

Article

The First Two Chapters of Mīnarāja's
Vṛddhayavanajātaka

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ABSTRACT: Among the earliest surviving Greco-Indian *jyotiṣa* (astronomical/astrological) texts, the *Vṛddhayavanajātaka* is the most expansive, containing over four thousand verses. Although the content of the work is devoted mainly to horoscopy, that is, prognostication based on the astronomical configuration of planets and zodiac signs, the *Vṛddhayavanajātaka* is nonetheless an important source for the study of the history of science of India and its cultural history, in particular, its interaction with the Hellenistic world during the early centuries of the Common Era. In 1976, David Pingree published a critical edition of the work in two volumes, to be followed by a third volume of the discussion and analysis of the text which never materialized. The present work attempts to fill this gap by providing an overview of the work, together with an English translation of its first two chapters.

KEYWORDS: Greco-Indian astral science, astronomy, astrology, Sanskrit, Hellenism

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1. Introduction: Title and authorship

According to Pingree's survey, there are no less than sixty manuscripts extant of the *Vṛddhayavanajātaka*, described as a "vast astrological compendium in 71 *adhyāyas*" dated to the first quarter of the fourth century CE.¹ Judging from the number of manuscripts, the *Vṛddhayavanajātaka* is by far the most widespread work among a handful of *jyotiṣa* texts bearing the designation *yavana*,² literally, the Ionians (ἰάονες, sg. ἰάων), referring broadly to the peoples of the Hellenistic world.³ It should be noted that the title *Vṛddhayavanajātaka* Pingree adopted in his edition (literally, "Older Greek genethliacal astrology") never occurred in the text, where chapter labels and the colophon refer to the work as the *Vṛddhayavana* and the *Mīnarājajātaka* respectively.⁴ The references to the work as *vṛddhayavanajātaka* ("The Older *Yavanajātaka*") or to the author as *Vṛddhayavana* ("Yavana the Elder")⁵ and *Yavaneśvara* ("Lord of the Greeks") might not have been original either, but reflect an understanding that the work bears a distinct relationship with other *yavana* texts and may thus be considered an attempt to disambiguate Mīnarāja from the many other *yavana* authors. Regardless of the true title of the text, it falls largely under the genre of *horā* or *jātaka* (genethliacal astrology) according to Varāhamihira's tripartite classification.⁶ In terms of its sources and content, the *Vṛddhayavanajātaka* mentions only two other authors, Garga and Parāśara, both presumably

* The research on the *Vṛddhayavanajātaka* began in September, 2015, in collaboration with Yano Michio as a part of a project to re-evaluate the extant materials on Greco-Indian astral science, supported in part by JSPS KAKENHI Grant 15K01118, "Overlapping cosmologies of Asia," and JSPS International Collaborative Research Accelerator Grant 15KK0050. I thank Yano for his extensive advice on the content of the text, as well as Charles Greifenstein, William Monroe, Timothy Engels and Kim Plofker for providing me access to all related materials. In addition, I thank Ronnie Dreyer, Dorian Gieseler Greenbaum, Valerie Roebuck, and the two anonymous reviewers for their comments on an earlier draft of this paper.

¹ Pingree 1959a: 268; CESS A4, 427-9.

² Pingree 1978a: I.24, I.31-9.

³ Possibly via Old Persian *yauna* (Karttunen 2015: 325-337).

⁴ VYJ II.385: *iti śrīvṛddhayavane goceṣṭitādhyāyaḥ || iti śrīyavaneśvarācāryaviracitaṃ mīnarājajātakaṃ samāptam ||* Note the epithet *Yavaneśvara* here found also in the closing verses of YJ, which Pingree erroneously interpreted as a second author (Mak 2013a: 13-6, 2013b: 71-3). See also fn. 37, 42 below.

⁵ Mak 2014: 1103. Monier-Williams defines *vṛddha* as "often in compound with the names of authors, especially of authors of law-books ... to denote either an older recension of their works, or the work of some older authors of the same name." (Monier-Williams 1899: 1010b). I see no reason to deviate from this interpretation.

⁶ For the classification, see Mak 2015: 4, fn. 9. Nb. chapters 66-71 of VYJ deal with various forms of omens which do not appear to be of Hellenistic origin and fall outside the purview of genethliacal astrology, belonging thus to the *saṃhitā* category (miscellany).

Indian.⁷ Various parallel passages between the *Vṛddhayavanajātaka* and the *Yavanajātaka* of Sphujidhvaja reveal a distinct relationship between the two works, although nowhere in the texts did the two authors refer to each other's work by either title or name.⁸

Despite the apparent popularity of the work, the name of the author, Mīnarāja, has not been mentioned in any known *jyotiṣa* works.⁹ Other than a brief note given at the beginning that the work is a treatise on horoscopy (*horā*) of 8,000 verses, abridged from a larger work of 100,000 verses transmitted to Maya by the "sage of old" (*pūrvamuni*),¹⁰ nothing is explicitly known about the author or the historical circumstances under which the work was composed. The text was possibly known to Varāhamihira, who in his *Brhājātaka* (mid-sixth century CE) referred to similar materials found in the *Vṛddhayavanajātaka* as a theory of the *Yavanas*.¹¹ It was likely known also to al-Bīrūnī, who referred to it in his *Tahqīq mā li-l-Hind* ("India," ca. 1030 CE) as an astrological work of the *Yavana*.¹²

2. Characteristics of the content of the first two chapters

Our materials are based on Pingree's 1976 edition of the *Vṛddhayavanajātaka*, which is in turn based on sixteen manuscripts, with the oldest dated to the fifteenth century.¹³ In this paper, we focus on the first two chapters by providing an annotated English translation of a total of eighty-two verses.¹⁴ The first volume of the 1976 edition published by the Oriental Institute, Baroda, based on Pingree's hand-copied manuscript, is however in a deplorable state, and at times illegible, making it necessary to reproduce the text here after comparison with other available materials.¹⁵

⁷ *tathā pradhānaḥ śakumaḥ pradiṣṭo vākyambhavo gargaḥ parāśarādyaḥ* (VYJ 67.5cd).

⁸ Pingree 1978a: I.24, note 75. Pingree assumed that Mīnarāja used YJ without actually comparing systematically the parallel materials, a task which he saved for the unrealized volume three of his edition of VYJ. See discussion in §4.

⁹ Pingree suggests Mīnarāja (lit. "Fish-King" in Sanskrit) to be a Greek designation of the Śaka tribe or a city on the Indus river, namely, Μίν πόλις located in Σακαστανή by Isidore of Charax; Μίνναγάρα, the capital of Μάνβανος according to the Periplus of the Erythraean Sea or Μίνάγαρα (Ptolemy, Geography 7.1.63), or Βίναγάρα (Geography 7.1.61) near the mouth of the Indus (Pingree 1978a: I.24 note 75).

¹⁰ Verse 1.2. See edition and translation.

¹¹ Pingree claims that the reference to 1800 *yogas* (planetary combinations) in BJ 12.1 corresponds to the 1475 *yogas* described by Mīnarāja (Pingree 1978a: I.24, II.330-1).

¹² "There is a larger book than this (the *Sārvalī*), a compendium on every subject of astrology, known as the *Yavana*..." (Sachau 1888: I.158). Though some uncertainties remain, on the basis of this description, Pingree identified the work al-Bīrūnī referred to as the *Vṛddhayavanajātaka* (Pingree 1978a: I.24 note 76).

¹³ Pingree 1976: II.7.

The first two chapters, titled “Characteristics of Zodiac Signs” (*rāśiprabheda*) and “Characteristics of the Abode of Planets” (*grahayomibheda*), provide a general outline of Greco-Indian horoscopy and the definition of some key concepts and terminology. Rather than being a straight-forward translation or adaptation of a Greek work, the *Vṛddhayavanajātaka* contains copious Indian elements. References to Hindu divinities, the caste system, Āyurvedic theories and religious concepts such as karma, are all well integrated into the work, suggesting that the *Vṛddhayavanajātaka* is the product of a unique Indian development based on a certain variety of Hellenistic astrology. It is most likely the result of a long process of acculturation which might have taken place centuries before the work was composed.¹⁴

The *Vṛddhayavanajātaka* contains some concepts not found in any extant Greco-Roman sources. Some of the notable differences include the idiosyncratic subdivisions of a sign such as the *navāṃśa* (“one-ninth,” 1.21),¹⁵ the *saptāṃśa* (“one-seventh,” 1.23), and the strength of places based on aspect (2.24). These topics are found also in the *Brhājātaka* and eventually became the salient features of practically all varieties of Greco-Indian horoscopy since the time of Varāhamihira. Another unique feature of the *Vṛddhayavanajātaka* is the long list of synonyms of the twelve places found in the first chapter, but unattested in any other known *jyotiṣa* texts.¹⁶ Furthermore, a comparison of this set of technical vocabulary used in the three works, *Vṛddhayavanajātaka*, *Yavanajātaka* and *Brhājātaka*, (see Appendix), reveals that the *Brhājātaka* contains the most Greek words, and the *Vṛddhayavanajātaka* the least.¹⁷

¹⁴ The English translation of the first two chapters of VYJ was published in part in Roebuck 1992: 21–27 (Ch. 1), 40–90, 135–139, passim (Ch. 2). In addition, Pingree produced a set of unpublished notes on the first four chapters, currently kept in the David E. Pingree archive of the American Philosophical Society (Box 2 and 25 in Plofker 2007, referred hereafter as DEP). The translation in this study is based on Pingree’s edition of the text. Wherever necessary, I refer to Roebuck’s translation and Pingree’s notes.

¹⁵ Unfortunately, Pingree’s original manuscript is lost at the Oriental Institute and there are no copies found in Pingree’s archive at the American Philosophical Society or the John Hay Library, Brown University. The materials used for comparison include different copies of the printed text (of varying degrees of legibility), partial transcripts of the text, facsimile of the original manuscripts and Pingree’s handwritten notes on the first four chapters of VYJ (DEP).

¹⁶ Mak 2013b: 75, 2014: 1102–4.

¹⁷ The concept of *navāṃśa* is likely the result of combining the twelve zodiac signs with the twenty-seven *nakṣatras*. The lowest common denominator of 12 and 27 is 108. To divide the celestial sphere into 108 parts, each sign would have nine such parts, and hence *navāṃśa*. See VYJ 1.21.

¹⁸ VYJ 1.28–39.

¹⁹ That BJ contains more Greek loans than YJ is not so apparent in the list of the twelve places, but rather from the synonyms used for the twelve zodiac signs, such as *kriya* (κρίος), *tāvuri* (ταῦρος), *jītuma* (δίδυμος) for Aries, Taurus, Gemini, etc. (BJ 1.8), which are attested in neither YJ nor VYJ. For reasons yet to be clarified, basic Greek loans such as *horā*, *hibuka* and *meṣūraṇa* are not found in this list in the VYJ.

Judging from the lengthiness and clumsiness of the list (possibly due to corruption), the synonyms are provided not just for their metrical variety, but rather they reflect the syncretic nature of the text.

The description of the planets in the second chapter reveals further differences among the three works. It has been noted that the two pseudoplanets Rāhu and Ketu are generally not featured in early Greco-Indian horoscopy during the first millennium.²⁰ However, Rāhu appears for the first time in the *Vṛddhayavanajātaka* in a passage on astrological geography;²¹ Ketu, on the other hand, unknown in both the *Vṛddhayavanajātaka* and the *Yavanajātaka*, appears in *Brhājātaka* 2.3.²² The planetary pantheon described in this text appears to be in transition from the early Hellenistic seven planet model to the later *aṣṭagraha* and eventually the pan-Indian *navagraha* tradition. Furthermore, in the list of planetary synonyms in the *Vṛddhayavanajātaka* (2.1–7), terms of Greek origin such as *jīva* (ζεύς), *asphujit* (ἀσφοδίτη), *koṇa* (κρόνος), are found. Some of these synonyms are decidedly Hindu in character, such as *puruhūtamantrī* (“Minister of Indra”) to refer to Jupiter and *harejya* (“honored by Śiva”) to refer to the Moon. The synonym *mihira* for the Sun (2.1) is of Persian origin. A handful of synonyms carry meaning of little sense such as “Keeping Good Rhythm” (*sutāla*) for Mercury and “Blade of Grass” (*tṛṇakaḥ*) for Saturn appear to be corrupt forms of obscure and possibly foreign origin. The list of synonyms of the planets along with the ones of the twelve places are likely a conflation of materials from different sources, just like the work itself as a whole: Greek, Iranian, Indian and other languages, made when the Indians came into contact with the foreign Hellenistic culture during the early centuries of the Common Era.²³

3. Scientific elements

3.1 Metrology

Among the most salient features of the Greco-Indian astral texts which distinguish them from their earlier Vedic counterpart exemplified by the *Vedāṅgajyotiṣa*, are the sexagesimal units or the metrological system in general, and the geometrical conception of the “heavens” through the configuration of places (*topoi*) in horoscopy. The *Vṛddhayavanajātaka* employs

²⁰ Pingree 1959b: 282, f. 4; DEP 37. Roebuck 1992: 72.

²¹ VYJ 2.10–1.

²² The horoscopy in BJ contains neither Rāhu nor Ketu. Varāhamihira was aware of the tradition of *navagraha* (BS Ch.16). The development of Indian pseudoplanets would require further study.

²³ As Pingree observed, Hellenistic astral science entered India during the first part of the first millennium and the Indian astral knowledge was in turn transmitted to the rest of Eurasia including Iran during the latter part of the first millennium (Pingree 1963). This observation does not exclude the possibility of exchange among different parties during a much earlier period.

sexagesimal units such as degrees (*aṃśa*, 1.44, *passim*) and minutes (*liptā/liptāliptikā* from λεπτόν(sg.)/λεπτά(pl.), 1.24, 6.28). One should note, however, that indigenous Indian units such as *cūḍapada* (1.24), *muhūrta* (67.2) and *tithi* (1.45) also appear in the work, resulting in an awkward mix of incompatible units—a phenomenon that is noted also in the *Yavanajātaka*.²⁴

3.2 Horoscopy as a geometric model of the heavens

The historical Greco-Indian horoscope may be reconstructed through the names given to the twelve places, in particular, the four cardines (*italic* with double underline indicates Sanskrit transliteration of the Greek counterpart):

Places (<i>topoi</i>)	<i>Vṛddhayavanajātaka</i>	<i>Yavanajātaka</i>	<i>Bṛhajjātaka</i>	Greek
I	<i>vilagna</i> “fastened”, <i>mūrdha</i> “head”	<i>horā</i>	<i>horā, lagna</i>	ῥωρα “hour/ascendant”
IV	-	<i>hipaka/hibukam</i>	<i>hibukam, pātālam</i>	ὑπόγειον “underground”
VII	<i>jāmitra</i>	<i>jāmitra, astaga</i> “setting”	<i>jāmitra, dyuna</i>	διάμετρος “diameter”, δύσις “setting”
X	<i>nabhasṭhala</i> “sky-surface”	<i>meṣūrana</i>	<i>meṣūrana</i>	μεσουράνημα “mid-heaven”

From the synonyms of the cardinal houses, it is evident that the Greco-Indian horoscope was conceived like the Hellenistic horoscope as a geometric model of the heavens, with the four cardines (ascendant, imum coeli, descendent and mid-heaven) corresponding to the four points of a circle moving counterclockwise from the left horizontal point (Fig. 1, 2). The idea of twelve equal divisions of the celestial sphere rising one after another at the eastern horizon was unknown in Vedic India.²⁵ The mathematical, or specifically geometrical conception in horoscopy is reflected also in the notion of aspect, translated into Sanskrit as *dr̥ṣṭi* (lit., “seeing”) and is a topic of fundamental importance in all specimens of Greco-Indian horoscopy. The idea of a large circle of equal parts rising sequentially from the eastern horizon lends itself also to the concept of melothesia or the Zodiac Man of ultimately Hellenistic origin, which is described at the beginning of the first chapter of the *Vṛddhayavanajātaka*

²⁴ Mak 2013b: 80–81, 107–9; 2014: 1102.

²⁵ It has been suggested that the transference of such idea to a diagrammatical representation such as the horoscope requires a different kind of mathematical language and thinking, which are characteristic of the Platonists (Pingree 1973: 119).

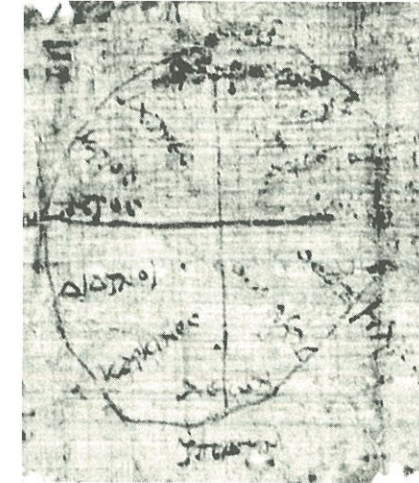


Fig. 1 Greek horoscope in Oxyrhynchus papyrus P. Oxy. 235 dated 15/22 CE (Neugebauer and Van Hoesen 1959: 18–19, photo courtesy of A. Jones)

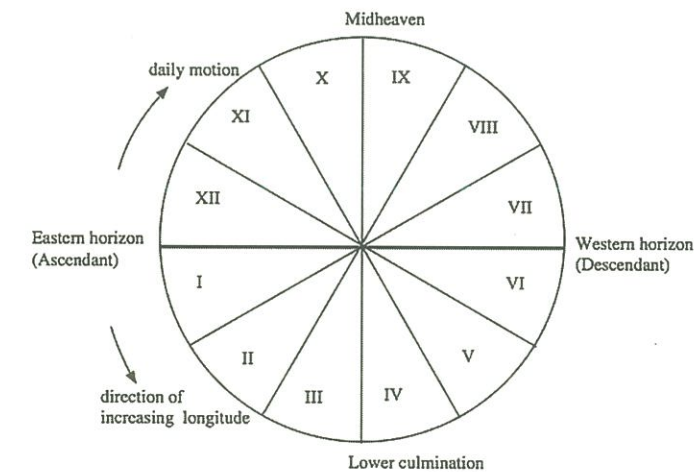


Fig. 2 Greek horoscope and the arrangement of the twelve places.

(1.4-15) as the primordial deity Prajāpati personified as Time (*kāla-puruṣa*), depicted with the twelve zodiac signs from head to feet.²⁶

²⁶ Pingree 1978a: II.199–203. VYJ 1.4-15 = YJ 1.14-25 (see §4).

3.3 *Bhūtasamkhyā* or word numerals

An important feature which distinguishes the *Vṛddhayavanajātaka* from the *Yavanajātaka* is the use of *bhūtasamkhyā* (figurative expressions of numerals), which is absent in the latter.²⁷ Examples of such expressions in this text include: *iṣu* (“arrow”) for five (1.21), *nanda* for nine (1.21) and *tithi* (number of “lunar days” in a fortnight) for fifteen (1.45). Elsewhere the number twenty-seven is expressed by a combination of word numerals: *svara* (number of musical notes in a scale) for seven and *aśvī[n]* (“the twin-gods”) for two.²⁸ While the earliest extant instances of *bhūtasamkhyā* are attested in Piṅgala’s *Chandaḥsūtra* (c. second century BCE),²⁹ the technique to express multi-digits with place value became fully developed and commonplace only by the time of Varāhamihira in the sixth century.³⁰ In addition to the concept of decimal place-value system, such multi-digit word numerals adopts also the

²⁷ On the definition and usage of the term, see Datta and Singh 1935: 53–63, Sarma, K.V. 2003, Sarma, S.R. 2009: 3–4. According to Pingree, *bhūtasamkhyā* expressions are found in YJ 79.6 (*bindu* for zero), 79.60 (*viṣṇu* for one, *graha* for seven), and 79.62 (*nārāyaṇa* for one, *aṅka* for nine and *indu* for one), with the remark that “the extreme clumsiness with which Sphujidhvaja expresses numbers is a reflection of the fact that a satisfactory and consistent method of versifying them had not yet been devised in the late third century.” Such criticism against the work, pace Pingree, is however unwarranted as the numeral and mathematical expressions have been shown to be almost completely consistent; the problems of the text arose due to Pingree’s misinterpretation and incorrect calculations (Shukla 1989). Furthermore, all the above instances of *bhūtasamkhyā* in YJ are in fact Pingree’s own emendations, which turn out to be unnecessary as well as untenable on various grounds (Mak 2013a: 5–16; 2013b: 68–73, 81, 90–91, 121–124).

²⁸ Similar examples are found also in VYJ 5.12.

²⁹ Datta and Singh 1935: 58, Sarma, S.R. 2009: 4–6.

³⁰ The concept of *bhūtasamkhyā* is dependent most likely on the ciphered positional notation which became widespread only after late sixth century. For a relatively updated discussion, see Chrisomalis 2010: 193–7. The most notable use of *bhūtasamkhyā* is found in Varāhamihira’s *Pañcasiddhāntikā* (Sarma, S.R. 2009: 7). Datta and Singh suggested that the earliest use of *bhūtasamkhyā* with place value may be found in the *Agnipurāṇa*, which they dated to the fourth century or earlier. However, without actual proofs, they proposed that the invention should be placed two centuries earlier to 100–200 CE, on the account of “the *Purāṇas* being works meant for the common folk” and that the system was spread to Southeast Asia by 605 CE (Datta and Singh 1935: 62–63). I find such claims questionable since the *Purāṇas* are works of accretions and no firm dates can be assigned. Both S.R. Sarma and Chrisomalis dated the earliest instance to the third century CE based on Pingree’s emended readings of YJ (Sarma, S.R. 2009: 9–10; Chrisomalis 2010: 195), which should also be rejected. Usage of a sequence of *bhūtasamkhyā* numerals in date expressions among extant Sanskrit inscriptions are dated considerably later, from the seventh century CE onward (Datta and Singh 1935: 59–60, Sarma K.V., 2003: 40; Sarma S.R. 2009: 8). Examples of expressions utilizing single-word *bhūtasamkhyā* are attested in much earlier Vedic texts including the *Rgveda*, the *Maitrāyaṇīyasaṃhitā* and the *Vedāṅgajyotiṣa* (ibid.). However, none of these instances correspond to the later *bhūtasamkhyā* system as we know and were certainly not used in a sequence and in a place-value system.

unusual rule of arranging the numerals in a right-to-left sequence (*aṅkānāṃ vāmato gatiḥ*).³¹ Our examples in the *Vṛddhayavanajātaka* of the numerals 108 and 12 are thus expressed as 8-0-1 and 2-1, representing the latest stage of the development of numeric expressions in India, dated likely sometime during the second half of the first millennium.

3.4 Planetary weekdays

The original Hellenistic planetary week begins from the day of Saturn and became standard in the Roman time by the time of Dio Cassius in the first half of the second century CE.³² The planetary order in the *Vṛddhayavanajātaka*, however, displays no awareness of the original planetary week but instead only a familiarity with the one beginning from the day of the Sun, followed by those of the Moon, Mars, Mercury, Jupiter, Venus and Saturn (1.17–18, 2.1–7).³³ Since the beginning of the week shifts from Saturday to Sunday definitively only by the fourth century CE,³⁴ the Indian planetary week beginning from Sunday which gained widespread acceptance by the fifth century CE must have spread after contacts were made between India and her neighbors under Hellenistic influence between the fourth and the fifth century CE.³⁵ The composition of the *Vṛddhayavanajātaka* is thus unlikely to be before the fourth century CE.

³¹ Datta and Singh 1935: 59–63, Sarma, S.R. 2009: 9–10.

³² *Roman History*, Book XXXVII (Loeb. ed., trans. by E. Cary, III.128–131). Boll 1912: 2578. See also Greenbaum 2016: 169–170. In addition, Stephan Heilen pointed out to me that the week with Saturn as its first day seems to be implied in Paul of Alexandria Ch. 21, and in Valens 6.7.12–13 saying that most astrologers determine the day rulers of the weekdays according to the ‘heptazone,’ i.e., the sequence of the planets from Saturn down to the Moon (personal communication, 2017.11.26).

³³ The same may be noted in YJ 79.55 (Mak 2013b: 118). Other orders of the seven planets are presented in VYJ/YJ due to astrological considerations as Yano remarked (Yano 2004: 336). The important point here however concerns only the knowledge of a specific sequence of seven planetary days in a cyclical week.

³⁴ As Pingree pointed out, although there could be earlier evidences, it has been suggested that “Sunday-week” was established in the fourth century CE by the Christians, which “raises a serious question concerning the date of Sphujidhvaja” (Pingree 1978a: II:405). Boll suggested that the shift was driven by Mithraism and the solar cult before the Christians: “Für diesen Anfang mit der Sonne sind bestimmend der Sonnenkult und die Sonnentheologie dieser späteren Zeit, die auch im Mithraskult sich ausspricht, und wohl auch auf den christlichen Beginn mit dem Sonntag, dem Tage der ‚Sonne der Gerechtigkeit‘, nicht ohne Einfluß geblieben ist. Seit dem 4. Jhdt. ist der Anfang mit Sol unbestritten.” (Boll 1912: 2578, referring also to Gundermann).

³⁵ Pingree 1978a: II.405; Yano 2004: 335–336. The name of the weekday first occurs in an Indian epigraph of the last quarter of the fifth century CE (Sircar 1965: 226).

4. Relationship with *Yavanajātaka* and other works

The *Vṛddhayavanajātaka*, the *Yavanajātaka*, the *Bṛhājyātaka* and other Greco-Indian horoscopic treatises share over a dozen topics with identical or near-identical chapter titles; the variations of content and their sources however have not been fully accounted for.³⁶ Pingree speculates that the early transmission of Greco-Indian horoscopy follows the order of Yavaneśvara, Sphujidhvaja, Satya, Mīnarāja and Varāhamihira.³⁷ Since Pingree's claim and his dating of the works of Satya and Mīnarāja are contingent on his dating of the *Yavanajātaka*, which turned out to be untenable, the relationship between all these works should be re-examined.³⁸ In terms of parallel material, a handful of practically identical verses have been identified in various chapters of the *Vṛddhayavanajātaka* and the *Yavanajātaka*, providing us thus a concrete though somewhat enigmatic connection between the two works.³⁹ In the first chapter of both works, twelve largely identical verses have been identified.⁴⁰ As these verses appear almost immediately after Mīnarāja claimed his work to be an abridgement of Maya's, it seems unlikely that these were quotations from the *Yavanajātaka*. Furthermore, seven sets of consecutive verses in the *Vṛddhayavanajātaka* (84 in total) describing the natal effects of the seven planets in various signs, are found scattered among the 224 verses found in Ch. 12-18 of the *Yavanajātaka*, where additional materials such as planetary aspects (*dr̥ṣṭiphala*) and other topics are interpolated.⁴¹ If one assumes that Mīnarāja cited the *Yavanajātaka* as Pingree has suggested, only with considerable difficulties could one explain how the more verbose and dispersed materials in the *Yavanajātaka* could have been gleaned and reduced to a neat set of verses in the *Vṛddhayavanajātaka*.⁴² Instead, a more logical explanation would be that the eighty-four verses were composed either originally by Mīnarāja, or more likely, by his predecessor Maya in the unabridged version of the text; Sphujidhvaja, who traced his own lineage also to Maya, cited the verses with additional materials taken from other sources.

³⁶ Pingree 1981: 85.

³⁷ Pingree 1960: 25, 1978 I: 5.

³⁸ According to Pingree, since Satya was quoted by Mīnarāja, he must be dated before c. 300 CE; since Satya contains elements of Yavaneśvara, he must be dated after 150 CE (ibid.). Beside the problematic dating of YJ (Mak 2013a, 2013b), the claim remains speculative as Pingree did not show how the fragmentary citations actually indicate such relation and what all the possibilities are on philological grounds.

³⁹ Mak 2014: 1103.

⁴⁰ VYJ 1.4-15 = YJ 1.14-25.

⁴¹ VYJ 17.1-12, 18.1-12, 19.1-12, 20.1-12, 21.1-12, 22.1-12, 23.1-12. Pingree provided no explanation on the pattern of distribution in YJ (Pingree 1978a: II.291).

⁴² In general, Sphujidhvaja in these chapters assigns two verses to each planet-sign combination instead of one in VYJ.

Mīnarāja is known to have cited his sources (Maya, Garga, Parāśara). It would thus seem odd that he did not refer to Sphujidhvaja and Satya if he had deliberately adopted their views in any significant manner. Similarly, Varāhamihira appears to have no knowledge of Sphujidhvaja.⁴³ If indeed Mīnarāja and Varāhamihira as "a general law" agree to Sphujidhvaja as Pingree observed,⁴⁴ it is more likely that they share a common source to start with, rather than citing Sphujidhvaja as Pingree suggested. In particular, the portions where the parallel verses are identified could well predate all three works.

Let us however turn once again to the sources explicitly mentioned by Mīnarāja. As mentioned above, the text was thought to be an abridgement of a much larger work of 100,000 verses composed by Maya, an author we know nothing about, but was mentioned in also the *Yavanajātaka*, the *Bṛhājyātaka* and other *jyotiṣa* works.⁴⁵ This important source of Greco-Indian astrology is lost, but the *Vṛddhayavanajātaka* could be as close as we can get to the teachings of Maya if Mīnarāja's claim is correct, that is, leaving aside the interpolated elements from other sources such as Garga and Parāśara.⁴⁶ The two Indian authors Garga and Parāśara are not mentioned in the extant edition of the *Yavanajātaka*; they were mentioned in the works of Varāhamihira, and were considered an important authority on Indian astral science by Bhaṭṭotpala.⁴⁷ Judging from both how multiple authors are referred to in some of these texts and how materials could be abridged and expanded, it becomes clear that works such as the *Vṛddhayavanajātaka* and the *Yavanajātaka* should not be considered original compositions, but rather parts of a long and established tradition of Greco-Indian astral science, where a body of textual materials underwent ongoing evolution and development, with the fluidity characteristic of early Indian literature. These works in fact claim themselves to be elucidations of what had already been propounded by their predecessors, often generically referred to in the texts as the *yavanas*.⁴⁸ How clear this Greek identity was to the authors is

⁴³ As Bhaṭṭotpala noted, the *yavana* referred to in BJ 7.9 cannot be Yavaneśvara/Sphujidhvaja (YJ 79.15) due to the contradiction in teaching (Mak 2013b: 73).

⁴⁴ Pingree 1960: 25.

⁴⁵ YJ 79.60, 62 (Mak ed.); BJ 7.1. According to Pingree, Maya was first cited by Varāhamihira (CESS A4, 358), apparently overlooking his own dating of VYJ. Maya appears as a "fictitious recipient of Sūrya's revelation" in the *Sūryasiddhānta* (1.1-6; CESS A4, 358, trans. in Burgess 1858: 146-147). For the rather doubtful claim of Maya as Ptolemy proposed by Weber, see Burgess 1858: 147.

⁴⁶ VYJ 67.5. The oldest extant work attributed to Garga (first century CE?) does not contain *horā* materials (CESS A2: 116-120). The extant manuscripts of the *Bṛhatpārāśarahr̥* attributed to Parāśara (according to Pingree, a different author) are dated much later to no earlier than the seventh century (CESS A4: 199). Both the works of Garga and Parāśara remain unedited and largely unstudied. For the latest research on Garga, see Geslani, Mak et al (2017).

⁴⁷ BJ 2.15, 7.3, 7.9, 12.2, passim; *Bṛhatsaṃhitā* 13.2, 21.2, passim. In particular, the work of Garga, identified as *Gargasamhitā* or *Gārgyājyotiṣa* appears to be a work of considerable influence during the early centuries of the Common Era and is the basis of Varāhamihira's *Bṛhatsaṃhitā*.

debatable. There remain however clear traces of the Hellenistic heritage as evinced by the conspicuous usage of Greek loanwords in the text. In the case of the *Vṛddhayavanajātaka*, beside the title itself (which may not be original), the word *yavana* occurs three times in the text.⁴⁹ The text contains some rare Greek loanwords such as *duścikya* (3.20, 3.24, 53.3, 54.30, 54.35, 54.37) and *dyūna* (1.34, 5.11) which are found in the works of Varāhamihira, but not in the extant *Yavanajātaka*.⁵⁰

5. Conclusion

From the above analyses, we can see that the *Vṛddhayavanajātaka* is a popular Greco-Indian *horā* text dated most likely some time after the fourth century CE and possibly much later. It is a compilation of earlier Greco-Indian materials based on works by Maya, Garga, Parāśara, and thus contains materials dated some centuries earlier, from a tradition that is shared also by Varāhamihira in the sixth century CE and Sphujidhvaja (date unknown, sometime before the seventh century CE). While there is no evidence that Sphujidhvaja quoted the *Vṛddhayavanajātaka* in his *Yavanajātaka* as Pingree has suggested, the large number of parallel verses are likely the result of an older common source no longer extant, that is, the unabridged version of a text composed by Maya as Mīnarāja described. It may be noted that the *Vṛddhayavanajātaka* has a generally Indian outlook despite its title—"Older Greek genethliacal astrology." A final remark should be made with regard to the identity and background of the authors of these texts. While both Sphujidhvaja and Mīnarāja have sufficient mastery of the Sanskrit language to compose the versified texts, there is no indication that they were proficient in the Greek language. All the authors they referred to, Maya, Garga, Parāśara and Vasiṣṭha appear to be Indian authors of Sanskrit *jyotiṣa* works; no Greek authors were explicitly mentioned. The question remains whether Sphujidhvaja and Mīnarāja should be labelled Indo-Greek after all? With no further evidence at hand, they appear to be distant descendants of the Indo-Greeks or even members of other ethnic groups under Hellenistic influence in northwestern India, who were eager to demonstrate their mastery of a foreign, esteemed but indigenized "yavana" astral science to the learned Indians. A more thorough comparison of

⁴⁸ VYJ 64.16, YJ 1.(49), (50), (61), 63, 92, 123 [*yavanendra*], 2.50, 3.(1), 38, 8.23, (29.1), 36.2, 44, 38.10, 59.4, 77.9, 78.3, 79.1, 3. Items in parentheses indicate references to the Greek language or Greek technical vocabularies, rather than Greek teaching.

⁴⁹ VYJ 2.9, 64.16, 67.1.

⁵⁰ For a list of Greek loanwords in the YJ, BJ and *Pañcasiddhāntikā*, see Yano 1987: 78-9, Karttunen 2015: 368-375. Technical Greek loanwords such as *āpoklīma*, *āspūjit*, *kendra*, *jāmitra*, *trikoṇa*, *dreksaṇa*, *līptā* are found in both works of Varāhamihira and the *Yavanajātaka*. Rather surprisingly, BJ in fact contains the most Greek loanwords in terms of both types and instances among VYJ, YJ, BJ and *Pañcasiddhāntikā*.

the content of these *horā/jātaka* works will help to identify the cultural background of their authors and to establish more precise dating and relationship of these texts.

Abbreviation

- BJ *Brhajjātaka* by Varāhamihira. Jhā, Sītārāma (ed.). 1944. *Brhajjātakam: Bhaṭṭotpālīya-saṃskṛta-vivṛtyā vilasitam*. Reprinted in 1973. Varanasi: Tāhakuprasāda.
- CESS *Census of the Exact Sciences in Sanskrit*. Pingree, David (ed.). 1970-1994. 5 vols. Philadelphia: American Philosophical Society.
- DEP David E. Pingree archive of the American Philosophical Society. Unpublished notes on the first four chapters of the VYJ.
- VYJ *Vṛddhayavanajātaka* by Mīnarāja. See Pingree 1976.
- YJ *Yavanajātaka* by Sphujidhvaja. See Pingree 1978a.

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Sanskrit edition

Editorial note: The text here is based on Pingree's edition. Variants are indicated only where the reading differs from the manuscripts' or Pingree's emendation (p).

Chapter 1 Rāṣiprabhedā

- 1.01ab sṛṣṭau vidhātre jagatām śivāya saṃhāarakāle sthitaye 'cyutāya |
- 1.01cd tubhyaṃ namaḥ sarvagatāya nityaṃ trayīmayāyāmalabhāskarāya ||
- 1.02ab yad uktavān pūrvamunis tu śāstram horāmayam lakṣamitam mayāya |
- 1.02cd tan mīnarājo nipuṇam svabuddhyā vicintya cakre 'ṣṭasahasramātram ||
- 1.03ab yā pūrvakarmaprabhavasya dhātrī dhātrā lalāṭe likhitā praśastiḥ |
- 1.03cd tām śāstram etat prakāṣam vidhatte dīpo yathā vastughane 'ndhakāre ||
- 1.04ab ādyaḥ smṛto meṣasamānamūrtiḥ kālasya mūrdhā gaditaḥ purāṇaiḥ |
- 1.04cd so 'jāvikāsaṃcarakandarādristenāgnidhātvaḥ kararatnabhūmiḥ ||
- 1.05ab vṛṣākṛtis tu prathito dvitīyaḥ savakṛtakaṇṭhāyatanam vidhātuḥ |
- 1.05cd vanādrisānūdvipagokulānām kṛṣṭibālānām ca viharabhūmiḥ ||
- 1.06ab vīṇāgadābhṛn mithunas tṛtīyaḥ prajāpateḥ skandhabhujapradeśaḥ |
- 1.06cd pranartakīgāyanaśilpikastrīkrīḍaratidyūtaviharabhūmiḥ ||
- 1.07ab karkī kulīrākṛtir ambasaṃstho vakṣaḥpradeśo vihitaḥ caturthaḥ |
- 1.07cd kedāravāpīpulināni tasya devāṅganānām ca viharabhūmiḥ ||
- 1.08ab simhas tu śaile hṛdayapradeśaḥ prajāpateḥ pañcamam āhur ādyaḥ |
- 1.08cd tasyāṭavīdūrgaguhāvanādrībāhyāvanībhumivanapradeśaḥ ||
- 1.09ab prāḍipakām gṛhya kareṇa kanyā nausthā jale ṣaṣṭam iti bruvanti |
- 1.09cd kālārdhadhārā jaṭharam vidhātuḥ saśādvalastrīratīśilpabhūmiḥ ||
- 1.10ab vīthyām tulāpaṇyadharo manuṣyaḥ sthitaḥ sa nābhīkaṭivastideśaḥ |
- 1.10cd śuddhārthavīṇāpaṇapattanāyasarvādhivāsonnatasasyabhūmiḥ ||
- 1.11ab śvabhre 'ṣṭamo vṛścīkavigrahas tu proktaḥ prabhor meḍhragudapradeśaḥ |
- 1.11cd guhābilaśvabhraṇiṣāśmagupti-valmīkākīṭājagarāhibhūmiḥ ||
- 1.12ab dhanvī manuṣyo hayapaścimārdhas tam āhur ūrū bhuvanapraṇetuḥ |
- 1.12cd samasthitavyastasaṃstāvājīkṛtāstrabhṛdvajrarathāśvabhūmiḥ ||
- 1.13ab mṛgārdhapūrvō makaro 'mbumadhye jānupradeśam tam uśanti dhātuḥ |
- 1.13cd nadīvanāraṇyasarojarūpaśvabhṛdhivāso daśamaḥ pradiṣṭaḥ ||
- 1.14ab skandhe tu riktaḥ puruṣasya kumbho jaṅghorum ekādaśam āhur ādyaḥ |
- 1.14cd tasyodakādhārakusasyapakṣī-strīśauṇḍikadyūtaniveśadeśaḥ ||
- 1.15ab jale tu mīnadvayam antyārāśiḥ kālasya pādaḥ kathitau varīṣṭhaiḥ |
- 1.15cd sa puṇyadevadvijātīrthabhūmir nadīsamudrāmbudharādhivāsaḥ ||
- 1.16ab idam jagat sthāvarajāṅgamākhyam sarvaṃ ravīndvātmakam āhur ādyaḥ |
- 1.16cd tasyodbhavo 'trāpacayaś ca dṛṣṭo bhamaṇḍale 'py eva tadātmakam tat ||

- 1.17ab tasyārdham ārkam vihitam maghādi sarpādi cāndram vihitam parārdham |⁵¹
 1.17cd krameṇa sūryaḥ pradadau grahāṇām vyastena tārādhipatis tathaiva ||⁵²
 1.18ab budhasya śukrasya dharāsutasya bṛhaspater bhāskaranandanasya |
 1.18cd dve dve gr̥he teṣu yathānūrūpaṃ phalaṃ vidheyam nīpuṇaṃ vidagdhaiḥ ||
 1.19ab eṣāṃ pumāṃso viśamāḥ pradiṣṭāḥ samā yuvatyāḥ phaladās tathaiva |
 1.19cd krūrasvabhāvāḥ śubhamūrtayaś ca carāgamiśrāḥ kramaśaś ca sarve
 1.19e kṣepyāḥ svabhāvena śubhāśubheṣu ||⁵³
 1.20ab meṣo hariḥ prāg navamaś ca nāthā yāmyādhipā gopramadāmṛgāś ca |
 1.20cd nṛyuktulākumbhadharāparāpāḥ karkālīmīnās tv atha cottarāpāḥ ||⁵⁴
 1.21ab eṣāṃ navāmśāḥ prabhavanti pūrvāt ādyāmśapālās ca nijālayasthāt |⁵⁵
 1.21cd ādyeṣunandāgr̥hapālākānām dṛeṣkāṇasaṃjñāḥ kramaśo vicintyāḥ ||
 1.22ab horādvayaṃ bhānuniśākarābhyām oje same vyastam uśanti tajjñāḥ |
 1.22cd kujasya baṇā iṣavaś ca saurer aṣṭau guroḥ sapta śāśāṅkajasya ||
 1.23ab bhṛgoḥ śarā pumbhavane pradiṣṭās triṃśāṃśakāḥ strībhavane vilomam |
 1.23cd saptāmśakāḥ saptamarāśīpūrvāḥ ṣaṣṭir vibhāgā bhavanasya meṣāt ||
 1.24ab cūḍāpadaṃ dvisvarasaptalīptam ādyam purāṇā gr̥halīptikānām |
 1.24cd nṛrāśīsaṃjñāḥ purato variṣṭhās catuṣpadās caiva tu dakṣiṇasthām ||
 1.25ab tathāparasyām prabhavanti kīṭā jalodbhavāś caiva tathottarasthām |
 1.25cd saumyodbhavāḥ prāg balavṛddhibhājo bhavanti yāmyās tv atha paścimasthām ||
 1.26ab gr̥hā grahāṇām viṣayeṣu yojyāḥ phalārthibhir hānikarās tathānye |
 1.26cd dyurātrisandhau prabalās ca kīṭā divā pumāṃsaḥ paśavaś ca rātrau ||
 1.27ab yaḥ svāmiyuktas tv athavāpi dṛṣṭaḥ saumyagrahair vā sa bhaved variṣṭhaḥ |
 1.27cd rāśiṃ gato vā śubhamadhyabhāgaṃ krūrair viyukto bahusaumyadrṣṭaḥ ||
 1.28ab tanur vilagnaṃ subhagaṃ variṣṭhā mūrdhā ca dehaṃ suragaṃ nivāsam ||⁵⁶
 1.28cd mūrtiḥ phalaṃ śrīphalaṃ iṣṭadaṃ ca saṃjñānakam pūrvagr̥haṃ vadanti ||
 1.29ab kośo dhanam darbhakasiddhimeḍaṃ prabhūṣiṇam bhāsurakam dvitīyam ||
 1.30ab tṛtīyam utpātaharam sūtaram vadanti bījāṅkurakam tam īḍyam ||
 1.31ab sukham sugamyam hy atha bandhulīnam gr̥ham suhṛtturyanavīnam āram ||⁵⁷
 1.31cd mitram praśantaṃ guruṇā viśālam nṛṇām kanīnam pracuraṃ kutālam ||
 1.32ab santānakam dātrakaram sūtākhyam gr̥hītasāram pravaram suhotram |

⁵¹ cāndram]Σ, śāśāṅkam *p*

⁵² vyastena]Σ, vyastāni LQW, vyastim na C, kṣetrāṇi *p*; tārādhipatis tathaiva] Σ, cāndrāṇi tathotkrameṇa *p*

⁵³ kṣepyāḥ]emend. (Yano), kṣeyāḥ *p*

⁵⁴ āparāpāḥ]Σ, āparās pāḥ *p*

⁵⁵ ādyāmśapālās]emend., sūryāmśakākhyās Σ

⁵⁶ mūrdhā ca dehaṃ]emend., mūrdhānadehaṃ Σ

⁵⁷ nṛṇām kanīnam]emend. (Pingree DEP 24), nṛṇām kanīkam Σ

- 1.32cd syāt pañcamam pūrvakaram kṛtālam sārārthivarnēdakaram kṛtīnām ||
 1.33ab purāvanim sāndrakaram kṛtīnām ṣaṣṭham pratīpam suripum ca śaktam |
 1.33cd saṃśoṣiṇam hrīdamadam subālam nirāhatam vārttikaram vṛthātyam ||
 1.34ab syād saptamam kūrdataram vitānam dyūnam kalatram madanam sūtaram |
 1.34cd dhūnam dhanam sattvavidam sukānam jāmitram ātram ratidam prasiddham ||⁵⁸
 1.35ab mṛtyum khalam chidramayam prakīrṇam paśācikaṃ daṃṣṭrikam ārtidam ca |
 1.35cd daśārikam sāṅgarikam narāṇām syāt tad vṛkākhyam kṛkam āhikākhyam ||
 1.36ab dharmadyutiṃ dhītikaram viśālam tṛṇātikam gocaraṇam gurutvam |
 1.36cd dhṛtiṃ vikāṣam praśamam variṣṭham sudhāvidāṅkam navamam vyanakti ||
 1.37ab nabhasṭhalaṃ karma gariṣṭham uktaṃ vidhāsikam sādhamamuktikam ca |
 1.37cd hitam virāvam daśamam kilīkam kitāravam bhāravam āhimānam ||
 1.38ab utpattigaṃ lābham itīha dhāram vinā kilam sādhamam adbhutam ca |
 1.38cd sūtaramadhyam sukham ṛddhipādam kulātmasāram pravadanti rīṣham ||⁵⁹
 1.39ab vyayapradam hānikaram ca daṇḍam virālinam sādhanikam subālam |
 1.39cd bhānum tathā dvādaśabham kulālam malīmasam dāriharam pravṛṇam ||
 1.40ab catuṣṭayākhyam kathitam ca kendram sarveṣṭadam kaṇṭakasamjñitam ca |
 1.40cd lagnam caṭuṣkam daśamam ca kāmam sarvāṇi tulyāni phalena kṛtvā ||
 1.41ab dvitīyalābhāṣṭamapañcamāni pañāpharākhyāni vadanti bhāni |
 1.41cd tṛtīyadharmāvivayālayāni āpoklimākhyāni vadanti tajjñāḥ ||
 1.42ab nabhastalaikādaśaṣṭṛkāṇi vṛddhipradāny eva vadanti pumsām |
 1.42cd mṛgājacandrarkṣatūlādharāṇām vargottamākhyāḥ prathamā navāmśāḥ ||
 1.43ab gokumbhasiṃhālīvisamjñitānām syuḥ pañcamās cāntyaabhavāḥ pareṣām |
 1.43cd nṛyuk kulīro vṛṣabho 'jasamjñāś cāpo mṛgo rātribalāḥ ṣaḍ ete ||
 1.44ab pṛṣṭhodayā dvandvavivarjitās ca divābalā'nye śirasodgamanti |
 1.44cd uccam raver ādyatamād daśāmśaś candrasya saptāśvisamo vṛṣāc ca ||
 1.45ab mṛgodgamo bhūmisutasya tajjñais tṛtīyabhāgaḥ paramaḥ pradiṣṭaḥ |
 1.45cd gajāśvisamkhyendusutasya ṣaṣṭhāj jīvasya karkāt tithisaṃkhyā eva ||
 1.46ab syāt pañcamo bhārgavanandanasya mīnāt svarāśvis tu śanes tulasya |
 1.46cd viṃśanmitaḥ pūrṇabalaḥ pradiṣṭaḥ arvāg atīte bhavane tu pātāḥ ||
 1.47ab yaḥ saptamas tuṅgaḥgr̥hasya rāśiḥ sa nīcasamjñāḥ kavibhiḥ pradiṣṭaḥ |
 1.47cd tenaiva mānena phalaṃ vidhatte tuṅgād vilomam bahuduhkhakāri ||⁶⁰
 1.48ab mūlatrīkoṇam dinapasya siṃho vṛṣaḥ śāśāṅkasya kujasya meṣaḥ |
 1.48cd kanyā tu cāndrer dhiṣṇasya cāpas tulā bhṛgoḥ sūryasutasya kumbhaḥ ||

⁵⁸ saptanam]emend., vāpinam Σ

⁵⁹ sukham ṛddhipādam]emend., sutvam ṛṣṭipādam (Pingree's text and apparatus here are unclear, cf. DEP 26)

⁶⁰ tenaiva mānena]Σ, menaivamānena *p*. The manuscripts I had access to read only *tenaiva*.

- 1.49ab meṣo 'ruṇaḥ śvetataro dvitīyo nīlas tṛtīyo 'ruṇitaś caturthaḥ |
 1.49cd āpāṇḍuraḥ pañcamukhaḥ pradiṣṭo nārī vicitrā satataṃ surūpā ||
 1.50ab tulādharaḥ kṛṣṇataro 'tha babhruḥ kīṭaḥ surakto navamaḥ pradiṣṭaḥ |
 1.50cd mṛgaḥ sumiśraḥ kapilo ghaṭākhyo dyutivihīno jhaṣasamjñitaś ca ||

iti śrīvṛddhayavane rāṣiprabhedah prathamō 'dhyāyāḥ ||

Chapter 2 Grahayonibhedā

- 2.01ab inaḥ pataṅgo mihiro 'tha haṃso mitro 'ryamākhyo dyumaṇiḥ kharāṃsuḥ |
 2.01cd śūraḥ khagas tīkṣṇamayūkhamālī dinādhipo bradhna iti pradiṣṭaḥ ||
 2.02ab śaśī śaśāṅkaḥ śaśabhṛn niśeśaḥ sāmudrakāḥ śītakaro harejyāḥ |
 2.02cd nakṣatranāthaḥ kumudāvabodhī vidhur himāṃsuḥ śaśalāñchanaś ca ||
 2.03ab vakraḥ kujo bhūmisutas turīyo raktāṅgabhūr lohitaḡātrakaḥ syāt |
 2.03cd kṣudhāturaḥ sāksidharo mahījaḥ kīnāśakāntaḥ kavivallabhaś ca ||
 2.04ab sarvajñabhojī vibudho budhaś ca cāndriḥ praṇetā priyakṛd virāḡtī |
 2.04cd syād dhaurtikaḥ kāśajajīvitajño vidhānakārī praṇataḥ sutālaḥ ||
 2.05ab jīvo 'ṅgirā devagurur matijño vaktā ca vācaspatir apramedyāḥ |
 2.05cd pītāmbaraḥ pītavidhiḥ sureṣṭaḥ saṃsiddhikarmā puruhūtanātrī ||
 2.06ab śukro 'sphujit daityaguruḥ sudhāmā kāvyo bhṛgur bījanidhiḥ praṇetā |
 2.06cd mahośanā saṃsmṛtikaḥ kṛtajñāḥ kalāvitānaprabalaḥ sujātyāḥ ||
 2.07ab koṇaḥ śanir babhrur iti prasiddhaḥ kṛṣṇo yamo manda utaṅka kālī |
 2.07cd sauriḥ sutīvras tṛṇakaḥ karālāḥ pratītakarmādhyanapradīṣṭaḥ ||
 2.08ab rakto raviḥ śītakaraḥ sitaś ca raktaḥ kujāḥ somasutas tu pītāḥ |
 2.08cd haridravarṇas tridaśādhipējyāḥ śukraḥ sitaḥ sūryasuto 'sitaś ca ||
 2.09ab sahasraśmīr yavaneṣu jāto vibhāvarīśas tu tathā kaliṅge |
 2.09cd avantideśodbhava eva bhaumaḥ kauśāmbikeyo himaraśmiputraḥ ||
 2.10ab sindhau prajātas tridaśeśamantrī janāntyabhūr bhojakaṭe bhṛgoś ca |
 2.10cd saurāṣṭrajas tīkṣṇakarasya putro rāhur mahābarbarasambhavaś ca ||
 2.11ab helir bhṛgur bhūmisuto 'tha rāhuḥ sauriḥ śaśāṅko vibudhaḥ surejyāḥ |
 2.11cd prāḡādināthāḥ kramaśo vicintyā digdvārahavartham alaṃ vicintyāḥ ||⁶¹
 2.12ab pāpo raviḥ sūryasutaś ca vakraḥ kṣīṇaḥ śaśo tatsahito budhaś ca |
 2.12cd saumyo guruḥ somasutaḥ śaśāṅkaḥ śukraś ca sarve prabhavanti tuṅge ||
 2.13ab śukraḥ śaśāṅko yuvati pradiṣṭau napuṃsakau sūryasuto budhaś ca |
 2.13cd jīvārkabhaumāḥ puruṣāḥ pradiṣṭāḥ ṣaḍvargaśuddhāḥ puruṣāḥ samagrāḥ ||
 2.14ab ṛgvedanāthas tridaśādhipējyo yajurvinetā bhṛgunandanaś ca |
 2.14cd sāmnāṃ tathā bhūtanayāḥ prasiddho hy atharvavedasya śaśāṅkaputraḥ ||

⁶¹ prāḡādināthāḥ]Σ (emend. in DEP 41), prāḡādhināthāḥ p

- 2.15ab śukrāmarejyau dvijalokanāthau divākarārau pṛthavīpatīnām |
 2.15cd vaiśyādhipaḥ śītakaraś ca saumyaḥ sūdrādhinātho ravijaḥ pareṣām ||
 2.16ab svatuṅgamitrasya gr̥he navāṃśe saumyekṣitānām balam ekam uktam |
 2.16cd strīsadmagābhyām śaśibhārgavābhyām puṃkṣetragānām ca tathā pareṣām ||
 2.17ab kāṣṭhābalaṃ syād gurucāndrilagne sūryārayor yāmyadiśām tathaiva |
 2.17cd sūryātmajasyaiva kalatragasya śukrasya candrasya tathottarasyām ||
 2.18ab ceṣṭābalaṃ bhāskararātripābhyām mṛḡadigābhyām kuṭile pareṣām |
 2.18cd gurvarkaśukrā divase variṣṭhāḥ sadā budho 'nye prabhavanti rātrau ||⁶²
 2.19ab svavarṣamāsodayavāsaṛeṣu saumyāḥ site 'nye ca bhavanti kṛṣṇe |
 2.19cd sūryasya śatrū bhṛguśūryaputrau saumyaḥ samo 'nye suhṛdaḥ pradiṣṭāḥ ||
 2.20ab mitraṃ dīneśaḥ śaśalāñchanasya samāḥ sajīvārkisitajñabhaumāḥ |
 2.20cd jīvārkacandrāḥ suhṛdaḥ kujasya jño 'riḥ samau bhārgavasūryaputrau ||
 2.21ab śukradyunāthau śaśijasya mitrau candro ripur jīvakujārkimadhyāḥ |
 2.21cd bhṛhaspateḥ śukrabudhau parākhyau samo 'rkajo 'nye suhṛdaḥ pradiṣṭāḥ ||
 2.22ab saumyārkajau bhārgavanandanasya mitre samo devaguruḥ kujāś ca |
 2.22cd anye pare bhāskaranandanasya mitrau sitajñau ripavas tathānye ||
 2.23ab guruḥ samo janmavidhau vicintyair daśāyabandhuvyayavittaśokaiḥ ||⁶³
 2.23cd mitraṃ svam eṣām pravādanti nityaṃ mitraṃ sumitraṃ samam eva mitram |
 2.23e śatruḥ samaḥ syāt kramaśas tu tajjñaiḥ ||
 2.24ab daśe tṛtīye navapañcame ca caturthachidre madane tathaiva |
 2.24cd paśyanti pādāntarapādavṛddhyā phalāni yacchanti śubhāśubhāni ||
 2.25ab pittādihiko raktavapuḥ surūpaḥ kanyādhipas tāmranakhaḥ suvaktraḥ ||⁶⁴
 2.25cd bhava varo bhāskaravīryayogāt tīvrāpratāpi parahā sadaiva ||
 2.26ab buddhyādhikaḥ śāstraparaḥ kṛtajñāḥ śleṣmādhiko dīrghatanuḥ prasannaḥ |
 2.26cd sulocanaḥ satyarataḥ sukāntiś candrasya vīryān manujaḥ pradiṣṭaḥ ||
 2.27ab pāpaḥ kṛtaghnaḥ puruṣaḥ kuśīlo hrasvaḥ kunetraḥ kunakhaḥ pradiṣṭaḥ |
 2.27cd kupyapriyo durviśahaḥ prakāmī bhaumasya vīryeṇa bhaved asattvaḥ ||
 2.28ab surūpadehaḥ subhagaḥ suśīlaḥ priyamvadaḥ śāstraparaḥ kṛtajñāḥ |
 2.28cd gauraḥ sudhāmā pṛthugātrayaṣṭir jñavīryataḥ saṃpravādanti martyaḥ ||
 2.29ab sucārugātraḥ praṇataḥ pratāpī sudīrghagātraḥ kaphavān sadaiva |
 2.29cd vidyādhikaḥ satyaparo manasvī surejyavīryāt satataṃ nayajñāḥ ||
 2.30ab dharmī sudīptir manujo 'tidīrghaḥ kaphātmakaḥ prāptayaśaḥ sadaiva |
 2.30cd nīrogadehaḥ priyasāhasaś ca śukrasya vīryeṇa bhavet sudāraḥ ||
 2.31ab sukrṣṭadehaḥ prakhalo 'tīhrasvo hīmsraḥ sadā drohāparaḥ prajānām |

⁶² gurvarkaśukrā]emend. (DEP 48), garvarkaśukrā p

⁶³ vicintyair]emend., vicintyo Σ

⁶⁴ raktavapuḥ]LQW, raktanava BCI, raktanakhaḥ Σ(p)

- 2.31cd vidyāvihīṇaḥ satataṃ kuailo vīryāc chaneḥ saṃpravadanti martyaḥ ||
 2.32ab sattvādhikāḥ sūryaśaśāṅkajīvās tamodhikaḥ sūryasutaḥ kujaś ca |⁶⁵
 2.32cd rajo'dhikau bhārgavasomaputrau sarve manuṣyaprakṛtiṃ nayanti ||

iti śrīvṛddhayavane grahayonibhedādhyāyaḥ ||

English translation

[Chapter 1 The Characteristics of Signs]

- 1.1. Obeisance to you, Śiva, Creator of the Worlds from the beginning of creation, sustaining and undestroyed through the times of destruction, perpetually present in all things, the tripartite spotless Sun.⁶⁶
 1.2. That teaching on horoscopy (*horā*) in 100,000 verses which the Sage of old spoke to Maya, Mīnarāja has studied carefully and through his own intelligence has put it into just 8,000 verses.⁶⁷
 1.3. This teaching reveals clearly the destiny (lit. “praise,” *praśasti*), the fulfiller of the power of actions done in the past, written on [one’s] forehead by the Creator, just as a lamp in darkness reveals a multitude of things.⁶⁸
 1.4. The first [sign] (Aries), known to have the form similar to a ram, is said by the ancients to be the head of Time (*kāla*). Its domains are the paths of goats and sheep, caves, mountains, thieves, fire, mines and gems.⁶⁹
 1.5. The second [sign] (Taurus), whose form is that of a bull, is said to be the area of the face and neck of the Creator. Its domains are the woods, mountains, summit, herds of elephants and cows, and the abodes of farmers.
 1.6. Third [sign] is the Couple (Gemini), holding a *vīṇā* and a club, whose region is the shoulders and arms of Prajāpati. Its domains are the houses for dancing girls, singers, craftsmen, women, amusement, sensual pleasure and gambling.
 1.7. The fourth [sign] (Cancer), whose form is that of a crab staying in water, is designated as the chest-area. Its domains are the flooded fields, reservoirs, sandbanks and the house of the female devotees.
 1.8. The Lion (Leo) on the mountain is the heart-area of Prajāpati. The ancients called it the fifth sign.

⁶⁵ sattvādhikāḥ]emend., satvādhikāḥ *p*

⁶⁶ This suggests that Mīnarāja is likely both a Śaiva devotee and a Sun worshipper.

⁶⁷ Pingree’s edition of the text contains only 4270 verses although the text here claims nearly double. The extant ms. of YJ similarly contains only 2270 verses while the colophon claims 4000 *Indravajrā* (sic) verses (Pingree 1978a: I.3).

⁶⁸ A parallel line noted by Pingree 1978a: I.32 in a “second YJ” 1.8: *vidhātrā likhitā yā latāṭe ’kṣaramālikā | daivajñās tām paṭhet prājño horānirmalacakṣuṣā |*

⁶⁹ VYJ 1.4-15 = YJ 1.14-25.

Its domains are the forests, narrow passages, caves, woods, mountains and outlands.

- 1.9. The Maiden (Virgo) in a boat on the water, holding a lamp in her hand—they call the sixth [sign], carrying the middle half of Time, the belly of the Creator. Her domains are the grassy spots, women, sensual pleasures and crafts.
 1.10. The man holding merchandise in his scales in the market (Libra), is located at place of the navel, hips and groins. His domains are the [place of] pure people, money, *vīṇās*, shops, cities, revenue, all abodes and tall crops.
 1.11. The eighth [sign], whose shape is that of a scorpion in a hole, is said to be the region of the penis and anus of the Lord. Its domains are the caves, pits, holes, poisonous and stony hiding-places, ant-hills, [abodes of] worms, boa constrictors, and snakes.
 1.12. A man carrying a bow with the rear half of a horse [is the ninth sign]. They say this is the thigh of the Maker of the World. His domains are the level land, [places where there are] horses both singly and in herds, warriors,⁷⁰ thunderbolt, chariots and horses.
 1.13. The tenth [sign] is a Makara with the front half of a deer, [and the rest] in the midst of water—they call it the knee-area of the Creator. Its domains are the rivers, woods, forests, lakes, ponds, and pits.
 1.14. An emptied pot on the shoulder of a man. The ancients call this the eleventh [sign, which is] the shanks and thighs. Its domains are the water-vessels, poor crops, birds, women, liquor shops and gambling halls.
 1.15. The last sign is a pair of fish in water. They are said by the excellent [sages] to be the feet of Time. Its domains are the auspicious gods, Brahmins, holy places, river, oceans and clouds.
 1.16. The ancients say that this world, called the inanimate and the animate, entirely speaking (*sarvam*) has its essence in the Sun and the Moon. In this [world], their rising and setting are seen. Also precisely in terms of the circle of signs, that [circle of signs] has its essence in the [Sun and Moon].
 1.17. The half of the [circle] beginning with Maghā (the first lunar mansion in Leo) is assigned to be Solar, while the other half beginning with Āśleṣā (i.e., Serpent, the last mansion in Cancer) is called Lunar. The Sun gave the signs to the planets in order, and the Lord of Stars (i.e., the Moon) did the same in reverse.⁷¹
 1.18. The assignment of Mercury, Venus, Mars, Jupiter and Saturn, in that precise order are made to each sign two at a time, skillfully by the wise.
 1.19. Of these effect-giving [signs], the odd and even ones are said to be male and female, harsh and kind respectively. From the order [counting from Aries] they are movable [cardinal], immovable [fixed],

⁷⁰ The text should read either *kṛtāstra* or *astrabhṛt*, but not *kṛtāstrabhṛt*, which may be forcibly translated as “carriers of excellent missile weapons.” Pingree emended *kṛtā* to *surā* (“alcoholic drinks”).

⁷¹ Hence, beside the Sun and the Moon assigned to Leo and Cancer respectively, for the solar half, Mercury, Venus, Mars, Jupiter and Saturn (from the next verse) to Virgo, Libra, Scorpio, Sagittarius, Capricorn; for the lunar half, Saturn, Jupiter, Mars, Venus, Mercury to Aquarius, Pisces, Aries, Taurus, Gemini. See *Tetrabiblos* I.17. Note the use of *nakṣatras* (almost certainly twenty-seven and not twenty-eight) instead of signs.

or mixed [two-natured].⁷² They should all be distributed among the benefic and malefic [signs] according to their own nature.

1.20. The Ram (Aries), the Lion (Leo) and the Ninth [Sign] (Sagittarius) (i.e., the first triplicity) are Lords in the East; the Bull (Taurus), the Maiden (Virgo), and the beast (Capricorn) are Lords of the South; the Couple (Gemini), the Scales (Libra) and the Pot-bearer (Aquarius) belong to the Western Lords; while the Crab (Cancer), Scorpio and Fish (Pisces) are the Northern Lords.

[Sub-divisions of the Signs]

1.21. The *navāṃśas* of these [signs] manifest themselves starting from the first [sign]; the lords of the first [*nav*] *āṃśa* are counted from [the Lord] of its own place (i.e., sign).⁷³ The designation of the decans (*dreṣkāṇa-*) should be known in sequence by [their] Lords in the first, fifth and ninth [sign, counting from its own place].⁷⁴

1.22. [*Horā*]

Those who know say that in the odd signs, the two *horās* [are ruled] by the Sun and the Moon [respectively]; in the even signs, they are the other way round.⁷⁵

[*Trimśāṃśa*]

In a male sign [the lords of the terms] are said to be 5 degrees for Mars, 5 for Saturn, 8 for Jupiter, 7 for Mercury...

1.23. ... 5 for Venus.⁷⁶ In a female sign, the *trimśāṃśas* (i.e., the lords of the terms) are said to be in reverse order.

[*Saptāṃśa*]

[The Lord] of the *saptāṃśas* count from the seventh sign.⁷⁷

[1/60 of a sign]

⁷² *Tetrabiblos* I.11-12.

⁷³ The line appears to be corrupt but the general idea to determine the lords of the *navāṃśas* based on the sign it belongs to and counting in sequence seems to be in place. Cf. BJ 1.6. The same idea is found in YJ 1.41 but expressed differently (Pingree 1978a: II.211).

⁷⁴ The calculation is different from those of YJ and BJ (YJ 1.39, BJ 1.12, Pingree 1978a: II.209), but are the same as Satya's based on the triplicities: *rāṣipater dreṣkāṇas tatpāñcamanavamabhavanāpatayaḥ syuḥ | teṣāṃ adhipatayaḥ svasvadreṣkāṇe graha balinaḥ ||* (DEP 15). The assignment of the twelve Lords of the signs to the *navāṃśas* would repeat itself in the cycle of 36 *navāṃśas* or 4 signs. Note the use of *bhūtasamkhyā*.

⁷⁵ Same as Satya as quoted by Bhaṭṭotpala in his commentary to BJ 1.12: *ojeṣu raver horā prathamā yugmeṣu cottarā ṣeṣā | indoḥ kramaṣo jñeyā janmani ceṣṭau svahorāsthau ||* (DEP 13-15). Note the difference in YJ 1.39 where the first *horā* belongs to the lord of the sign and the second to the lord of the eleventh sign from it (also BJ 1.12).

⁷⁶ Same in YJ 1.42. The subdivisions within a sign based on the unit of degrees (one thirtieth of a sign) are known as 'terms' in Hellenistic astrology; the values here are different (Pingree 1978a: II.211-218).

⁷⁷ Note difference in YJ 1.40 (Pingree 1978a: II.210).

The sixtieth-divisions of a sign count from Aries.⁷⁸

1.24. A *cūḍapada* consists of 772 *liptās*.⁷⁹ The ancients [describe] the first of the *liptikā* of a house (of 30 degrees). The human signs (Gemini, Virgo, Libra, Aquarius) are in the East and they are the best. The quadrupeds (Aries, Taurus, Leo) are in the South.

1.25. The insect (Scorpio) are in the West. The water-born (Cancer and Pisces) are in the North.⁸⁰

1.26. The houses, when connected with the domains of the planets [would be endowed] with the (excellent) rays of effects. Other planets may result in harm.⁸¹ Insects at twilight, men during the day and animals at night, are the strongest.

1.27. A [house] is most desirable when it is conjoined with [its corresponding planetary] Lord or aspected by the auspicious planets; or if it has entered into a sign, whose subdivision is either auspicious or neutral, not conjoined with malefics, or aspected by many benefics.

[Names of the Twelve Places]⁸²

1.28. [The sages call] the Ascendent (i.e., the first place) Body (*tanu*), Fortunate, Best, Head, Body (*deha*), Abode of Gods, Body (*mūrti*), Fruit, Auspicious Fruit, Benefic, Harmonizer, Easterly House.

1.29. The Second [Place] is [called] Treasury, Wealth, *Darbhakasiddhamedam*,⁸³ Adorned, Shining One.

1.30. The Third Place, they say, is *Utpātahara* and *Sutāra*. It is [also] called Seed-and-Sprout and Praiseworthy.

1.31. [The Fourth Place] is [called] Happiness, Accessible, Devoted to Relatives, *Suḥṛtturyanavīna*, Corner, Friend, Prāsanta, Gurunā, Separating, Young among Men, Plentiful, Bad Rhythm.

1.32. The Fifth Place is called *Santānaka*, *Dātrakara*, Offspring, *Grhītasāra*, Eminent, *Suhotra*, *Pūrvakara*, *Kṛtāla*, *Sārārthivārṇedakaram* *kṛtīnām*.

1.33. The Sixth [Place] is [called] *Purāvani*, Strengtheners of Rogues, Opponent, Strong Foe, Capable, Drying up, Shaming-and-Taming, Very Childish, Unbeaten, Skilled and Loitering.

1.34. The Seventh Place⁸⁴ is well known⁸⁵ as the Most Depressing, Dejected, *Dyūna* (δύσις), Wife, Passion,

⁷⁸ Similar to YJ 1.37ab.

⁷⁹ Strange resemblance to YJ 1.37cd: *dvāsaptatiḥ sadviśatāṃśakānām cūḍapadānām navame nīje 'mśe*. "In each *navāṃśa* of two hundred (minutes) there are seventy-two *cūḍapadas*" (Pingree trans.).

⁸⁰ Pingree 1978a: II.231. YJ 1.79 gives celestial positions instead of cardinal directions.

⁸¹ Pingree noted, "...*grhā grahāṇām*—is clearly corrupt, but all the manuscripts agree on this reading. It would be grammatically better to have *grahā grhāṇām*, but at this point Mīnarāja is still discussing the significances of the zodiac signs rather than those of the planets." (DEP 18, italic mine).

⁸² See Appendix for summary. Pingree 1978a: II.229: "The *bhāvanāmāni* catalogued by Mīnarāja (1,28-38) constitute an expanded list which is not yet satisfactorily explained, but the names preserved by Varāhamihira (BJ 1. 15-19, LJ 1.15-17)...are all derived from YJ, with or without minor additions. The only Sanskrit text which represents a divergent tradition is an anonymous pair of verses (quoted by Rudra on BJ 1.17).

⁸³ Terms from Pingree's edition which I cannot decipher are left in their untranslated forms.

Very Bright, Distressed, Wealth, Truth-knower, Passionate, *Jāmitra* (διάμετρος), *Ātra*, Pleasure-giving.
 1.35. [The Eighth Place is called] Death, Mischief-maker, Defective, Disheveled, Demonic (*paśācika*), Tusked, Injurious, Enemy of Fate,⁸⁶ Combatant among Men, Wolf, Lizard and Serpentine.
 1.36. One calls the Ninth Place Splendor of Dharma, Bringing about Devotion, Mighty, *Tṛṇātika*, Pillar, Gravitas, Firmness, Brilliance, Tranquility, Best and *Sudhāvidāṅka*.
 1.37. The Tenth Place [is called] [Mid-]heaven,⁸⁷ *Karma*, Most Venerable, Shining One, *Sādhakamuktika*, Welfare, Crying, *Kilika*, *Kitāra*, Bow-string and *Āhimāna*.⁸⁸
 1.38. Here, they call the Eleven[th] Place Profit, Gain, Holding, Surplus, Extraordinary, Amidst Brilliance, Happiness, Supernatural Power, *Kulātmasāra* and *Riṣpha* (ρίφη).⁸⁹
 1.39. [They call] the Twelfth Place Loss-making, Injurious, Punishment, Sparse, Exhaustion, Very Childish, Luster, Potter/Owl (*kulāla*), Filthy, Poor and Clever.
 [Cardines]
 1.40. What is called a Cardine (*kendra* = κέντρον) is also known as *Catuṣṭaya* and *Kaṇṭaka*. They are the Ascendent, the Fourth, Tenth and Seventh [Place]; they all give similar results and all the desired objects.
 [Succedents and Cadents]⁹⁰
 1.41. Those who know call the Second, Eleventh, Eighth and Fifth [Place] Succedents (*pañāphara* = ἐπαναφορά). The Third, Ninth, Sixth and Twelfth [Place] are called Cadents (*āpoklima* = ἀποκλίματα).
 [Vṛddhiprada]⁹¹
 1.42. They call the Tenth, Eleventh, Sixth and Third [Place] Profitable.
 [Vargottama]⁹²
 The first *navāṁśa*-s of Capricorn, Aries, Cancer, Libra are called *Vargottama*.
 1.43. [The *Vargottamas* are] the fifth [*navāṁśa*] for Taurus, Aquarius, Leo, Scorpio, and the last [*navāṁśa*] for the others.
 [Day/night strength of signs]⁹³

⁸⁴ *saptamam*, emended from *vāpinam*.

⁸⁵ DEP 25 takes *prasiddha* to be a synonym.

⁸⁶ *Daśārika*. Pingree suggests possible corruption from *daśeraka* (DEP 25), meaning “ass.”

⁸⁷ That is, zenith. Cf. *meṣūraya* = μεσουράνημα (Pingree 1978a: II.218).

⁸⁸ Cp. *māna* in BJ 1.16.

⁸⁹ Cf. *riṣpha* for the twelfth house in BJ 1.15.

⁹⁰ YJ 1.53, BJ 1.16-20.

⁹¹ Same as *upacaya*, as in YJ 1.57 and BJ 1.15.

⁹² YJ 1.61, BJ 1.14. As YJ put more simply, “In every sign the *navāṁśa* belonging to that sign is named by the Greeks the *vargottama*” (*sve sve grhe tu svagrāhāṁśakākhyaṁ vargottamākhyaṁ yavanair niruktāḥ*). There appears to be no parallel of either *navāṁśaka* nor *vargottama* in Greek sources (Pingree 1978a: II.221).

⁹³ YJ 1.81, BJ 1.10. While the day/night division is common in YJ, BJ and most other attested Indian systems (Pingree 1978a: II.232), the description for back/head-rising is different. Cf. YJ 1.63.

The six [signs] Gemini, Cancer, Taurus, Aries, Sagittarius and Capricorn possess night strength...
 1.44. ... and rise from the back except Gemini. The others having day strength rise from the head.
 [Exaltations]⁹⁴
 Exaltation (*ucca*) of the Sun is the tenth degree from the very first [sign]; [Exaltation] of the Moon is the twenty-seven degrees [sic] of Taurus.⁹⁵
 1.45. Exaltation of Mars is said by those who know to be three degrees [sic] of the rising Capricorn.⁹⁶ That of Mercury is twenty-eight degrees [sic] from the sixth [sign] (i.e., Virgo).⁹⁷ That of Jupiter is indeed fifteen degrees (*tithisaṁkhyā*) [sic]... should be five degrees of Cancer.⁹⁸
 1.46abc. Exaltation of Venus is twenty-seven degrees from Pisces. The full-strength (i.e., Exaltation) of Saturn is said to be twenty degrees of Libra.⁹⁹
 [Dejection]¹⁰⁰
 1.46d-1.47. Turning backward, the seventh sign past the house of Exaltation is said by the sages to have the designation of Dejection (*nīca*). At a particular measure away from the Exaltation it gives the

⁹⁴ YJ 1.59-60, BJ 7.6, Pingree's edition or source appear to be corrupt. According to Pingree 1978a: II.221, “Sphujidhvaja's exaltations are completely confused by Mīnarāja...but all later Indian astrologers have copied it faithfully.” In his personal notes, he commented, “It remains difficult for me to conceive of how Mīnarāja managed to mix the numbers up in the way in which he did; that Varāhamihira (BJ 1.13) and all his successors got it right is an indication that Mīnarāja preceded them all.” (DEP 33). Pingree's reasoning is not clear to me, as one would have thought that Mīnarāja's reading would have caused corruption to those who followed him.

⁹⁵ Either Mīnarāja got it confused (with possibly the degree for Venus) or the edition of the text is corrupt. The correct value should be three degrees, which may be read from the next value given incorrectly to Mars.

⁹⁶ Once again the value is incorrect. The correct value should be read from the next value, twenty-eight degrees, which was incorrectly given to Mercury.

⁹⁷ The correct value should be fifteen degrees, given incorrectly to Jupiter which follows.

⁹⁸ The *pañcamo* from 46a should be read with Jupiter and the value of 5 degrees is thus the same as YJ and BJ. From here onward, the correct values may be read with a somewhat awkward shift among the verses.

⁹⁹ Similar to the case with Jupiter, the twenty-seven here (*svarāśvī*) should be assigned as the sole value for Venus. Pingree assigned twenty-seven as an alternative value for Venus and picked up twenty (*viṁśanmīta*) from the following half-verse for Saturn.

¹⁰⁰ YJ 1.60c.

¹⁰¹ I have reverted Pingree's silent emendation *menaivamānena* to the ms. reading *tenaiva mānena*. According to Pingree, “...Mīnarāja could have found the word *menaiva* only in the YJ, where, in 1.50d, is found the word *menyaiva*, “lunar,” derived from the Greek μηνιαῖος. VYJ 1.47c, then should be read: *menaivamānena phalaṁ vidhatte* and translated as “it establishes its effect by the lunar measure,” with the comment “It remains uncertain how to interpret this.” (DEP 34). The emendation seems unnecessary and the comparison with YJ 1.50d remains difficult since the topic in YJ concerns the place of the Moon (*sthānam tu candrasya*), which plays no apparent role in the discussion of Dejection here in VYJ.

opposite result, making it increasingly undesirable.¹⁰¹

[*Mūlatrikona*]¹⁰²

1.48. The *Mūlatrikona* of the Sun is Leo. That of the Moon, Taurus. That of Mars, Aries. That of Mercury (lit., son of the Moon), Virgo. That of Jupiter, Sagittarius. That of Venus, Libra. That of Saturn, Aquarius.

[Colors of the Signs]¹⁰³

1.49. Aries is reddish-brown, the second [sign] is white, the third blue, the fourth reddish-brown, the fifth yellowish white, Virgo always colorful and beautiful.

1.50. Libra is said to be very dark, Scorpio tawny-brown, the ninth very red, Capricorn well-mixed, Aquarius brown, Pisces devoid of radiance.

Here ends the Chapter on the Characteristics of Signs of the Glorious *Vṛddhayavana*

[Chapter 2 Characteristics of the Abodes of the Planets]

[Sun]

2.1. King, Bird, *Mihira*, Goose, *Mitra*, *Aryaman*, Sky-jewel, Intense-rayed, Hero, Bird, Garlanded with Hot Rays, Lord of Day, Reddish One—these are his names.¹⁰⁴

[Moon]

2.2. Possessing a Hare, Hare-marked, Hare-bearer, Lord of Night, Oceanic, Cold-rayed, honored by Hara (*Śiva*), Lord of the *Nakṣatras*, Awakener of Water Lilies, Arranger, Cold-rayed, and Hare-marked.

[Mars]

2.3. Crooked,¹⁰⁵ Born from Earth, Son of Earth, Fourth, Born with a Red Body, Red-limbed, Afflicted with Hunger, Bearer of Witness, Son of the Earth, Beloved of Farmers, and Beloved of Poets.

[Mercury]

2.4. Enjoyer of All Knowledge, Very Wise, Knower, Son of the Moon, Author, Benefactor, Free from Passion, Knave, Born of the Bright One, Knower of Lives and Maker of Destiny, Clever, Keeping-good-rhythm.

[Jupiter]

2.5. *Jīva* (ζεύς), *Angiras*, Guru of the Gods, Knower of Minds, Speaker, Lord of Speech, Incomparable, Yellow-clad, Yellow Appearance, Loved by the Gods, Maker of Perfect Success, Minister of *Indra*.

[Venus]

2.6. Bright, *Asphujit* (ἀσφοδίτη),¹⁰⁶ Guru of the *Daityas*, Having a Good Abode, Son of *Kavi*, *Bhrgu*,

¹⁰² YJ 1.62, BJ 1.14, Dorotheus 1.1.

¹⁰³ BJ 1.20. Surprisingly not founded in YJ.

¹⁰⁴ Cf. Roebuck 1992: 44; passim for other planets.

¹⁰⁵ *vakra*, i.e., retrograde.

¹⁰⁶ Also VYJ 39.87b, YJ 1.33a, 5.9a; *sphujit* (YJ 1.91c). BJ 2.3a, 24.15b, 26.9b.

Receptacle of seeds, Great *Uśanas*, Remember-er, Grateful, Abounding in Many Arts, Good Caste.

[Saturn]

2.7. *Kona* (κρόνος), Slow, Tawny—thus is he generally known—Black, *Yama*, Tardy, *Utanka*, Blackness, Son of the Sun, Very Sharp, Blade of Grass, Terrible, One-who-remembers-past-actions.

[Color of planets]

2.8. The Sun is red, the Moon white, Mars red, Mercury yellow, Jupiter yellow, Venus white and Saturn black.¹⁰⁷

[Birth-places]¹⁰⁸

2.9. The Sun is born among the Greeks, the Moon in Kaliṅga, Mars in Avanti, Mercury in Kauśāmbī...

2.10. ...Jupiter is born in Sindhu. The locale of birth for Venus is Bhojakaṭa. Saturn in Saurāṣṭra, and Rāhu in the Great Barbarian Land (*mahābarbara*).

[Directions]¹⁰⁹

2.11. In order to learn the gates of the directions properly, one should know that the Sun (*heli* = ἥλιος),¹¹⁰

¹⁰⁷ DEP 38 noted color scheme similar to YJ 1.120 and BJ 2.5. The overlapping of the color yellow (*pīta*, *haridravarṇa*) for Mercury and Jupiter here is not so satisfactory. In the case of YJ and BJ, Mercury was assigned green instead (*pālāśaka*, *harita*).

¹⁰⁸ Cp. Varāhamihira's *Yogayātrā* 3.19-20: *aṅgeṣu sūryo yavaneṣu candro bhaumo hy avantīyāṃ magadheṣu saumyaḥ | sindhau gurur bhojakaṭeṣu śukrah saurāḥ surāṣṭre viṣaye babhūva | mleccheṣu ketuś ca tamaḥ kaliṅge jātā yato 'taḥ pariṇīdītās te | svajanmadeśān pariṇīdayanti te 'to 'bhiyojyāḥ kṣitipena deśāḥ ||*. Pingree believes that Varāhamihira's list of birth-places of the nine *grahas* is a crude adaptation of the older list of Mīnarāja (Pingree 1959: 267-8). Pingree further suggested that Mīnarāja's list was taken from YJ: "This list of the countries from which the planets 'originate' was probably taken from YJ since it fits the time of Rudradāman I, the Western Kṣātrapa when Yavaneśvara wrote YJ" (DEP 39, also Pingree 1978a: I.15-16). Pingree's claim is however rather weak as he himself admitted that the line is missing in YJ (Pingree 1978a: II.271).

¹⁰⁹ Hence, Sun, E; Venus, SE; Mars, S; Rāhu, SW; Saturn, W; Moon, NW; Mercury, N; and Jupiter, NE. BJ2.5c *prāgādyā raviśukralohitatamaḥ saurenduṣṭisūrayaḥ*. The scheme is not found in YJ but it bears a certain resemblance to the lords of triplicity in four directions described in the YJ. DEP 40: "The lords of the directions according to Sphujidhvaja YJ 1.66-17 (Pingree 1978a: II.223-227), [where] the lords of the triplicities associated with: East: Sun and Venus (first triplicity); South: Mars (second triplicity); West: Moon and Saturn (third triplicity); North: Jupiter and Mercury (fourth triplicity). From this was derived by someone before Mīnarāja—undoubtedly Satya—the system of Mīnarāja, which is also found in Varāhamihira's BJ 2.5, and YY 5.5 and 6.1..." See also Pingree 1989: 3.

¹¹⁰ Here the Greek term *heli* (= ἥλιος) appears for the first time, not found in the earlier list of synonyms. Pingree notes that the term is used in VYJ and BJ (2.2) but not in YJ (DEP 40-41). Pingree thus suggests that "Varāhamihira had access to Greek material through intermediaries other than Sphujidhvaja; among these alternatives would have been Satya and Mīnarāja." Pingree points out the resemblance between Satya, Mīnarāja and Varāhamihira, but could not explain the discrepancies between YJ and VYJ on one hand, and the presence of parallel verses on the other.

Venus, Mars, Rāhu, Saturn, the Moon, Mercury and Jupiter rule them in order, starting from the East.
[Favorability]
2.12. The Sun, Saturn and Mars are malefic, as are the waning Moon,¹¹¹ and Mercury when conjoined with these. Jupiter, Mercury, the Moon and Venus are benefic. All are powerful in Exaltation.
[Sexes]¹¹²
2.13. Venus and the Moon are described as young women; Saturn and Mercury are neuter; Jupiter, the Sun and Mars are male. All men are purified in the six classes (*ṣaḍvargaśuddha*).¹¹³
[Vedas]
2.14. Jupiter rules the *Rgveda*, Venus the *Yajurveda*, Mars the *Sāmaveda* and Mercury the *Atharvaveda*.
[Castes]¹¹⁴
2.15. Venus and Jupiter are the Lords of Brahmins. Sun and Mars are [the Lords] of the Earth (Kṣatriyas). Moon is the Lord of the Vaiśyas. Mercury is the Lord of the Śūdras. Saturn is [the Lord] of the others (i.e., the outcastes).
[Positional strength] (*sthānabala*)
2.16. [A planet] is said to be equally (*ekam*) strong when it is in its own, exalted or friendly sign, in its own *navāṃśa*, or when aspected by benefics.¹¹⁵
[Male/female sign strength]
The Moon and Venus are strong in female signs; the rest are strong in male signs.

¹¹¹ Waning Moon is considered malefic here in VYJ and BJ 2.5: *kṣīṇendvarkamahisutārkatānayaḥ pāpā budhas tair yutaḥ*; no reference as such is mentioned in YJ 1.109. Pingree suggested Satya to be the one to introduce this concept (Pingree 1978a: II.241). DEP 42: “Bhaṭṭotpala on this passage notes that Yavaneśvara (or Sphujidhvaja) never wanted the Moon to be malefic, and quotes in support of that statement YJ 1.89 and 1.109; but he does not indicate who introduced the idea of a malefic new Moon.”

¹¹² The scheme is same as in YJ 1.115 and BJ 2.6. According to Pingree, the planets themselves are all masculine and the list here enumerates the sexes governed by the planet (Pingree 1978a: II.246). It seems to me that the conflict of sexes is the result of conflating older Indian myths (in which all the protagonists concerned are male) with the new sex-specific planetary deities.

¹¹³ The import of the final *pāda* is uncertain. The expression *ṣaḍvargaśuddha* has however over a hundred occurrences in VYJ and is highly characteristic of this text. From other passages, this should refer to the six main subdivisions of a sign mentioned earlier in 1.21-23, namely, *navāṃśa*, *dreṣṭāṇa*, *horā*, *triṃśāṃśa*, *saptāṃśa* and the sixtieth-division. A planet is said to be pure in six classes when the subdivisions it is in are all benefic.

¹¹⁴ Cf. the same idea in BJ 2.6a; also in Satya (cited by Utpala): *guruśukrau raviraktau candrah saumyah śanaīścaraś ceti | viprakṣatriyaviśūdrasamkarāṇām prabhutvakarāḥ ||*. YJ 1.117-18 gives a slightly different scheme and assigned Mercury to Vaiśya together with the Moon. Saturn was assigned to Śūdras instead. Pingree appears not to have taken the verse-ending *pareṣām* in VYJ into consideration and thus interpreted VYJ to have the same scheme as YJ (Pingree 1978a II.246). VYJ agrees with Satya (or v.v.) instead of with YJ.

¹¹⁵ The verse appears to be incomplete if compared to BJ 2.19 and 20.11.

[Cardinal strength] (*kāṣṭhābāla* = *digbāla*)
2.17. Cardinal strength is at the Ascendent [conjoined with] Jupiter and Mercury; [that] of the Sun and Mars is in the southern direction (= Tenth Place or Zenith). When Saturn is in the Seventh Place, [there is cardinal strength]. That of Venus and Moon is in the North (= Fourth Place or Nadir).
[Motion strength] (*ceṣṭābāla*)
2.18. If the Sun and the Moon are at the beginning of Capricorn, and other [planets] are in retrograde, there is strength in motion.
[Temporal strength] (*kālabāla*)
Jupiter, Sun and Venus are the best when they appear during the day. Mercury is always [strong]. The others (Moon, Mars and Saturn) are [strong] at night.
2.19. [The planets] are auspicious in the year, month, heliacal rising (*-udaya-*)¹¹⁶ and the weekday they rule in the bright [fortnight]. The others are in the dark [fortnight].¹¹⁷
[Planetary friendship]¹¹⁸
Venus and Saturn are the enemies of the Sun. Mercury is neutral to it. All the others (Moon, Jupiter and Mars) are its friends.
2.20. The Sun is the friend of the Moon. Jupiter, Saturn, Venus, Mercury and Mars are neutral to it. Jupiter, Sun and Moon are the friends of Mars. Mercury is the enemy. Venus and Saturn are neutral.
2.21. Venus and Sun are the friends of Mercury. The Moon is the enemy. Jupiter, Mars and Saturn are neutral. Venus and Mercury are the enemies of Jupiter. Saturn is neutral. The others (Sun, Moon, Mars) are said to be friends.
2.22. Mercury and Saturn are the friends of Venus. Jupiter and Mars are neutral. Others (Sun and Moon) are enemies. Venus and Mercury are the friends of Saturn. Others (Sun, Moon, Mars) are the enemies...
2.23. ...[except] Jupiter which is neutral.
[Rule of planets in terms of places]¹¹⁹
[The sages] say that [a planet] is always its own friend.¹²⁰ According to the rules of birth,¹²¹ [the Places of] 10, 11, 4, 12, 9 and 8 are considered by those who know them to be friendly, very friendly, neutral, friendly, inimical and neutral to them (i.e., the planets) respectively.
[Planetary aspects]¹²²
2.24. In the Places of 10 and 3, 9 and 5, 4 and 8, and 7, [the planets] “aspect” with the increase of

¹¹⁶ Possibly corruption of *horā*, or “hour”.

¹¹⁷ If what we supplied here is correct, the concept of black and white fortnight (*pakṣa*) is highly characteristic of Indian astral science.

¹¹⁸ The text in this section remains unsatisfactory. See DEP 49-50.

¹¹⁹ This verse appears to be corrupt with trailing materials from the last verse (2.22), an extra *pāda* and conflicting verbs (*pravādanti* and *syāt*). Without more drastic emendation, the assignment appears to remain incorrect.

¹²⁰ That is, in its own house regardless the place.

¹²¹ Here *janmavidhi* appears to mean the rule of horoscopy (*horā*).

strength of a quarter, [starting] from a quarter, producing the [respective] effects, auspicious or inauspicious.

[Influence on Characters]¹²³

2.25. By the power of the Sun, a man will always be choleric, red-bodied, good-looking, a lord of maidens, with copper-colored nails and a handsome face, the best among beings, of fierce splendor, a slayer of enemies.

2.26. By the power of the Moon, a man is said to be intelligent, intent on learning, grateful, phlegmatic, tall, contented, with beautiful eyes, delight in truth, radiant.

2.27. By the power of Mars, it is said, a person will be wicked, ungrateful, of bad character, short, with poor eyes and poor nails, given to anger, intolerant, lustful, powerless.

2.28. By the power of Mercury, they say, a man will have a beautiful body, lucky, of a good character, pleasant speech, intent on learning, grateful, brilliant, prosperous, with broad limbs.

2.29. By the power of Jupiter, one will always have very beautiful limbs, clever, majestic, tall, phlegmatic, very knowledgeable, devoted to truth, intelligent, a knower of good conduct.

2.30. By the power of Venus, a man will always be just (possessing *dharma*), radiant, very tall, phlegmatic, famous, with a body free of disease, given to rashness, and will have a good wife.

2.31. By the power of Saturn, they say, a man will have a very thin body, villainous, very short, dangerous, ever intent on doing harm to [other] creatures, without knowledge, always ill-clothed.

[Three *guṇa*-s]¹²⁴

2.32. The Sun, Moon and Jupiter are *sattvic*; Saturn and Mars are *tamasic*; and Venus and Mercury are *rajasic*. They all influence the nature of human beings.

Here ends the Chapter on the Characteristics of the Abodes of Planets of the Glorious *Vṛddhayavana*

¹²² YJ 1.65, BJ 2.13, LJ 2.1, Pingree 1978a: II.223, DEP 53. In other words, the places of 3 and 10 give quarter strength. The places of 5 and 9 give half strength. The place of 4 and 8 give three quarter strength. Finally, the place of 7 gives full strength. The scheme given by VYJ, YJ, BJ are nearly identical. Pingree connected the scheme with the four types of aspect in Greek astrology, namely, sextile (3, 11), trine (5, 9), quartile (4, 10) and opposition (7). The Indian version followed certainly a foreign prototype, though not all the places match, most likely due to a very early corruption. However, as Pingree has pointed out, no known Greek or Latin sources extant give numerical equivalents to their strength of different aspects.

¹²³ YJ 1.123-136. Pingree 1978a: II.251-252. DEP 53. See Pingree 1965.

¹²⁴ Same as BJ 2.7b. YJ 1.114 has a different scheme assigning Moon to *rajas* (instead of *sattva*) and Mars to *sattva* (instead of *tamas*).

Appendix

Name of houses (Greek terms underlined, names/concepts unattested elsewhere in *italic*)

	VYJ 1.28-39	YJ 1.54-72	BJ 1.15-20
I	vilagna, mūr̥ti, tanu, deha, <i>subhaga</i> , <i>variṣṭha</i> , <i>mūrdhā</i> , <i>suragaṃ nivāsam</i> , <i>phalam</i> , <i>śrīphala</i> , <i>iṣṭadam</i> , <i>saṃjñānaka</i> , <i>pūrvagr̥ha</i>	mūr̥ti, deha, <u>horā</u> , <i>sva</i> , <i>cintā</i>	tanu, lagna, <u>horā</u> , <i>kalpa</i>
II	kośa, dhana, <i>prabhūṣiṇa</i> , <i>bhāsuraka</i>	kuṭumba	kuṭumba, sva
III	<i>utpātahara</i> , <i>sutāra</i> , <i>bijāṅkuraka</i>	sahaja	sahaja, sahottha, <i>vikrama</i> , <i>duścikya</i>
IV	bandhulīna, sukha, gr̥ha, <i>sugamya</i> , <i>suhṛtturyanavīna</i> , <i>āra</i> , <i>mitra</i> , <i>praśanta</i> , <i>guruṇā</i> , <i>viśāla</i> , <i>nṛṇām kanika</i> , <i>pracura</i> , <i>kuṭāla</i>	bandhu, gr̥ha, <i>hibuka</i> (Ch. 36, 57, 61, 68, 72) <i>jala</i> , <i>janitra</i> , <i>ātmasuta</i>	bandhu, veśman, sukha, <i>hibuka</i>
V	suta, <i>santānaka</i> , <i>dātrakara</i> , <i>gr̥hītasāra</i> , <i>pravara</i> , <i>suhotra</i> , <i>pūrvakara</i> , <i>kṛtāla</i> , <i>sārārthivarṇeḍakara</i> , <i>kṛtīnām</i> , <u>trikoṇa</u> (1.65, <i>passim</i>)	ātmaja, <u>trikoṇa</u> (1.11, <i>passim</i>)	buddhi, putra, <u>trikoṇa</u> , <i>pratibhā</i> ,
VI	suripu, <i>nirāhata</i> , <i>purāvani</i> , <i>sāndrakara</i> , <i>kṛtīna</i> , <i>pratīpa</i> , <i>śakta</i> , <i>saṃśoṣiṇa</i> , <i>hrīdamada</i> , <i>subāla</i> , <i>vārnika</i> , <i>vṛthāṭya</i>	ripu	ari, kṣata
VII	kalatra, dyūna, madana, sukāma, ratida, <i>vāpin</i> , <i>kūrdatara</i> , <i>vitānam</i> , <i>sutāra</i> , <i>dhūna</i> , <i>dhana</i> , <i>santi</i> , <u>jāmitra</u> , <i>ātra</i> , <i>prasiddha</i>	jāyā, astaga, <i>prayāṇa</i> , <i>āgamana</i> , <i>vyādhi</i> , <i>nāsa</i> , <u>jāmitra</u>	patni, cittottha, dyūna, <u>jāmitra</u>
VIII	mṛtyu, chidramaya, <i>khala</i> , <i>prakīrṇa</i> , <i>paiśacika</i> , <i>daṃṣṭrika</i> , <i>ārtidam</i> , <i>daśārika</i> , <i>sāṅgarikaṃ</i> , <i>narāṇām</i> , <i>tadvṛka</i> , <i>kṛkamāṇika</i>	mṛtyu	marāṇa, randhra
IX	dharmadyuti, gurutva, <i>dhītikara</i> , <i>viśāla</i> , <i>tr̥ṇātika</i> , <i>gocaraṇa</i> , <i>dhṛti</i> , <i>vikāśa</i> , <i>praśama</i> , <i>variṣṭa</i> , <i>sudhāvidāṅka</i> , <u>trikoṇa</u> (1.65, <i>passim</i>)	dharma, <u>trikoṇa</u> (1.11, <i>passim</i>)	śubha, guru, tapas, <u>trikoṇa</u>
X	karma, <i>nabhasṭhala</i> , <i>gariṣṭha</i> , <i>vibhāsika</i> , <i>sādhaka</i> , <i>uktika</i> , <i>hita</i> , <i>virātra</i> , <i>kilika</i> , <i>kitārava</i> , <i>bhārava</i> , <i>āhimāna</i>	karma, <u>meṣūraṇa</u> , <i>aiśvarya</i> , <i>abhyudaya</i> , <i>kośabala</i>	karma, āspada, <u>meṣūraṇa</u> , <i>māna</i>
XI	labha, <i>dhāra</i> , <i>trinā</i> , <i>kila</i> , <i>sādhika</i> , <i>adruta</i> , <i>sutāramadhya</i> , <i>sukha</i> , <i>ṛddhipāda</i> , <i>kulātmasāra</i> , <i>riṣpha</i>	arthasamudbhava	aya, bhava
XII	vyayaprada, <i>hātikara</i> , <i>daṇḍa</i> , <i>virālina</i> , <i>sādanika</i> , <i>subāla</i> , <i>bhānu</i> , <i>kuṭāla</i> , <i>malīmasa</i> , <i>dārihara</i> , <i>pravīṇa</i>	vyaya	vyaya, <i>riḥpha</i>

ZINBUN

NUMBER 48 (2017)

INSTITUTE FOR RESEARCH IN HUMANITIES
KYOTO UNIVERSITY

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Printed by Nakanishi Printing Co. Ltd.

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