

Indian Cosmology and Astrology

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Introduction

- *Jyotiḥśāstra* (“science or knowledge of the stars or the light”) is the umbrella term for the mathematics, astronomy, and astrology that first developed in India concurrently with the writing of the Vedas in the first millennium BCE.
- As each technique became more sophisticated, mathematics, astronomy, and astrology became fields in their own right, but *jyotiṣa* or *jyotiḥśāstra* is still used today, though it mostly refers to astrology and even palmistry.
- In many ways, *jyotiḥśāstra* is an unbroken tradition since the astrological rules and theories used today are basically unchanged from texts that were produced in the first millennium CE. Varāhamihira (505-587 CE), a mathematician, astronomer, and astrologer, considered by many to be the father of Indian astrology, laid out the rules that are followed today, which are primarily a combination of Indian and Hellenistic techniques.
- Along with these astrological traditions, Indian astrologers have integrated techniques culled from Arabic astrology and translated from the Persian into Sanskrit during the Mughal Era in the 16th-17th century. This was known as *Tājika*, which meant Persian. Others use modern planets Uranus, Neptune and Pluto, and western progressions. What does remain constant is the use of the sidereal zodiac.

Hinduism, or The Vedic tradition

- As many scholars will attest, there is no simple answer to explain what we know of as Hinduism. Rather than try to summarize completely on my own, I will also reference Gavin Flood in *Introduction to Hinduism*.
- “What is Hinduism? A simple answer might be that Hinduism is a term which denotes the religions of the majority of people in India and Nepal, and of some communities in other continents, who refer to themselves as ‘Hindus’.” (Flood, Gavin, *Introduction to Hinduism*, p.5)
- Although 80% of India’s population identify themselves as Hindus, India’s varied population and rich heritage (which would not exist without the confluence of religions and cultures) includes Jains, Sikhs, Muslims, Parsees, Buddhists, Christians, and Jews.
- “The diversity of Hinduism is truly vast and its history long and complex. Some might claim, both from within the tradition and from outside it, that because of this diversity there is ‘no such thing as Hinduism’, while others might claim that, in spite of its diversity, there is an ‘essence’ which structures or patterns its manifestations. The truth of the matter probably lies somewhere between these claims. Ask many Hindus and they will be sure of their identity as ‘Hindu’, yet the kinds of Hindus they are will vary a great deal.” (Flood, p. 5)

- “There is nevertheless a wide body of ritual practices, forms of behaviour, doctrines, stories, texts, and deeply felt personal experiences and testimonies, to which the term ‘Hinduism’ refers...It is important to bear in mind that the formation of Hinduism, has only occurred since the 19th century, when the term was used by Hindu reformers and western orientalist. However, its origins and the ‘streams’ which feed into it are very ancient, extending back to the Indus Valley civilization.” (Flood, p. 8)
- Unlike other religions, Hinduism does not have one prophet, founder, or teacher. There is no unified system of belief encoded in a creed or declaration of faith. Its basis instead lies in the Vedas, a set of four sacred texts that claim to have divine authorship.
- Hinduism is polytheistic, and each community may worship a different patron god or goddess, and may even have different rituals to accompany those deities.
- It is non-dualistic in that there is no concept of good and evil as in other religions.
- There is no sense of time. Instead, it is “often categorized as belief in reincarnation (*saṃsāra*), determined by the law that all actions have effects (*karma*) and that salvation is freedom from this cycle.” (Flood p. 6)

Vedas

- The roots of Hinduism and, as a result, *jyotiḥśāstra*, lie in the four sacred books (and oldest extant texts in India) known as the *Vedas*, which contain hymns, prayers, and detailed instructions for sacrifices and rituals. The word *veda* comes from the root *vid* (“to know”) and means “(sacred) knowledge.”
- The Vedas were said to have been divinely revealed by *ṛṣis* (seers), and then orally transmitted until they were written down in Sanskrit by the settlers of the Indus Valley. They are called *śruti* texts, meaning that which is heard or revealed.
- The four books were written separately over the first millennium, and were probably written by a combination Indo-Aryan settlers (since Sanskrit had many similarities to Indo-European languages) and indigenous peoples who spoke a Dravidian language. (Dravidian languages include South Indian languages of Tamil, Kannada, Telegu, and Malayalam). (The question of authorship of the Vedas has been controversial and politically charged, and is too complex for this presentation.)
- The four Vedic collections beginning with the oldest, are *R̥gveda* (the most extensive), *Samaveda*, *Yajurveda*, and *Atharvaveda*. These are categorized as *mantra* texts.

- The Vedas contained hymns, poetry, mantras, and instructions for rituals and sacrifices that were known as *vidhi* or Vedic injunctions. Although there are many references to luminaries through hymns, and instructions for rituals that took place on new and full moons, there is no actual mathematical astronomy. There is mention in the *R̥gveda* of 12 spokes on a wheel, which some people have interpreted as the zodiac. The *Nakṣatra Kalpa*, a supplement of the *Atharvaveda*, lists 28 *nakṣatras* accompanied by presiding deities, as well as part of the day, directions, and rituals pertaining to them.
- Also considered to be part of the *Vedas* are the Upanishads (philosophical treatises), Brahmanas (commentaries on sacrificial rituals), and Sutras (*instructions for rituals*).
- The Vedas are also the most important source of information about the daily life of Vedic Aryans, and their religious and philosophical ideas.

• In addition to the four books, there were six *vedāṅgas* (combination of the word *veda* and *aṅga* (limb)). These ancillary branches (*aṅgas*) of the Vedas are considered to be adjunct sciences, or systems of knowledge (*śāstras*) that are needed to fully understand and interpret the Vedas---the songs, prayers, and instruction for rituals and sacrifices. These six are:

- *jyotiṣa* (astronomy)
- *śikṣā* (phonetics)
- *vyākaraṇa* (grammar)
- *chandas* (meter)
- *nirukta* (etymology)
- *kalpa* (performance of rituals)

Jyotiṣa Vedaṅga

- The creation of a calendar, which can be defined as an orderly system of dividing time, emanates from the need in some way to create order out of chaos.
- In India the early soli-lunar calendars, which were developed by observing the cycles of the rising and setting of the sun and the phases of the moon, had always been used to mark seasonal celebrations and to time agricultural cycles.
- Although agrarian planning was important, it was the need to adhere to the timing of Vedic injunctions with exact precision that prompted the development of a more accurate calendar and the reason that *jyotiṣa* became one of the Vedic branches. Timing was said to be found in the science of astronomy.
- This calendar became known as the *Jyotiṣa Vedaṅga* , one of the Vedic six limbs, and comprised specifically a text written by one Lagadha. It represents one of the earliest soli-lunar calendars, dating from the first millennium BCE---probably around 5th century BCE---but dates are disputed.
- The calendar was calculated by observing and recording the cycles of the rising and setting of the sun and moon over time; it represents the earliest stage of Indian calendrical tradition, and all the basic elements that characterize the Indian calendar can be found within it. It was only after the introduction of Hellenistic astronomy that the calendrical values were improved to a useful degree. (Michio Yano. "Calendar, Astrology, and Astronomy." In *The Blackwell Companion to Hinduism*, p. 377.)

If it were not for the fact that the calendar was used to time sacrificial rituals required by Vedic injunction, or that the astrologer often presided over them to verify that the rituals were carried out exactly at the proper time, then *jyotiṣa* would probably not have been classified as a *vedāṅga*.

- It was quite common for the priests themselves to have the astronomical knowledge needed, and if they were not the astronomers, they received all their instruction from the astronomer-astrologer. This is still the case today at Hindu temples throughout India, whereby the temple priest receives instruction from the astrologer about setting up the planetary altars, and performing other rituals dependent on cosmology.



Brahmanical Tradition

- Studying the Vedas, which included instruction for recitation of mantras and participation in Vedic sacrifice, were restricted to men of the priestly Brahmin caste. This Brahmanical tradition, whose values and rules were incorporated into what we know as Hinduism, was interpreted and defined in *smṛti* (from the root “to remember”) texts, that is those that were learned by memory and written down, or more simply, texts that had human and not divine authorship, and were therefore not restricted.
- These texts among them *Dharmaśāstra* and *Manusmṛti* became the sources of Hindu Law, and could be read by those beyond the Brahmin classes. The issuance of these texts accompanied the development of natal astrology and the timing of events that went beyond Vedic rituals.

Measurements of the Moon: *Tithi* and *nakṣatra*

Tithi

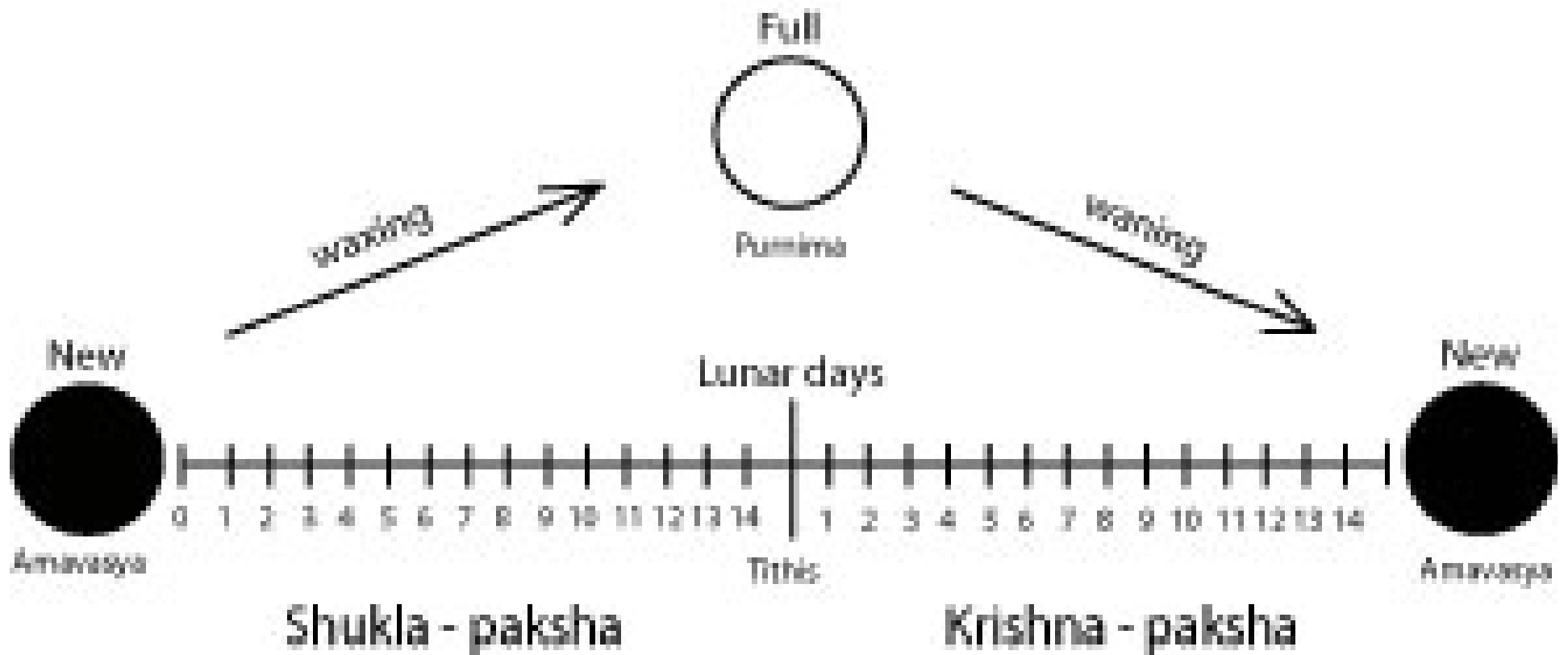
- Indians used the heavenly bodies, especially the position and phases of the Moon, the nearest and most visible luminary, to guide them on a daily basis, and especially to mark holidays and celebrations.
- The Indian lunar calendar was divided into lunar days and months. There are 30 lunar days measuring 12 degrees in a 360 degrees lunar month (approximately 29.5 solar days), the time it takes for the Moon to travel from New Moon to New Moon.
- The Indian lunar day, called a *tithi*, spans 12 degrees, or 1/30 of a lunar month. Because of the Moon's irregular motion, it can take the Moon anywhere from 20-26 hours to travel 12 degrees, or complete one lunar day.
- The *tithis* are numbered from 1-15 in the waxing cycle or bright portion (*śuklā pākṣa*), which culminates with the 15th *tithi*, the Full Moon (*pūrṇimā*), and 1-15 in the waning cycle, or dark portion (*kṛṣṇa pākṣa*), which ends with the 15th *tithi*, the New Moon (*āmāvāsyā*) thus totaling 30 *tithi*, in a lunar month.

Tithis (Each are 12 degrees)

1. *pratipat*
2. *dvitīyā*
3. *tṛtīya*
4. *caturthī*
5. *pañcamī*
6. *ṣaṣṭī*
7. *saptamī*
8. *aṣṭamī*
9. *nāvamī*
10. *daśamī*
11. *ekādaśī*
12. *dvādaśī*
13. *trayodaśī*
14. *caturdaśī*
15. *pūrṇimā* Full Moon

16. *pratipat*
17. *dvitīyā*
18. *tṛtīya*
19. *caturthī*
20. *pañcamī*
21. *ṣaṣṭī*
22. *saptamī*
23. *aṣṭamī*
24. *nāvamī*
25. *daśamī*
26. *ekādaśī*
27. *dvādaśī*
28. *trayodaśī*
29. *caturdaśī*
30. *āmāvāsya* New Moon

The Lunar Month



Nakṣatras

- The most important measurement for the Moon, and the basis of the lunar calendar, was the *Nakṣatras*, or star cluster, that it occupied. The *Nakṣatras* are the 27, or sometimes 28, fixed star groupings into which the ecliptic was divided arbitrarily to demarcate the specific location of the moon at any given time, rather than just pointing to it in the sky.
- By dividing the sky into these groups, which often centered around a prominent star (*yogatārā*) within a particular cluster of stars (e.g., Aldebaran, the bright red star, within the *nakṣatra* of *rohiṇī*, or “red cow”), each cluster, or *nakṣatra*, was named and located, thus formulating a reference point for the position of the moon, as well as for the sun, in order to plan harvesting cycles, perform Vedic rituals, and even plan an important event like a marriage, or the naming of a child, etc.
- Since this was a way of dividing the sky long before zodiac many people refer to it as lunar zodiac.
- Often translated into English as “lunar mansions,” the *nakṣatras* were used to mark the path of the moon in its 27.3 day sojourn through the fixed stars along the ecliptic, and are believed to have been established as the basis of the early lunar calendars around 2240-1760 BCE, during which time the vernal (spring) equinox, which began the New Year, occurred in or near the Pleiades. (Asko Parpola, *Deciphering the Indus Script*, 204)

- Since the *nakṣatra* of *kṛttikā* is comprised of the stars in the Pleiades, this would explain why *nakṣatra* lists always began with *kṛttikā* as the first asterism. This continued long after this was no longer the case, until they were used in natal astrology texts, when they became aligned with the zodiac and began with 0 degrees Aries.
- These lists were made up of either 27 or 28 *nakṣatras* depending on the purpose for which they were listed and used. The lists appear in *Maitrāyaṇī Saṃhitā* (II. 13.20), *Nakṣatra Kalpa* in the *Atharvaveda*, and the *Taittirīya Brāhmaṇa* of the *Yajur Veda* (IV.4.10), among others. The *Nakṣatra Kalpa* lists 28 *nakṣatras* starting with *kṛttikā* accompanied by presiding deities, as well as part of the day, directions, and rituals pertaining to them.

(Sen, “Astronomical Knowledge as revealed in the Saṃhitās, Brāhmaṇas and Sūtras,” 66-68. Parpola, *Deciphering the Indus Script*, 204. “Astronomy in Indus Civilization and During Vedic Times,” 138. Sarma, “A Survey of Source Materials,” 4.)

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- In order to develop a workable calendar based on the motions of the sun and the moon, the *nakṣatras* were comprised only of stars that lie along or near the ecliptic. By selecting only those visible stars to constitute the *nakṣatras*, calendar makers could more easily measure planetary motion, and mark the path of the moon through each group, due to the moon's proximity to the Earth. It was absolutely vital that only the stars that were closer to the ecliptic be included in the *nakṣatra*, since otherwise the moon would not conjoin all the stars in the group, and it was the moon's conjunction with these particular stars that determined the *nakṣatra* divisions and particular categorization as auspicious or inauspicious for performing various rituals and beginning other activities.
- Although they were used as far back as the second and third millennium BCE, they were used to designate stars. In the *R̥gveda*, the word *nakṣatra* was used synonymously with “star,” as well as with “sun,” but with the development of a soli-lunar calendar to time Vedic rituals, the word *nakṣatra* came to refer to each of the 27 or 28 star groupings, rather than to an individual star.
- Since the *nakṣatras* were formulated as a way of marking off time by using the movement of the moon through the constellations, it is always understood that when the word *nakṣatra* is used, it refers only to the moon's *nakṣatra*.
- It was not until the *jyotiṣa vedaṅga* that the *nakṣatras* became well plotted as a coordinate system, and began to be used for all sorts of rituals.

Nakṣatras Listed with Zodiacal Signs

1.	<i>aśvinī</i>	0 AR 00-13 AR 20
2.	<i>bharaṇī</i>	13 AR 20-26 AR 40
3.	<i>kṛttikā</i>	26 AR 40-10 TA 00
4.	<i>rōhiṇī</i>	10 TA 00-23 TA 20
5.	<i>mṛgaśira</i>	23 TA 20-6 GE 40
6.	<i>ārdṛā,</i>	6 GE 40-20 GE 00
7.	<i>punarvasū</i>	20 GE 00-3 CAN 20
8.	<i>pusya</i>	3 CAN 20-16 CAN 40
9.	<i>aśleṣā</i>	16 CAN 40-0 LE 00
10.	<i>maghā</i>	0 LE 00-13 LE 20
11.	<i>pūrvaphalgunī</i>	13 LE 20-26 LE 40
12.	<i>uttaraphalgunī</i>	26 LE 40-10 VI 00
13.	<i>hasta</i>	10 VI 00-23 VI 20
14.	<i>citrā</i>	23 VI 20-6 LI 40
15.	<i>svāti</i>	6 LI 40-20 LI 00
16.	<i>viśākhā</i>	20 LI 00-3 SC 20
17.	<i>anurādhā</i>	3 SC 20-16 SC 40
18.	<i>jyēṣṭhā</i>	16 SC 40-0 SA 00
19.	<i>mulā</i>	0 SA 00-13 SA 20
20.	<i>pūrvāṣādhā</i>	13 SA 20-26 SA 40
21.	<i>uttaraṣādhā</i>	26 SA 40-10 CA 00
22.	<i>śravana</i>	10 CA 00-23 CA 20
23.	<i>dhanīṣṭhā</i>	23 CA 20-6 AQ 40
24.	<i>śātabhiṣa</i>	6 AQ 40-20 AQ 00
25.	<i>pūrvabhadrapadā</i>	20 AQ 00-3 PI 20
26.	<i>uttraphadrapadā</i>	3 PI 20-16 PI 40
27.	<i>revatī</i>	16 PI 40-0 AR 00

Note: A 28th nakṣatra called *abhijit* is sometimes in between *uttaraṣādhā* and *śravana*.

Nakshatras of Cancer and Leo

URSA MAJOR

• V
• ξ

LEO MINOR
Small, dim constellation

Purva Phalguni

Pushyami

M44
Beehive

Magha

CANCER

Uttara Phalguni

Ashlesha

SEXTANS
Small, dim constellation

HYDRA

Hydra's Head

Ecliptic

The Sickle

Algieba

Double for small
scopes; A = 2.2;
B = 3.4; Sep. = 4"
126 ly
Sep. = 130 AU
Lum.: A = 90; B = 30

Regulus

1.4
78 ly
Lum. = 160
Dia. = 5

Three 9th-mag.
spiral galaxies; not as
bright as M65/M66 nearby;
All about 40 million ly

Two 9th-mag. spiral
galaxies in same
telescopic field
Both 40 million ly;
both about size of
Milky Way Galaxy;
180,000 ly apart

Location of 14th-mag. red dwarf
star Wolf 359, third nearest star
7.7 ly
Lum. = 0.000016
Mass = 10% of Sun

δ
2.5
58 ly
Lum. = 30

θ
3.3
178 ly

β
Denebola
2.1
36 ly
Lum. = 20

M65
M66
3.9

M105
M96
M95

ρ
3.9

χ
4.6

σ
4.1

μ
3.9
133 ly

ε
3.0
250 ly

ζ
3.4
260 ly

η
3.5
2,000 ly
Blue SG

ο
3.5

ε
3.4

ζ
3.1

δ

η

ο

Chart 18 ▲

Chart 4 ▲

The Development of *Jātaka* (natal astrology)



Śārdūlakarṇāvadāna

- While the positions of the Sun and Moon were always used to mark seasonal celebrations, planting, and the timing of Vedic rituals, they were not yet used for personal prognostication or horoscopy. It made sense though that with a more sophisticated calendar the Moon's *nakṣatra* would be applied to describe the individual.
- *Śārdūlakarṇāvadāna*, a Buddhist text dating from around the first century CE, is the earliest extant Sanskrit text that lists the characteristics and fate of the individual based on the *nakṣatra* occupied by the moon at the moment of birth. Translated first into Chinese in the Kingdom of Wu in about 250 CE and into Tibetan in about 864 CE, this Buddhist *avadāna* is comprised of two love stories, each of which centers on two people of different castes who fall in love, yet defy and ultimately triumph over their classification by caste.
- These tales then frame the middle section, an astrological and astronomical treatise, which, in addition to briefly delineating the individual effects of the moon's *nakṣatra* includes chapters on the *nakṣatra*'s effects on activities to be undertaken, meteorological conditions, and an exhaustive list of all types of omens. This information is all revealed by someone who, despite being of a low caste, nonetheless demonstrates his wisdom in the field of astrology, which was considered to only be the domain of high-caste Brāhmaṇas.

- The text of these stories is noteworthy in that while the love story and the debates about caste are clearly of Buddhist origin, and pointedly anti-caste, the astronomical and astrological portion of the text, namely the information spoken by this outcaste about the use of *nakṣatra* and omens, was used as a device to show that even someone of a lower caste could possess this knowledge. Each story also provides a glimpse into the types of astrology, astronomy, and divinatory systems that were practiced at the time it was written.
- Most noteworthy, however, is that the appearance of these stories marks the first time that the position of the moon's *nakṣatra* at the moment of birth was used to portend the fate of the individual, even though the description of each *nakṣatra* as it affects the individual is very succinct and only consists of one or two attributes per *nakṣatra*. These are the first four:



A person born in *kṛttikā* is honored. One born in *rohiṇī* is very fortunate and enjoys pleasure. One born in *mṛgaśīra* is a seeker of battle. One born in *ārdrā* is a spring of food and drink.

- The interest in *Sārdūlakarṇāvadāna* could be attributed to Chinese Buddhism, but interest may have also been in the astrological sections, since the Chinese developed a system of astrology that included 28 *hsius*, or *nakṣatra* equivalent, although “many of the Chinese *hsius* differ from the Indian *nakṣatras*; only nine of the 28 *hsiu* determinatives are found to be identical with the corresponding junction stars (*yogatārās*) of the concerned *nakṣatras*.” (See Subbarayappa “Indian astronomy: an historical perspective,” 27.)

Yavanajātaka

- Other than *Śārdūlakarṇāvadāna*, which only contains one brief section on the fate of the individual, the earliest extant Sanskrit text on horoscopy is the *Yavanajātaka* (Greek horoscopy), composed in 269/270 CE by Sphujidhvaja, an Indian of Greek descent. This work, which was compiled, translated into English, and completely annotated by David Pingree, was an adaptation into meter of an earlier Sanskrit manuscript by Yavaneśvara, another Indian of Greek descent (149/150 CE). That text, according to Pingree, was translated from a Hellenistic astrological text probably written in Egypt toward the beginning of the second century. Unfortunately, neither Yavaneśvara's translation nor the original Hellenistic text has been recovered.
- Despite missing fragments of text, Pingree pieced much of it together, transforming *Yavanajātaka* into a readable text that showed how Hellenistic concepts were combined with uniquely Indian ones. Most notable was its introduction of the use of the zodiac, a division of the ecliptic into *rāśis* (twelve equal divisions of stars, or zodiacal signs) of thirty degrees each, as the primary backdrop for the *grahas* ("seizers," or planets), which in the third century CE amounted to Sun, Moon, Mars, Mercury, Jupiter, Venus, and Saturn.
- For the first time, the concept of the *rāśicakra* (horoscope) was introduced whereby the *grahas*, positioned against the backdrop of the *rāśis* and in relation to one another at the moment of birth, would be interpreted to portend the fate of the individual. The *rāśis* were used to categorize everything from dwelling places to body parts to vocation to colors, and chapters of the *Yavanajātaka* included descriptions of what it meant for those categories to have the *grahas* placed in a particular *rāśi*.

- Though much of *Yavanajātaka* was derived from Greek sources, chapters on subjects like Indian flora and fauna, the use of the *nakṣatras* for *yātrā* (military strategy), *praśnaśāstra* (interrogational astrology), *muhūrtaśāstra* (electing a time and date), and other areas of interest originated in India, and may be attributed to the third-century astrologer Satya, whose name was referenced by Sphujidhvaja and later astrologers such as Mīnarāja and Varāhamihira, even though no texts directly attributed to Satya have survived. (David Pingree, *From Astral Omens to Astrology from Babylon to Bikaner*, 36-37)
- Still, much of what has become standard Indian astrology has its roots in many of the Hellenistic concepts introduced in this text, as well as these new Indian techniques that were recorded here for the first time.

Vṛddhayavanajātaka by Mīnarāja

- As far as we know, the next astrological work did not appear until almost a half century later, and further changed the direction of Indian horoscopy. *Vṛddhayavanajātaka* (“Great or Old Greek Genethliology”), a text on horoscopy comprised of 71 chapters, was composed around 300-325 CE by Mīnarāja, a figure about whom we know very little except that he was a *Yavanādhirāja* (Greek overlord) who lived in the kingdom of the Western Kṣatrapas in the late third-early fourth century CE, and likely came from the same social milieu as Sphujidhvaja and Yavaneśvara. (Pingree, *From Astral Omens to Astrology from Babylon to Bikaner*, 36-37)
- From an astrological perspective, the text marks the transformation of Indian astrology from a *nakṣatra*-based system of omens and rituals to a Greek-influenced system that used the horoscope to determine the fate of the individual.
- When *Vṛddhayavanajātaka* appeared, the Brahmanical community was unified in maintaining their privileged status, yet at the same time, Brahmins represented diverse interests and points of view, especially in the realm of religious ideas and institutions.
- *Vṛddhayavanajātaka* is almost double the size of *Yavanajātaka* and the bulk of the chapters, though not all, are similar but not identical to chapters in *Yavanajātaka*. One striking addition, which does not seem to appear anywhere in the extant literature, is *Strījātaka* (astrology for women).

- Chapters 58-62 are listed under the heading of *Strījātaka* (astrology for women). These chapters were the first of a new genre, which would appear as one or more chapters in all astrological texts that followed. In this text the chapters defined the ascendant, Moon, *nakṣatras* planets in the houses, and royal yogas (planetary combinations) for women, and gave positive and negative descriptions. These signatures were probably used as a guideline for what would make a desirable wife, and one who would help uphold Vedic values.

An example from the chapter on *nakṣatras* for women:

When born in *aśvinī* the woman is agreeable, has abundant wealth, and is pleasing to look at, has speech that is pleasant, is patient, pleasing, endowed with purity, attached to gods and elders.

One enjoined with the class of woman born in *bharaṇī* will be cruel and argumentative, has wicked thoughts, devoid of wealth, has no luster or glory, constantly in dirty or tattered clothes.

But now a woman born in *kṛttikā* will be predominantly angry, intent on fighting, without passion, one who is hostile, devoid of blood relatives, predominantly phlegmatic, having a body that is always lean.

But now the woman born in *rohiṇī* will have limbs that are beautiful, pure and not intoxicated, having her husband as her primary interest, devoted to father and mother, having good sons and daughters, endowed with wealth.

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- It is also very clear that the fire and air signs are “wicked” ascendants for women, while earth and water signs serve her better

When Aries rises the woman is not truthful, cruel, always full of anger, excessively phlegmatic, has speech that is cruel, always disaffected from her own relatives.

When Taurus rises, the woman will be intent on truth, agreeable, have modest conduct and devoted to her husband, skilled in all the 64 arts,* attached to her own group, sweet to her husband’s words.

In the ascendant of Gemini, the woman has very cruel speech, is very lustful, and devoid of virtues, always cruel, full of phlegm and bile, extravagant, and has cruel behavior.

In the ascendant of Cancer, the woman is fertile, endowed with beauty, wealth, and good conduct, one who is dear to relatives, has behavior that is noble, endowed with resplendence and endowed with proper pleasures.

*(Note: The 64 arts refer to those listed in Vātsyāyana’s *Kamāsūtra* (1.3.16) as a range of accoutrements, so to speak, that a woman should perfect in order to prepare for sexual intercourse. This evolved into a list of artistic and intellectual skills and talents that a well-rounded, upper class woman should possess and range from knowledge of gemology and carpentry to skills in the performing arts to mastery of languages. In addition to the translations and commentaries, a good rendering of the significance of the *Kamāsūtra* can be found in Daud Ali, *Courtly Culture and Political Life in Early Medieval India*.)

- *Vṛddhayavanajātaka* is unique in that it is the earliest extant text dedicated solely to horoscopy; there is nothing on *yātra*, *praśnaśāstra*, or *muhūrtaśāstra*, all of which had been included in *Yavanajātaka*. It is also the first time since the *Śārdūlakarṇāvadāna* that the moon's *nakṣatra* was used for individual prognostication, and from this point forward in all *jātaka* literature, the moon's *nakṣatras* would continue to be used both for the timing of rituals, holidays, and other activities, as well as for the timing and interpretation of the individual's destiny.
- This is also the first time that *strījātaka* material appeared, since there does not seem to be any record of Sanskrit texts, extant or otherwise, that include material on women's horoscopy, or even textual references to it, that predate this text in Indian astrological works, or even in Hellenistic astrological works, for that matter.

Varāhamihira

- Aside from *Vṛddhayavanajātaka*, there do not seem to be any extant astrological texts dating from the fourth and fifth centuries, though we do know of their existence from references in the texts of Varāhamihira (505-587 CE), the great mathematician, astronomer, and astrologer who was likely in attendance at Yasodharman's court, which was probably held at Ujjain.
- Varāhamihira is best known for his astronomical and mathematical text, *Pañcasiddhāntikā*, alongside his masterwork *Bṛhatsaṃhitā* and *Bṛhajjātaka* (Great Horoscopy), which became the classic text on *jātaka* (natal astrology), from which all future texts emanated. Most of these subsequent authors copied both Varāhamihira's style and his content, with many passages replicated almost word for word.
- Although Varāhamihira adapted many Hellenistic techniques from *Yavanajātaka* and *Vṛddhayavanajātaka*, including *strījātaka* material, he “Indianized” the material even further, as well as revising and abridging it. Thus, whereas *Vṛddhayavanajātaka* consists of 71 chapters, *Bṛhajjātaka* has 28 chapters. In writing *Bṛhajjātaka*, Varāhamihira reverts to that terse, shorthand quality that many *jyotiḥśāstra* texts use, assuming that their audience has the background, and does not need spoon feeding, so to speak. In the Indian tradition, later commentaries in the 10th century CE explained the background and extensive meaning of each verse.

The Horoscope and Hindu Values

- The Brahmanical values (based on Vedic teachings) that became known as Hinduism, developed alongside astrology and these values and religious beliefs naturally became an integral part of Indian horoscopy. The horoscope became a more sophisticated tool to view the fate of the individual.
- Beginning in the Gupta era (320-550 CE) temples dedicated to the *Sūrya*, the Sun, were constructed throughout India, and *graha pūjās* (religious ceremonies) dedicated to the planets emerged. If the grahas are strengthened, then their blessings would be bestowed, both individually and collectively.
- The horoscope represents the stage that a person's soul has reached, and thus indicates one's caste (Indian class distinction), character traits, and accumulated *karma* (positive and negative actions from past and present incarnations). Understanding the three types of *karma*—*Sañcita*, *Prārabdha*, and *Āgāmi*—is central to Hinduism, and thus central to the practice of Indian astrology as well.

- *Sañcita*, or accumulative *karma*, pertains to both known and unknown actions from all previous incarnations that cannot be altered, resulting in the child's "birth in a particular family with particular surroundings, special physical features, and noticeable mental inclinations."



- *Prārabdha*, or operative *karma*, includes all actions that we create and experience in this lifetime "whose machinery is set in motion towards their fruition in the present life." This *karma* is a combination of the characteristics and cycles that are set forth in the horoscope. There will, however, always be differing viewpoints among astrologers as to how much of this "machinery" has already been pre-determined and how much we can direct.

- *Āgāmi karma* includes the contemplative and future actions that we plan to do as a result of the insight we have attained.

(Raman, B.V. *Planetary Influences on Human Affairs*. New Delhi: UBS Publishers Distributors Ltd., 1992, p. 92)

The horoscope, if properly understood in terms of character strengths and weaknesses, destiny, and planetary cycles, will lay out how we absolve negative past *karma*, and create new positive *karma*, allowing us to fulfill our *dharma* (duty). Simplistically speaking, the concept of *dharma* encompasses the duties we need to perform through family, community, work, and ultimately God, in order to lead a righteous life.

- The concept of *saṃsāra*, or reincarnation, is vital to Hindu thought and thus to our understanding of the horoscope as well. Whatever karmas have not been fulfilled by the end of life, will then be carried over into the next one.
- *Saṃsāra*, which literally means “passing through a succession of states” contributes to a non-judgmental approach to astrology, just as there is no good and evil but simply *karmas* that need to be experienced, and *dharma* that needs to be fulfilled.
- Based on some texts, the astrologer may even claim to be able to define the person’s past incarnations.

Jyotiḥśāstra Today

- As a system of knowledge *jyotiḥśāstra* is taught in universities and schools throughout India. Under the umbrella of *jyotiḥśāstra*, the course of study varies but mostly still consists of mathematics, astronomy, and astrology. Under the heading of astrology we have *saṃhitā* (collective or mundane), *jātaka* (natal astrology), *praśna* (literally “question” and somewhat related our present-day horary astrology), and *muhūrta* (electional astrology). Also included is often nimitta, the study of omens, though this would be classified by some as divination and not really *jyotiṣa*.
- Other than those who study scholarly *jyotiḥśāstra*, contemporary astrologers usually come from families of astrologers, so that they have each developed techniques, which have been kept within the family for centuries. Since the *jyotiṣ* earned a living by teaching mathematics, astronomy, or astrology to others, he often maintained a personal library within the family home, since it was the custom to train sons and nephews so that they would continue in the same profession. These books stayed behind closed doors in the ancestral home. (See David Pingree. “The Logic of Non-Western Science: Mathematical Discoveries in Medieval India.” *Daedalus* 132 (4):45-53.)

Much of the astrology is unchanged from *Varāhamihira* with alterations from region, and family. Some have added *tājika techniques like solar returns and arabic lots*, and many also add in Uranus, Neptune, and Pluto. Magazines like B.V. Raman’s *The Astrological Magazine*, which began publishing in the 1930s, popularized astrology in India. They always inserted Uranus, Neptune and Pluto.

- It is customary to have a chart constructed by an astrologer when a child is born. Often the father will go to the astrologer, who will write the chart up, and give it to the father who does not show it to the child. He is mostly interested in health, education, marriage, and vocation.



- It was traditional, and sometimes still is done, that the child is named beginning with the sound associated with the Moon's *nakṣatra*; each 3 degrees 20 minutes (quarter of the 13 degrees 20 minute *nakṣatra*) has a corresponding sound. This used to be so that you always remembered the *nakṣatra* under which you were born. Girls were not supposed to be named this if they were born in a difficult *nakṣatra* so that nobody would think of her as difficult since it could possibly affect marriage prospects. This is an ancient custom that some people still follow.

- After the initial information about the child's destiny is written down and given to the parents, they may or may not consult throughout childhood, though the astrologer often advises the parents periodically as to the child's eating habits, behavior patterns, upbringing, education and, ultimately, arranging the marriage. It is just as common for adults to consult astrologers for themselves as well, and the astrologer will also provide *upāyas* (remedial measures) to alleviate or lessen planetary afflictions.

- People visit an astrologer for making decisions whether they be long-term (i.e change of residence, choosing a career, marriage) or short-term (signing a document or purchasing a car or house). If a client requires short term counsel, needs to chat or requires comfort, he or she may simply drop in without an appointment. In addition to the astrologer's position in the community as general seer, confidante and therapist he is also the source of sacred knowledge.

Nakṣatra Sounds

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been described fully, the technique and the pointers to such conclusions of the results which may be handy and useful for easy reference are given in the following lines:

Nakshatra Padas	1st	2nd	3rd	4th
Aswini	chu	che	cho	l
Bharni	li	lu	le	lo
Krittika	a	i	u	e
Rohini	o	v	vi	vu
Mriga	ve	vo	k	ki
Ardra	ku	gh	in	chh
Punarvasu	ke	ko	h	hi
Pushya	hu	he	ho	d
Ashlesha	de	du	de	do
Magha	m	mi	mu	me
P. Phaguni	mo	t	ti	tu
U. Phaguni	te	to	p	pi
Hasta	pu	sh	n	t
Chitra	pe	po	r	ri
Swati	ru	re	ro	t
Vishaka	ti	tu	te	to
Anuradha	n	ni	nu	ne
Jyeshtha	no	y	yi	yu
Mula	ye	yo	b	bi
Purva Ashadha	vu	th	bh	dh
Uttara Ashadha	be	bo	j	ji
Abhijit	ju	jo	je	sh
Sharavana	shi	shu	shu	sho
Dhanishtha	g	gi	gu	go
Shatbhisha	go	s	si	su
Purvabhadra	se	so	da	di
U. bhadra	du	kh	jh	dh
Revati	de	do	ch	chi

- Like the priest, minister, rabbi or other religious figure, the astrologer provides non-judgmental, wise counsel. His sessions are, at times, 'confessionals' furnishing comfort, hope and encouragement in bleaker moments. The Hindu astrologer serves the community and is available for advice whenever needed. He also provides the temple priests with the information needed to conduct worship and festivities at the precise time and to advise about the nature of the planets in general especially for their planetary altars.
- Along with a rendering of the horoscope, which outlines strengths and weaknesses, as well as the best timing for education, profession, marriage, children, etc, the astrologer will often prescribe *upāyas* (remedies) consisting of rituals, mantras, prayers, or selfless service, to mitigate planetary afflictions. These remedies are meant to strengthen the mind and spirit in the face of adversity, as well as to provide humility. This helps those who consult to become focused, less centered on personal problems, and more dedicated to acts that are driven by faith and compassion.
- One of the astrologer's most significant functions is still sanctioning arranged marriages. He will look at two horoscopes and advise if the two people are compatible, and if so, he will set a wedding date and time, which can range from any hour of night or day. Those families who do not have prospective partners in mind must search for a family with whom to unite. They may consult an astrologer who will advise them as to profession, age, caste and in which direction to search. For example, if the child's chart reveals that the potential marriage partner lives to the East, the astrologer advises the parents to search to the east of the child's birthplace.

- The search for a suitable marriage partner may take place by word of mouth, business/family connections or placing a matrimonial ad in a newspaper or internet website, a very common practice both in India and in Indian communities in the West. These days the marriage ads are often placed by the prospective marriage partners themselves, and not just by the parents. These ads were published in the last week in *The Hindu*, the largest Indian English-language newspaper. (I bolded horoscope requests).

Iyer,vadamma, haritha, mirugaseerisham,1986 born, B.Tech, MS,185 cms,Own business @ Delhi, Rs 2.5L P.M,Upper class seeks suitable girl with good family bkgrd, **horoscope match must**, v_s_anuja@yahoo.co.in, 09818187293 b/w 3- 5 pm (*Published on Mar 3, 2013*)

ARCOT AGAMUDAYA Mudaliar Poosam 35/175 MCA LDC Puducherry Govt. 20000/- seeks working girl from Respectable family.Subsect, Pillai, Chettiar **can apply with Horoscope**. Box No-HB-1774,THE HINDU Chennai-600002 (*Published on Mar 3, 2013*)

SC AD 33 Doctorate in Tamil, **Prof-Pvt College seeks suitable bride with horoscope**. 9840959223/ 9840852253 (*Published on Mar 3, 2013*)

Alliance from never married South Indian brahmin girl with knowledge of Tamil for never married Tamil Iyer Punarvasu 46 / 179 Fair, B.Com, business, 60L pa. **Horoscope, Biodata & photo** to mithun_66@yahoo.com. Phone 044-24660650/ 09819645686 / 09999027499 (*Published on Mar 3, 2013*)

54/167,CHETTIAR,PG,International Business seeks Companion good character good looking below 45 years Caste No bar. **Apply with photo&horoscope** to ulmaka@hotmail.com (*Published on Feb 24, 2013*)

CHENNAI BASED Nair Boy (26), tall, handsome entrepreneur, heading a Pvt Ltd firm, Vishakam, Shuddha Jathakam, highly respectable, well-placed family from Malabar, invites alliances from goodlooking, tall Nair girls with excellent family background. **Horoscope match compulsory. Contact: hemasunil16@gmail.com with all details, horoscope & photographs.** (*Published on Feb 24, 2013*)

YADAVA 28/182 B.E. SWE/MNC 8.4L P.a Seeks bride B.E./MCA/MBBS/MBA **send Bio data & Horoscope** to Box No-HB-1672,THE HINDU Chennai-600002 (*Published on Feb 24, 2013*)

Planetary Worship

- Propitiating the planets has always been a major aspect of *Jyotiṣa* as well as Hindu temple ritual.
- The main motivation is to honor the planet, seek protection, and ameliorate any affliction that might be brought about by difficult planetary combinations, either in the birth chart or by planetary transits, especially Saturn.
- Some people are aware of the times of these planetary positions, by consulting the almanac--- *pañcāṅga* (“five limbs”)---which is used to mark the beginning and ending of holidays and religious festivals, as well as to look up the best tithi or *nakṣatra* to start a project, get married, say prayers, etc.
- The *pañcāṅga* consists of (1) Vara. Days of the Week; (2) Tithi. Lunar Day; (3) nakṣatra. Lunar Mansion; (4) Karana. ½ tithi. 60 karanas in a lunar month. 6 degrees in a karana; (5) Yoga. Union of sun-moon angle.
- They might know about planetary afflictions from the astrologer who can recommend an *upāya* (remedy) in order to propitiate the afflicted planet. You can propitiate a planet that is afflicted by means of giving service, donating clothes or food, feeding birds, mantra, prayer, gemstone, or making an offering to the graha or the navagrahas (“nine planets”) at a temple.

Jyotiṣa in Hindu Temples

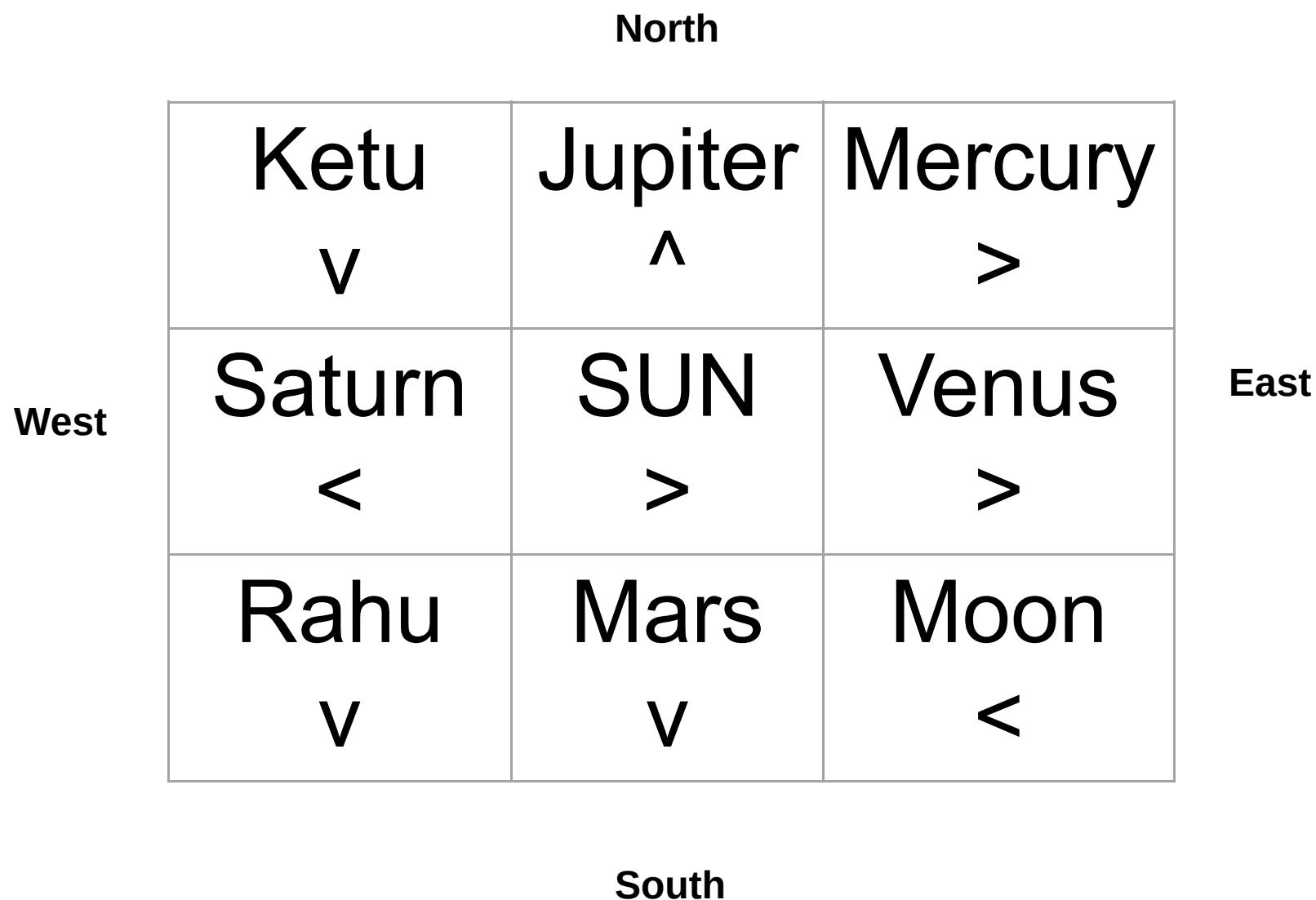
- In temples that are consecrated to a deity and not to a graha, there is often some form of astrological symbolism and planetary worship.
- Often the zodiac is often found on temple ceilings.



Stone carving. The top right box is Pisces. If you go counterclockwise you will see Aries, Taurus, Gemini, etc. Kumbhakona Temple, Tamil Nadu.

- People frequent temples as they do in any religion. They go for a daily service, to watch the ritual bath of the deities, and to leave offerings at the temple. Sometimes they go to receive a blessing, or have a *pūjā* (religious ceremony) done for them by the temple priest who will often ask for the person's *nakṣatra*, which most people know, since often they have had their horoscope cast by the astrologer at the behest of the father. The *nakṣatra* is then recited in the *pūjā*. At the time of marriage, considerations of the *nakṣatras* for the both the bride and groom may be compared to check for psychological compatibility.
- Navagraha ("nine planets") altars are found in many temples, regardless of the patron deity. Offerings in order to propitiate the planets and take away their afflictions are done by placing gifts at the navagraha altar. This can include milk, ghee (clarified butter), oil, or an object that the planet rules. Often there are lamps with ghee or sesame oil that you light with a candle, and place on a metal tray in front of the altar.
- Every morning an *abhiṣeka* is performed on all the deities (often stone statues) in the temple, including the navagrahas. *Abhiṣeka* (a Sanskrit term that originally applied to the coronation ritual) is the daily ritual purification bath of the deities conducted by temple priests in which they first undress the deity of all clothing, jewelry, accessories. Next they pour libations on the statue, which can include milk, yogurt, ghee, rosewater, honey, sesame oil, rosewater, or sandalwood paste, on the statue for a ritual bath. Afterwards clothing and jewelry and accessories are put back on. Navagrahas are bathed after the primary deities, since their altars are usually to the right or left of the deities, and sometimes in another room from the main hall.

Typical Layout of Navagraha Altar





Mahakalesvara Temple (Temple of the great eternal lord). Irumbai near Pondicherry

Navagrahas are laid out as in previous diagram

- Navagraha Altar with Saturn in the Center dressed in black and seated on a crow. If you look closely, Saturn's wife is the small figure seated on his left shoulder. This is a rare Navagraha altar where the wives of the planets are worshipped alongside the Graha' themselves. Behind Saturn is a glimmer of red, which is the Sun.
- Ketu is seen on the left side of the photo with the snakes for a head and wearing printed clothing.
- Rahu is seen on the right side of the photo wearing blue and seated on a lion
- Between Saturn and Rahu in the back you see the Moon wearing white and there is a crescent behind her head.
- Behind Ketu you see Jupiter dressed in yellow and behind him Mercury dressed in Green.





Detail of Ketu from previous photo

Jyeṣṭhā at Brahmapuresvara Temple



Brahmapuresvara Temple in Tamil Nadu. Sometimes the Deities of the Planets are worshipped separately.

Mahakalesvara Temple. Irumbai. Mars with his Peacock





Lord Murugan, the deity associated with Mars, is present in all Siva temples as he is the second son of Siva and Parvati. He is recognized by his spear and is seen riding a peacock who is standing on the snake of desires. This shows that Mars helps to defeat our lower desires. Photo from Irumbai Temple in Tamil Nadu.

Ramanathaswami Temple in Tamil Nadu. Lord Shani (Saturn) and Family



Shani (Saturn) is often given his own altar. In this temple he is worshipped along with his 2 wives, Jyeshtha and Mandi as well as his two sons Gulika and Maandi. His crow is also shown. In most temples you are not allowed to photograph the Deities, so there are paintings near the altar which can be photographed. Also the Idols are all black stone and can only be seen clearly during abhishekam, therefore the artwork near the altar helps to identify the Deity.

Jyotiṣa in the *Pūjā*



Here 10 coconuts, which channel spiritual energy, are placed in a 3x3 grid similar to the Navagraha grid. The two Coconuts in the center represent Śiva and Śakti , the divine male and female energies and the dynamic of all creation. The coconut serves as a focus of worship and aggregates the spiritual energy from the mantras and prayers that are offered. A ghee lamp is seen at the bottom of the photo. The Ghee flame is pure and opens a gateway for the offerings to reach the gods. Chidambaram Temple. Śiva and Pārvatī dance competition.



Pūjās can range from simple home ceremonies to elaborate temple affairs where many priests, Brahmins, come to offer prayers and perform elaborate rituals. Here Ghee – purified butter – is offered to the fire to bring the favor of the Gods.

This was a *Mahāpūjā* dedicated to the Ether Element. It featured 12 priests who chanted scripture for 2 hours while others offered spices and Ghee to the fire to “feed” the gods. A band played at key moments and the temple bells were rung to awaken the *śakti* in the environment. Jupiter rules the element of ether, or space, and also rules the sense of hearing.

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