ornament of Tājika*, of clear meaning and filling the ears entirely with the delight of splendid words and expressions, is a new vessel capable of crossing its boundless and insurmountable ocean.’
like a passage on annual predictions, with the word ‘year’ occurring three times in two verses.¹²⁰

| ‘Samarasiṃha’ | Praśnatantra |
|----------------|--------------|
| ‘Will I have progeny in this year?’ If [a client asks thus and] the rulers of the ascendant and the fifth [house] partake of an itthaśāla, it will certainly happen in that very year. Or if they should both occupy each other’s domicile, then too progeny should be predicted in that year—from a benefic configuration, not otherwise.ᵃ |
| ‘Will there be progeny in this year?’ If [a client asks thus and] the rulers of the ascendant and the fifth [house] partake of an itthaśāla, it will certainly happen in that very year. Or if they should both occupy each other’s domicile, then too progeny should be predicted in that year—from a benefic configuration, not otherwise.ᵇ |

ᵃ Quoted in Hāyanaratna 6.6:

```
asmin varṣe 'patyaṃ mama bhavitā lagnapañcamādhīśau |
   bhajato yadītthaśālaṃ tatraivābde bhaven nūnam ||
yadi vā mitho grha gatau syātāṃ cet saṁtatis tad api |
   vācyā tasmin varṣe śubhayogād anyathā na punah ||
```

ᵇ Praśnatantra 2.41–42:

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asmin varṣe 'patyaṃ bhavitā vilagnapañcamādhīśau |
   bhajato yadītthaśālaṃ tatraivābde bhaven nūnam ||
yadi vā mitho grha gatau syātām cet saṁtatis tad api |
   vācyā tasmin varṣe śubhayogād anyathā na punah ||
```

(Available editions and MSS all agree on the metrically deficient reading of 41b.)

Here the two versions are virtually identical; but the following example concerns two passages which, while composed in the same metre and more or less interchangeable with regard to meaning—being clearly based on the same source text—are so different in phrasing that we cannot plausibly blame textual corruptions, but must conclude that one constitutes a deliberate reworking of the other.¹²¹

¹²⁰ The Arabic source of this passage is probably Sahl’s K. fi l-masāʾil (5,2 in the forthcoming Dykes translation, the numbering of which will be followed below), which, however, does not include any mention of the current year; cf. note 124.
¹²¹ The Arabic source of this passage is Sahl’s K. fi l-masāʾil 11,2–9.
‘Samarasiṃha’

‘Will I receive honour from the king?’ [If a client asks thus], by a friendly aspect between the rulers of the ascendant and the eleventh house, it will happen quickly; by an inimical aspect, only after many days. If the ruler of the eleventh house occupies an angle, joined to or aspected by the moon, the result is full; in a fixed sign it will be complete, little in a movable one, and half in a mixed one. If Jupiter occupies an angle in its exaltation and so on, the results of the king’s goodwill are complete, [but] if afflicted by malefic planets, it will come to a swift end.a

Praśnatantra

In a question saying: ‘Will I receive the honour and so forth that I desire from the king or not?’, if there is a muthaśīla by friendly aspect between the rulers of the eleventh place and the ascendant it will happen soon; by an inimical aspect, after many days. And if the ruler of the eleventh place and the moon have a kambūla in an angle, it should be predicted that [the client’s] desire is fulfilled. If it occupies a [sign that is] movable, fixed or of dual nature, the result is [according to] its own designation. If the slow[er planet] is afflicted by malefics, the desire, having been realized, is quickly destroyed [again]; if it is not joined by malefics but by benefics, the desire will be attained by means of a dignity.b

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a Quoted in Hāyanaratna 6.12:

```plaintext
nṛpater gauravalābhō me syād iti lagnalābhapatyoṣ ca |
snehadrśā śīghraṃ syād ripuḍṛṣṭyā bahudinaṁ eva ||
āyeśe kendrasthe śaśiyutadrṣte ca pūrṇapalam asti |
sthirarāśau paripūrṇam care 'lpam ardham bhaven miśre ||
devaśura kendragate svoccaṅgata ca nṛpaśubhāśā |
pūrṇapalā krūragrahanipūḍite śīghranāśaḥ syāt ||
```

b Praśnatantra 2.123–125:

```plaintext
nṛpater gauravalābhāśādī mama syān na veti ca praśne |
āyeśalagnapatyoḥ snehadrśā muthaśile drutam bhavatı | |
ripuḍṛṣṭyā bahudivasaṁ kendre cāyeśakambūle |
vācyā pūrṇavāśā carsthiradvibhāvaŋca svanāṁapalām ||
mande krūropahate bhūtvāśaṁ praṇāśam upayāti |
krūrayukte ca śubhayuy adhikāravaṇe labdhyaśā ||
```

The metrical variant of 124cd, with eight feet (guna) consisting of four morae (mātra) each except for the penultimate, which has five, recurs in several quotations from Samarasilima found in the Hāyanaratna. The ca in 125c, however, seems spurious and has been eliminated in translation.
While neither version refers to the current year, it is surely significant that the word praśne (‘in a question’) is absent from the variant quoted by Balabhadra.122

A possible explanation of these textual peculiarities would be that Samarasiṃha authored at least two independent or semi-independent works in addition to the *Karmaprakāśa*: one—the original *Praśnatantra*, based on Sahl—dealing with interrogations or praśna, the other with annual revolutions or varṣaphala; and that he included in the latter a certain amount of reworked material imported from the former.123 Balabhadra’s *Hāyanaratna*, being chiefly concerned with varṣaphala, would naturally favour the latter variants.124

In this connection it will be useful to examine some of Viśvanātha’s statements about Samarasiṃha’s works in the *Prakāśikā* commentary. The most substantial section of the *Praśnatantra* derived from Sahl through Samarasiṃha is introduced (2.1) with the words: ‘Now follows the investigation of questions pertaining to the individual places [of the horoscope, as found] in the *Praśnatantra* related in the *Tājikaśāstra*.125 If we assume that *Tājikaśāstra* is to be taken as the designation of an actual text, then this suggests that, to Viśvanātha’s mind at least, the original *Praśnatantra* did form part of a larger work. His commentary on Nilakanṭha’s *Samjñātantra* 2.52 gives us a further piece of the puzzle as he remarks, before quoting a verse on inauspicious configurations: ‘For that reason the plain meaning of this is clearly stated in the *Samjñātantra* [of the] *Tājika* authored by Samarasiṃha.’126 Another section of the *Praśnatantra* is introduced (3.1) with the simple phrase tājike samarasiṃhe.

122 Of the text witnesses used for the forthcoming edition of the *Hāyanaratna*, a single, fairly late ms (Koba Gyan Tirth 19-187, dated 1833–34 ce) does actually give a reading much closer to the *Praśnatantra* version, but with the crucial word praśne replaced with varṣe ‘in the year’.

123 It is, of course, also possible that Samarasiṃha had access to a work on annual revolutions composed by Sahl (or to excerpts from it), in addition to the K. fi l-masāʾil, and that it was Sahl himself who incorporated material from one work in the other. Ibn an-Nadīm attributes a K. taḥāwīl sinī l-mawālīd (*Book of Revolutions of the Years of Nativities*) to Sahl, but no ms of this text apparently survives. See Ullmann 1972: 31; Sezgin 1979: 128.

124 As noted above (see note 120), *Praśnatantra* 2.41–42 on children has the appearance of dealing with annual predictions rather than interrogations and may have been included in this text by mistake. As remarked in Gansten 2014: 116, these two stanzas are very close to *Praśnatantra* 2.25cd–27ab with regard to technical content, and both may ultimately derive from the same passage in Sahl’s K. fi l-masāʾil (5.2). Another example of material migrating from different parts of Samarasiṃha’s writings into the received text of the *Praśnatantra* is discussed below (cf. notes 131 and 137).

125 atha pratyekabhāvapraśunakanirupānām tājikaśāstroktapraśnatantere.

126 yataḥ kāraṇāt tatra samarasimhahartatājikasamjñātantere sphuṭam prakāṣṭārtham uktaṃ asti.
It thus seems reasonable to assume that Samarasiṃha wrote, in addition to the Karmaprakāśa, a set of works known collectively by generic titles such as Tājika[śāstra] or Samarasiṃha[tājika] and comprising a Saṃjñātantra on fundamentals of Tājika astrology, a Praśnatantra on interrogations, and a work on annual revolutions, probably called *Varṣatantra. Stanzas on these three topics attributed to Samarasiṃha but not found in the Karmaprakāśa are in the same āryā metre, accentuating the underlying unity of the texts.

6 The Karmaprakāśa and the Tājikaśāstra

Although familiar with the Karmaprakāśa, Viśvanātha appears to have been ignorant of the identity of its author. This is not so strange as it may seem: as discussed above, the text of the Karmaprakāśa proper does not actually mention Samarasiṃha’s name. Nevertheless, we can be fairly certain that Samarasiṃha did author the Karmaprakāśa, for three reasons. First, as evinced by the colophons of many (but not all) manuscripts and corroborated by Balabhadra,127 there is a tradition to that effect, even if Viśvanātha was unaware of it. Second, as was also previously mentioned, the last verse of the Karmaprakāśa does contain a pun on the author’s name; and third, stanzas on fundamental Tājika doctrines quoted by other authors from what we may now tentatively call Samarasiṃha’s Tājikaśāstra have very marked similarities—often word for word, though in different metres—with corresponding passages in the Karmaprakāśa, though the latter are occasionally more concise. Two brief examples will suffice for the present:

| ‘Samarasiṃha’ (Tājikaśāstra) | Karmaprakāśa |
|-------------------------------|--------------|
| Red, white, green, pink, grey, whitish, many-coloured, black, golden, yellow, variegated, and brown are the colours of [the twelve signs] beginning with Aries.⁠¹ | Red, white, parrot-coloured, pink-hued, grey, whitish, variegated, black, golden, yellow, variegated, and brown: these are the colours of the bodies of [the twelve signs] beginning with Aries.⁠² |

127 See note 134.
In the daytime and in the former [bright] fortnight, in a nativity or a question, Saturn placed in a male sign does little harm, but much harm if the opposite. Mars at night, in the latter fortnight, and placed in a female sign, does little harm in a nativity or a question, but much if the opposite.\(^c\)

On the three occasions that Viśvanātha quotes the *Karmaprakāśa* in his commentary, he refers to it only by title (as the *Manuṣyajātaka*), never by author; and on one such occasion, he adds: ‘[This] is also said in Samarasiṃha’\(^{128}\) Further on, in the context of a disputed reading, Viśvanātha

\(^{128}\) *uktaṃ ca manuṣyajātaka [...] samarasimhe ṭy uktam asti* (ad *Saṃjñātantra* 2.36). The stanza quoted from the *Karmaprakāśa* is 3.9.
states: ‘However, in Samarasiṃha and likewise in the Yavanatājika and likewise in the Manusyaṭāṭaka, the reading is [...]’. Both ‘Samarasiṃha’ and the Karmapraśnatantra are then quoted verbatim in the gloss: it is ‘Samarasiṃha’ that contains the exact phrase discussed (lagnād dvitiyabhanāt), while the Karmapraśnatantra (4.4) includes a very similar one (lagnād dvitiyāc ca). The reference to a Yavanatājika, not quoted, remains unclear. None of the stanzas that Viśvanātha explicitly attributes to Samarasiṃha is found in the Karmapraśnatantra, although, as noted above, those on general topics (such as aspect doctrine or lots) have close parallels—always in other metres—in that text.

As for Nilakaṇṭha, he was not only familiar with Samarasiṃha’s Tājikaśāstra himself, but also expected his readers to be so. This is clear from a reference found in the Saṃjñātantra of his Tājikanīlakaṇṭhī (2.51–52), which includes a partial quotation:

From the example beginning If the moon occupies Aries [with] Saturn, others say that itthaśāla and the other [configurations apply] to a slower and a swifter [planet] occupying a single sign. That is incorrect, since it is clearly said there that an itthaśāla of a fallen [planet] with [another] fallen [planet, or] of an enemy with an enemy, destroys the object [asked about].

\[\text{paraṃ tu samarasiṃhe tathā yavanatājike tathā manusyaṭāṭike [sic] lagnād dvitiya-bhanād ity eva pāṭho 'sti (ad Saṃjñātantra 3.24), reading manusyaṭāṭake for what is almost certainly a scribal error. (Though the mistake is present in all three editions at my disposal, the actual quotation from the Karmapraśnatantra at the end of the same gloss is preceded by the correct title: tathā coktaṃ manusyaṭāṭake.) The disputed phrase from ‘Samarasiṃha’ is also quoted and discussed by Balabhadra in Hāyanaratna 4.2.}

Pingree 1970–94 A5: 326 lists ten mss of Tājika works attributed to ‘Yavana’, one with the title given as Yavanatājika. I have not seen any of these texts. On the other hand, a possible reason for Viśvanātha not actually quoting from the Yavanatājika could be that he is referring not to a Sanskrit text, but to an Arabic one. A few sentences earlier Viśvanātha had invoked ‘the school/opinion of the Yavanas’ (yavanānāṃ mate), which could conceivably denote contemporary Muslim astrological practice.

The same is true of Praśnatantra 4.49–57, 60–61 (at the very end of the text, derived from Sahl’s Introduction rather than his work on interrogations), which correspond minutely to Karmapraśnatantra 2.10–14; 3.4–7, 9, and most likely formed part of Samarasiṃha’s Saṃjñātantra rather than his original Praśnatantra. For an actual borrowing between the Tājikaśāstra and the Karmapraśnatantra, see note 135.

\[\text{mesasthe 'bje śanīyādṛṣṭāntān mandaśīghrayoh | ekarkṣāvasthitāv itthaśālādīn āpare jaguḥ | tad ayuktam nicagasya nicena ripunā ripōh | itthaśālāḥ kāryanāsī utkam tatra yataḥ sphaṭam |}

The point Nilakaṇṭha is making is that, since no two planets share the same sign of fall, an itthaśāla or application between two fallen planets must be formed between different signs.
Viśvanātha’s commentary gives the original verses in full and identifies them as originating with Samarasiṃha, an attribution corroborated by Balabhadra. The opening of Nilakaṇṭha’s Varṣatantra is likewise a pastiche on a stanza by Samarasiṃha—most probably from his own *Varṣatantra—which we know from a quotation in the Häyanaratna:

| ‘Samarasiṃha’ (Tājikaśāstra) | Nilakaṇṭha: Varṣatantra |
|-------------------------------|-------------------------|
| In general, [true] understanding does not shine forth for men in [considering] the results of genethlialogy (jātaka), which are applied to long [times]. Therefore, the annual results proclaimed by the Tājikas are elucidated here.\(^a\) | Because the results of the periods related in [texts on] nativities (jātaka) clearly give [only] the results of large [periods of] time, [and] the understanding of the astrologer does not shine forth in [using] them, therefore I shall explain the results of the year from the ancient Tājika [doctrine].\(^b\) |

\(^a\) Quoted in Häyanaratna 1.2:
prāyo na jātakaphale ciraprayojye matiḥ sphurati puṃsām |
tenātra häyanaphalaṃ prakāṣyate tājikaproktaṃ ||

\(^b\) Varṣatantra 1.2:
jātakoditadosāphalaṃ ca yat sthūlakālaphaladaṃ sphyuṣam nṛṇaṃ |
tatra na sphyruṣa daivavinmatis tad brave ’bdaphalam āditājikāt ||

An earlier and even closer pastiche of Samarasiṃha’s verse is found in Tejaḥsiṃha’s Daivajñālaṃkṛti 1.2 (1337; cf. note 105):
prāyo ’tra jātakaphale bahukālasādhye
buddhir nṛṇaṃ sphyruṣa no khalu duḥkhasādhye |
tat tājikoktam anuvacmy anubhūya pūrvaṃ
samkṣipya vārṣikavilagnaphalaṃ sphyuṣārthaṃ ||

‘In general, understanding does not shine forth for men in [considering] the results of nativities (jātaka), which are produced with much [expenditure of] time [or: for long periods of time] and with much difficulty. Therefore, I relate the results of the annual horoscope proclaimed by Tājika [teaching], which are clear in meaning, having first verified and abbreviated them.’

\(^133\)
mesasthe ’bje šaninā karkasthe bhūbhuvā striyāṃ kavinā |
makarasaste gurunā saha minasthe jēna na śubham ca ||
yadi nīco nīcena ca muthaśilakāri tathā ripur dvīsatā |
tat kambūlaṃ nēṣṭaṃ candro ’pi vināśako ’muṣmin ||

These two stanzas are also quoted (with the minor variation tadvat tat kambūlaṃ in the penultimate pāda) in Häyanaratna 3.3. The former stanza is based directly on the explication of ghayr al-qabūl or non-reception in Sahl’s Introduction (358–60).
Of the *Karmaprapākāśa*, however, Nilakanṭha appears to have been ignorant. He neither quotes nor makes any mention of it; moreover, the technical terms *hillāja* and *khattakhutta*—explained in the *Karmaprapākāśa* as discussed above—are mistaken both by Nilakanṭha and by much of the later Tājika tradition for the personal names of earlier authorities.134 This circumstance strongly suggests that Nilakanṭha had not actually read the *Karmaprapākāśa*, perhaps even that he was unaware of its existence, which in turn may indicate that the *Karmaprapākāśa* never achieved the same circulation as the *Tājikaśāstra*. Balabhadra’s *Hāyanaratna*, which is a nibandha or meta-commentary drawing on many important expositions of Tājika, does contain a single reference to the *Karmaprapākāśa* (under the title *Manusya-jātaka*), which he recognizes as authored by Samarasiṃha.135 Despite having at least some acquaintance with the *Karmaprapākāśa*, however, Balabhadra—whether solely out of respect for his guru’s brother, or because he was unfamiliar with certain parts of the work (perhaps due to an incomplete manuscript)—perpetuates the misunderstanding of *hillāja* and *khattakhutta* as personal names.136

The relative dating of the *Tājikaśāstra* and the *Karmaprapākāśa* cannot, perhaps, be conclusively settled on purely text-internal grounds; but one or two points of interest may be noted. First, as discussed above, while the verse just quoted from the *Tājikaśāstra* contrasts the Tājika approach with that of genethlialogy (*jātaka*), the *Karmaprapākāśa* specifically addresses Tājika genethlialogy. This difference in focus may reflect a development in Samarasiṃha’s

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134 Balabhadra in *Hāyanaratna* 1.2 quotes this stanza from the *jyotiṣa* section of the Ṭodarānanda, completed by Nilakanṭha in 1572:

\[
\text{khattakhutto romakaś ca hillājo dhīsanāhvayaḥ |}
\text{durmukhācārya ity ete tājikasya pravartakāḥ |}
\]

‘Khattakhutta, Romaka, Hillāja, Dhiṣaṇa and Durmukhācārya: these are the propounders of Tājika.’ I have previously suggested (Gansten 2012a) that *hilāj* and *kadkhudāh* may have been thus misunderstood due to being of Persian rather than Arabic origin (unlike the majority of Tājika technical terms), but I now rather believe the reason to be the early decline—one might almost say the death in infancy—of Tājika genethlialogy.

135 *Hāyanaratna* 3.7: *manusya-jātaka samarasimho ’pi*, quoting *Karmaprapākāśa* 3.8. At a later point in the *Hāyanaratna* (5.7), Balabhadra also quotes two consecutive āryā verses on the scheme of triplexity rulerships from ‘Samarasiṃha’, the former of which does occur in *Karmaprapākāśa* 1.21 but is probably quoted here from the *Tājikaśāstra*; see Gansten 2018: 175 f.

136 Not only does Balabhadra quote Nilakantha with approval (cf. note 134), but he actually states at the beginning of the *Hāyanaratna* (1.2):

\[
\text{hillājakhammadhiromakasāṁnatam |}
\text{sāraṃ samarasimhasya kriyate vārsikāṁ phalam |}
\]

‘[Here] the results pertaining to the year are set forth: the essence of [the writings of] Samarasiṃha, approved by Hillāja, the noble Khattakhutta, Khindhi and Romaka.’
understanding of Tājika, and perhaps in his access to Arabic-language sources, with the *Karmaprakāśa* representing a later and more inclusive phase. Second, as was also noted, the evidence strongly suggests that the doctrine of the sixteen configurations (*ṣoḍaśayoga*) was received by the Indian tradition through Samarasiṃha, whose distinctive misnumbering is repeated by every later author on the subject; but the original examples that accompany some of Sahl’s definitions, though present in later authors such as Nilakanṭha and Gaṇeśa, are lacking from the *Karmaprakāśa*. This implies that the doctrine in question, with the examples intact, was transmitted through the *Tājikaśāstra* rather than through the *Karmaprakāśa*; and in fact, Samarasiṃha’s rendition of one such example has been preserved for us in the extant text of the *Praśnatantra* (4.58–59).137 Assuming that a Sanskrit version preserving material from the Arabic original is likely to be earlier than an abridged version, this would support the hypothesis of the *Karmaprakāśa* having been composed after the *Tājikaśāstra*.138

If Samarasiṃha did indeed author three interrelated texts known individually as the *Saṃjñātantra*, *Praśnatantra* and *Varṣatantra*, it seems more than likely that Nilakanṭha’s own *Saṃjñātantra* and *Varṣatantra* were intended to emulate and perhaps to eclipse the work of his illustrious predecessor. In this he was ultimately successful, an achievement probably not unrelated to his official position as *jyotisāraja* at Akbar’s court.139 The extant, hybridized *Praśnatantra*, while containing no original contribution by Nilakanṭha, may have been compiled by himself or one of his students in order to complete the triad; or the compilation may have been mistakenly attributed to Nilakanṭha on the strength of his existing *Saṃjñātantra* and *Varṣatantra*. If Nilakanṭha was further unaware that Samarasiṃha had also composed a *jātaka* work—namely, the *Karmaprakāśa*—this would help to explain the lack of any genethliological material in his own writings.

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137 See Gansten 2014:105 ff.; cf. also note 124 above. While the surrounding verses (*Praśnatantra* 4.54–57, 60) are closely mirrored in *Karmaprakāśa* 3.4–7, the latter text omits the example. As it relates to a fundamental concept of Tājika, the example in question is likely originally to have occurred in the *Saṃjñātantra* of Samarasiṃha’s *Tājikaśāstra* rather than in its *Praśnatantra*.

138 As remarked above (note 20), the fact of the *Karmaprakāśa* lacking an eponymous variant title may lend some support to the hypothesis of another well-known work with such a designation (*Samarasiṃhatajīka* or -śāstra) preceding it in time, and may also have played a part in obscuring the authorship of the *Karmaprakāśa*.

139 See Pingree 1997: 92 ff.; Sarma 2000.
Concluding Remarks

Irrespective of who was technically the earliest writer on Tājika, Samarasimha remains undoubtedly the single most influential author in the tradition as a whole, both directly and through his impact on Nilakantha, whose works in their turn have largely defined Tājika since early modern times. Although next to nothing is known of Samarasimha personally, and even the century of his *floruit* remains somewhat conjectural, a close study of his preserved writings enables us to form some tentative conclusions about his role in the Sanskrit-language transmission of Perso-Arabic astrology.

The available evidence, then, suggests that Samarasimha authored at least four works on Tājika, the first three of which were interconnected and known collectively as the *Tājikaśāstra*, with variants. The individual parts dealt with general principles, interrogations, and annual prognostication, respectively; the former two were known as *Samjñātantra* and *Praśnatantra*, the third most likely as *Varṣatantra*. Very likely it was this *Tājikaśāstra* that Balabhadra had in mind when defining his subject matter at the beginning of the *Hāyanaratna*:

> The word Tājika denotes the treatise (*śāstra*) composed by Yavanācārya in the Persian language, comprising one area of astrology and having for its outcome the prediction of the various kinds of results of annual [horoscopy] and so on. That same treatise was rendered into the Sanskrit language by those born after him, Samarasimha and other Brahmans versed in grammar, and that [work], too, is denoted by the word Tājika.140

These three works depended heavily (though, in the case of the *Varṣatantra*, perhaps only indirectly) on Sahl ibn Bishr, with some influence from other Arabic-language authorities—one of which may have been al-Kindī, and another 'Umar aṭ-Ṭabarī—as evinced by the extant *Praśnatantra*. Centuries later, the latter text was substantially enlarged by the addition of excerpts from other, mostly non-Tājika works, and the text as a whole was (mis)attributed to Nilakantha. The *Samjñātantra* and *Varṣatantra* are apparently lost, or at least not available in print nor listed under those names in any manuscript catalogues examined by me; their positions of authority seem to have

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140 *Hāyanaratna* 1.2: *yavanācāryena pārasyā bhāṣayā praniṇam jyotiḥśāstraikadeśarūpam vārsikādīnāvidhaphalādesphalakom śāstraṃ tājikaśabdavācyam | tadanantara-saṃbhūtaḥ samarasimhādibhir adhitavākaraṇaṁ brähmanaṁ tad eva śāstraṃ saṃskṛta-śabdonipaddhām tad api tājikāśabdavācyam eva. As remarked above, Balabhadra appears not to have distinguished Arabic from Persian, nor is his identification of Samarasimha as a Brahman correct.
been usurped by Nīlakaṇṭha’s identically named works, jointly known as the Tājikanīlakaṇṭhī. Samarasiṃha’s Tājikaśāstra was, however, still extant in the early seventeenth century, as confirmed by quotations in the works of Viśvanātha and Balabhadra.

The transmission of Tājika doctrines formulated by Samarasiṃha appears to have taken place primarily through this Tājikaśāstra, while his fourth work, the Karmaprakāśa on genethlialogy, has exercised comparatively little influence on the later tradition. For this work, Samarasiṃha explicitly cites ‘Khindika’, probably identical with al-Kindī, as the author of his source, which may have been a compendium. The ultimate Arabic source texts appear to be the genethlialogical works of Abū Bakr (for the bulk of the text), Abī Ma’shar (particularly for lots, sahama), ‘Umar (a brief passage) and one or more authors as yet unidentified. Some of the material in the initial part of the Karmaprakāśa, ultimately based on Sahl, was most probably adapted in slightly abbreviated form from Samarasiṃha’s own Tājikaśāstra.

There is reason to suspect that the extant text of the Karmaprakāśa is incomplete, lacking as many as seven or more chapters. The material that it does contain is highly abbreviated as compared to the source texts, and sometimes imperfectly understood. One reason for this may be that Samarasiṃha viewed the Perso-Arabic doctrines through the lens of Indian astrological tradition. By contrast, the transmission of the same doctrines to the Latin west, which had no previous tradition of judicial astrology to speak of, was much fuller and more faithful. Even so, the Sanskrit versions do occasionally include material which is not present in the surviving Latin translations.

Given the paramount importance of Samarasiṃha for the tradition of Tājika astrology, we may wonder why his genethlialogical teachings seem not to have been passed down the generations as diligently as those on annual prognostication and interrogations. One partial explanation may be the lack of a living teacher-student tradition of Tājika in the period immediately following Samarasiṃha. Such a situation is indicated by Tejaḥsiṃha, who—although belonging to the same region, hereditary community and social class as Samarasiṃha, intimately familiar with at least some of his works, and writing within perhaps two or three generations of him—explicitly states that he wrote his own work after verifying by experience the statements taken from books, ‘even without the mediation of a true teacher’.141 Significantly, Tejaḥsiṃha deals only with definitions and revolutions, not with genethlialogy

141 Daivajñālaṃkṛti, penultimate verse (with minor emendations; see Gansten 2017: 121 f.):

[... ] sadguroryat |
pāramparāyād ṛte ‘pi svayam anubhavanād granthajārthasya [... ]
proper, suggesting that only parts of Samarasiṃha’s oeuvre were available to him; perhaps he also contributed to their wider distribution.

Despite these circumstances, the *Karmaprakāśa* has outlived—at least in part—Samarasiṃha’s more popular works, although its authorship was sometimes forgotten. Ironically, its relatively neglected status may have contributed to its survival, as Nilakaṇṭha and other authors of the Mughal era did not attempt to outshine it with genethliological works of their own.

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