

Theme 4.2

Continuity of Sky Observation; the Story of Two Dhruva

The story of the child prince Dhruva who by his penance became the Pole Star is a captivating children story in India. The story can be traced to the Brahmāṇḍa Purāṇa (BP) and the Viṣṇu Purāṇa (VP) which were scripted into their present form in the early centuries of the Common Era (CE). But, there was no visible star at the North Celestial Pole (NCP) during the above period that could have been called *dhruva* meaning fixed.

From where did the Purāṇas inherit such an astral legend so vividly? There by hangs a piece of Indian history of seminal importance going back to early Vedic times when the star *Abhaya* (Fearless) was stationary to be popularly called *Dhruva* (Fixed) at the tail end of a group of fourteen stars looking like an aquatic animal called *Śiśumāra*.

This constellation forgotten over time, except for a handful of orthodox Hindus, is now recognizable as the constellation Draco. *Abhaya* the fourteenth star on this whale-like animal figure is α -Draconis (Thuban) which was the North Pole Star for a fairly long period during 3200-2400 BCE.

Due to the effect of precession, this sky picture changed with texts mentioning *Dhruva* to be rotating or drifting. Then came a period when there was no fixed star at NCP but still *Dhruva* was notionally shown in the Vedic marriage ceremony by the husband to his bride chanting ancient hymns addressed to the fixed Pole Star.

Paraskara grhya Sutra, specifies that even if the star is not visible, the bride should say ‘seen’

॥ १८ ॥ अस्तमिते ध्रुवं दर्शयति । ध्रुवमसि ध्रुवं त्वा पश्यामि ध्रुवैधिपो-
ष्ये मयि मह्यं त्वादाद्बृहस्पतिर्मया पत्या प्रजावती संजीव शरदः शतमिति
॥ १९ ॥ सा यदि न पश्येत्पश्यामीत्येव ब्रूयात् ॥ २० ॥ त्रिरात्रमक्षाराल-
वणाशिनौ स्यातामधः शयीयातां संवत्सरं न मिथुनमुपेयातां द्वादशरात्रं
षड्रात्रं त्रिरात्रमन्ततः ॥ २१ ॥ ८ ॥ ❀ ॥

Kālidāsa (5th cent. CE) has immortalized this Vedic marriage ritual in his poem *Kumārasambhavam* (7.85) where Pārvatī is shown the star *Dhruva* by Śiva.

ध्रुवेण भर्त्रा ध्रुवदर्शनाय प्रयुज्यमाना प्रियदर्शनेन ।
सा दृष्ट इत्याननमुन्नमय्य ह्रीसन्नकण्ठी कथमप्युवाच ॥

How did this astral practice come into the social *dharmic* Hindu marriage rites?

In Theme 1.1 we discussed how the ‘dhruvagraha’ in the Agnishtoma, was linked to the Pole Star (*adhidaivata*). This also originated when there was a fixed star at the NCP. The evidence is in the Taittiriya Aranyaka.

The Taittirīya Āraṇyaka (TA) of the Kṛṣṇa Yajurveda (KYV) is made of ten chapters called prapāṭhaka or praśna. In its present form of TA, chapters 7 to 9 and the 10th chapter constitute respectively, the Taittirīya and the Mahānarāyaṇa Upaniṣads. Chapters 1 and 2 have several interesting ideas that are essentially observational suggesting that these could have been the basis for the development of later astral sciences.

Season determination by observing nature and the sky is described in detail in (TA 1.3-1.6), which along with MAU could have given rise to the six season solar zodiac.

ऋषयः सप्तात्रिंशच्च यत् । सर्वेऽत्रयो अगस्त्यश्च । नक्षत्रैः शंकृतोऽवसन् (तै० आ० १-११)

In TA (1.8) Saptarṣi and Agastya are said to be with the nakṣatras. Agastya by unbroken tradition can be identified as the southern star Canopus. From the context Saptarṣi refers to the constellation U. Major. Almost all Indian astral texts, in some manner or other, refer to Saptarṣi and Agastya, but gradually forgot over centuries the Śiśumāra constellation described in the second chapter of TA.

*viśvāmitro jamadagnirbhāradvājo'tha gautamaḥ|atrirvasiṣṭaḥ kaśyapa ityete saptarṣayaḥ |
saptānām ṛṣīṇām agastyāṣṭamānām yadapatyam tadgotramityācakṣate|| (Āśvalāyana
Śrauta Sūtra Pariśiṣṭa)*

ब्रह्मोपस्थानकाले सर्वात्मकस्य परमेश्वरस्य शिशुमाराख्यजलम् (ग्रा ?) हरूपत्वं
ध्यानार्थं दर्शयति—

यस्मै नमस्तच्छिरो धर्मो मूर्धानं ब्रह्मोत्तरा हनुर्यज्ञोऽ-
धरा विष्णुर्हृदयं संवत्सरः प्रजननमश्विनौ पूर्वपादा-
वन्निर्मध्यं मित्रावरुणावपरपादावग्निः पुच्छस्य प्रथमं
काण्डं तत इन्द्रस्ततः प्रजापतिरभयं चतुर्थं—, इति ।

यस्मै परब्रह्मणे नमः सर्वैर्नमस्कारः क्रियते तत्परं ब्रह्मात्र शिशुमाराख्यध्यात-
व्यस्य जलग्राहस्य श्विर उक्तमाङ्गस्थानम् । योऽयमनुष्ठेयो धर्मः स मूर्धानं मूर्धस्था-
नीयः, शिरसो मूर्धश्चैकस्मिन्नेवाऽऽयतन ऊर्ध्वोभागेभेदेन भिदा । योऽयं चतुर्मुखो
ब्रह्मा सोऽयं तस्य ग्रा (ग्रा ?) हस्योत्तरा हनुः । यो यज्ञः सोऽधरा हनुः । यो
विष्णुः सोऽयं हृदयस्थानीयः । यः संवत्सरः सोऽयं प्रजननेन्द्रियस्थानीयः । याव-

स वा एष दिव्यः शक्रः शिशुमारस्तं ह, — इति ।
य एवं वेदापे पुनर्मृत्युं जयति जयति स्वर्गं लोकं
नाध्वनि प्रमीयते नाशौ प्रमीयते नाप्सु प्रमी-
यते नानपत्न्यः प्रमीयते लघ्वान्नो भवति,— इति ।
ध्रुवस्त्वमसि ध्रुवस्य क्षितमसि त्वं भूतानामधिपतिरासि
त्वं भूतानां श्रेष्ठोऽसि त्वां भूतान्युपपर्यावर्तन्ते नमस्ते
नमः सर्वं ते नमो नमः *शिशुकुमागय नमः (१) इति ॥

This hymn is about the constellation Shishumaara, made up of 14 stars. The text describes the head, jaws, heart, forelegs, hind legs, tail in detail as stationed in the sky with names for the fourteen stars. The commentary of Sayana attests this to be describing the celestial aquatic animal Shishumara.

1. Head: Dharma
2. Upper Jaw: Brahma
3. Lower Jaw: Yajna
4. Heart: Vishnu
5. Genital: Samvatsara
- 6,7. Forelegs: Ashwin (twins)
8. Navel: Atri
- 9,10. Hind legs: Mitra & Varuna
11. Tail-First part: Agni
12. Tail 2nd part: Indra
13. Tail 3rd part: Prajapati
14. Tail End: Abhaya-Dhruva

A star on the Polar circle can be seen as Fixed from Earth to be called Dhruva.



About 27,000 years are needed to complete the precession cycle. Currently we have a *Dhruva*. *There was a Dhruva around 3000 BC*

यदह्ना कुरुते पापं दृष्ट्वा तन्निशिमुञ्चते
यावत्यश्चैव तारास्ताः शिशुमाराश्रिता दिवि १००
तावंत्येव तु वर्षाणि जीवताभ्यधिकानि तु

साकारः शिशुमारश्च विज्ञेयः प्रविभागशः १०१
श्रौत्तानपादस्तस्याथ विज्ञेयो ह्युत्तरो हनुः
यज्ञः परस्तु विज्ञेयो धर्मो मूर्द्धानमाश्रितः १०२
हृदि नारायणः साध्यो ह्यश्विनौ पूर्वपादयोः
वरुणश्चार्यमा चैव पश्चिमे तस्य सक्थिनी १०३
शिशनं संवत्सरस्तस्य मित्रोऽपानं समाश्रितः
पुच्छेऽग्निश्च महेंद्रश्च मारीचः कश्यपो ध्रुवः १०४
तारकाः शिशुमारस्य नास्तं यांति चतुष्टयम्
नक्षत्रचन्द्रसूर्याश्च ग्रहास्तारागणैः सह १०५
उन्मुखा विमुखाः सर्वे वक्रीभूताः श्रिता दिवि
ध्रुवेणाधिष्ठिताश्चैव ध्रुवमेव प्रदक्षिणम् १०६

परियांतीश्वरश्रेष्ठं मेढीभूतं ध्रुवं दिवि
अर्ग्रीद्रकश्यपानां तु चरमोऽसौ ध्रुवः स्मृतः १०७
एक एव भ्रमत्येष मेरुपर्वतमूर्द्धानि

ज्योतिषां चक्रमेतद्धि गदा कर्षन्नवाङ्मुखः

मेरुमालोकयत्येष पर्यते हि प्रदक्षिणम् १०८

इति श्रीब्रह्मांडे महापुराणे वायुप्रोक्ते पूर्वभागे द्वितीयेऽनुषंगपादे

ध्रुवचर्याकीर्त्तनं नाम त्रयोविंशतितमोऽध्यायः २३

One who knows the
14 stars correctly
lives longer by that
many years!

**Names of the
14 stars of the
Shishumara
constellation
and the
corresponding
body parts
making up the
animal figure**

**The last four stars
ending with Dhruva
are circumpolar**

Dhruva-Meru centric
astronomical model

ततो मन्दतरं नाभ्यां चक्रं भ्रमांत वै यथा
मृत्पिंड इव मध्यस्थो ध्रुवो भ्रमति वै तथा ६४
त्रिंशन्मुहूर्तानिवाहुरहोरात्रं ध्रुवो भ्रमन्
उभयोः काष्ठयोर्मध्ये भ्रमते मंडलानि तु ६५
कुलालचक्रनाभिश्च यथा तत्रैव वर्त्तते
ध्रुवस्तथा हि विज्ञेयस्तत्रैव परीवर्त्तते ६६
उभयोः काष्ठयोर्मध्ये भ्रमते मंडलानि सः
दिवानक्तं च सूर्यस्य मन्दा शीघ्रा च वै गतिः ६७



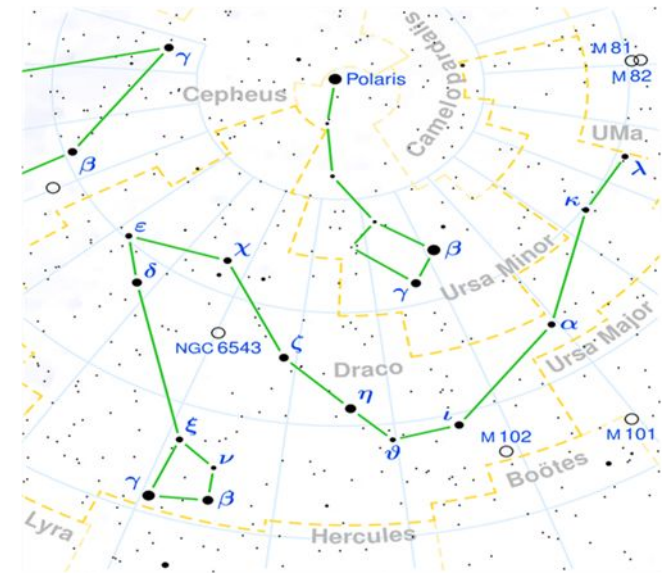
THE OIL MILL COMPARISON OF THE PURANA SHOWS THE MODEL MAKING ABILITY OF THE OBSERVERS OF THE SKY IN THE MOST ANCIENT PERIOD. THEY LOOKED FOR PHYSICAL EXPLANATIONS THAT CAN DESCRIBE MOVEMENTS OF PLANETS. THIS WAS POSSIBLE ONLY BECAUSE DHRUVA WAS ALMOST FIXED WITH DAILY ROTATION AROUND THE POLE IN THOSE DAYS

around 1200 BC



Why the Puranic Dhruva is not now the Pole Star ?

1. There was no Pole Star for people to look at and call it DHRUVA during approximately 2000 BCE-1500 CE; for 3500 years.
2. Purana describes Dhruva to be at the end of a constellation called Shishumara with 14 stars,
3. All stars named and to be marked on the body of the heavenly animal.
4. A small star is to be next to Dhruva to be called Suniti.



If there was no Visible star at NCP how did Brahmanda & Vishnu Purana scripted around 400-500 CE know about Dhruva as fixed star? Purana proposes Meru-Dhruva centric cosmology. How this idea that Earth is connected to Dhruva by an invisible Meru/Medhi (Pole) arise?

1. *Purana should have recorded inherited tradition of ancient memories*
2. *Earth's axis wobbles slowly such that over millennia there may be no star at the North Pole that looks fixed. At present we can see Polaris (alfa-U.Minor) as 'fixed' in the night sky without movement.*
3. *During 3200-2400 BCE 'Abhaya' of the Taittiriya Aranyaka (Yajurveda) was the Dhruva or fixed star! This star is called 'Thuban' or alfa-Draconis in modern astronomy.*

सर्वश्रेष्ठः क्षयिष्णुं पश्यामो यथेमे दुःशमशकादयः॥ तृणवनस्पतय उद्धृतप्रध्वःसिनोऽथ
 किमेतैर्वाऽपरेऽन्ये महाधनुर्द्धराश्चक्रवर्तिनः ॥ केचित्सुद्युम्नभूरिद्युम्नेन्द्रद्युम्नकुवल्याश्वयौ
 वनाश्ववध्र्यश्चाश्वपतिः शशबिन्दुर्हरिश्चन्द्रोऽम्बरीषो ननक्तुः शर्यातिर्ययातिरनरण्ये
 द्रुयोऽथ मरुत्भरतप्रभृतयो राजानो मिषतो बन्धुवर्गस्य महतीः श्रियं त्यक्त्वाऽस्माल्लोकाद्वु-
 मुल्लोकं प्रयाता इति, अथ किमेतैर्वाऽपरेऽन्ये गन्धर्वासुरयक्षराक्षसभूतगणपिशाचोरगग्रहादीनां
 निरोधनं पश्यामः, अथ किमेतैर्वाण्यानां शोषणं महार्णवानां शिखरिणां प्रपतनं ध्रुवस्य
 प्रचलनं ब्रश्चनं वातरज्जनां निमज्जनं पृथिव्याः स्थानादपसरणं सुराणामित्येतद्विधेऽ-
 स्मिन्ससारे किङ्कामोपभोगैर्यैरेवाशितस्यासकृदिहावर्तनं दृश्यत इत्युद्धर्तुमर्हसीत्यन्धो-
 दपानस्थो भेक इवाहमास्मिन्ससारे भगवःस्त्वं नो गतिस्त्वं नो गतिः ॥४॥

॥ इति मैत्रायणीयारण्यकेऽथवा मैत्रायणीयशाखोपनिषदि प्रथमः प्रपाठकः ॥१॥

Brhadratha mentions names of 16 kings before him. This would be about 300-400 years.

Why Dhruva moves?

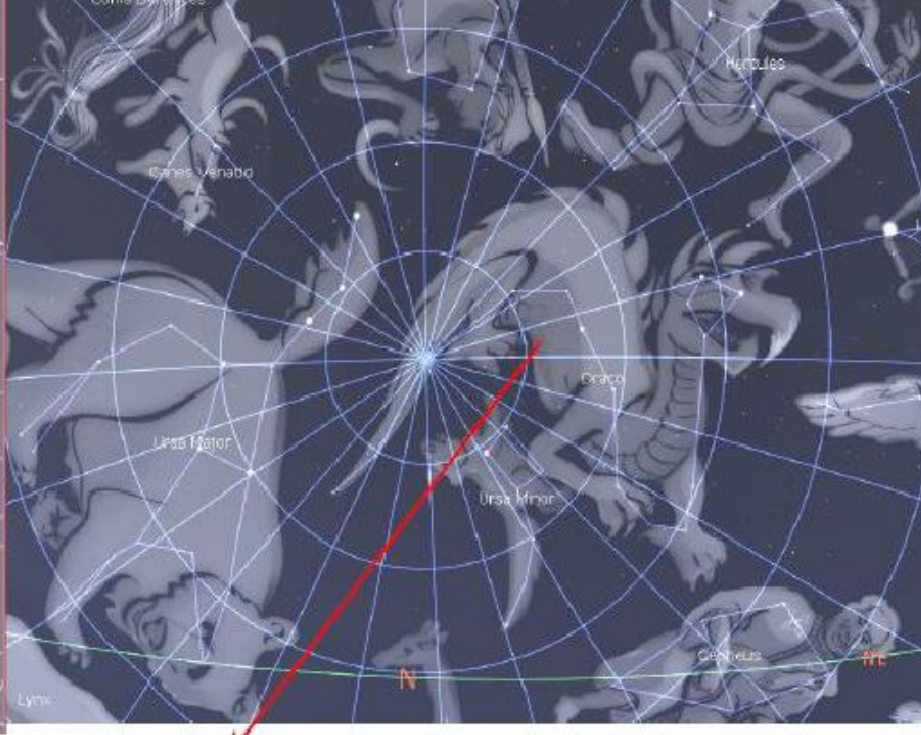
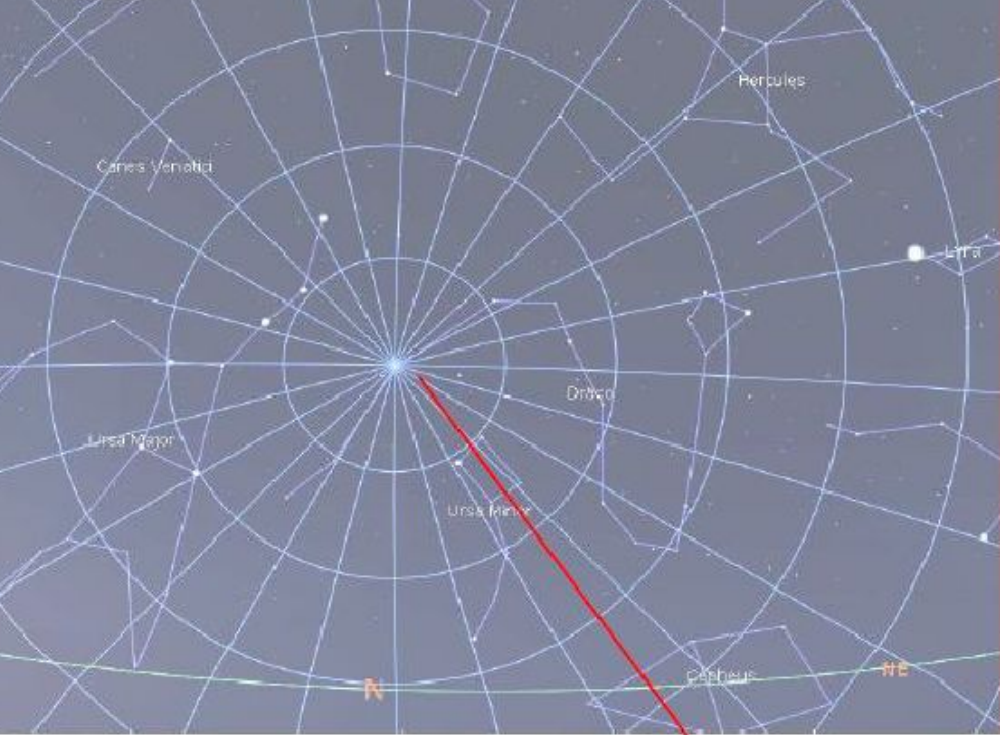
प्रपाठकः ६।१४-१८]

मैत्रायणीयमारण्यकम् ।

[५५१]

घाद्यः श्रविष्ठाद्धिमाग्र्यं क्रमेणोत्क्रमेण सार्पाद्यः श्रविष्ठाद्धिन्तः सौम्यं तत्रैकैकमात्मनो
 नवाः शकः स चारकविधः सौक्ष्म्यत्वादितत्प्रमाणमनेनैव प्रमीयते हि कालो न विना
 प्रमाणयेत्प्रमाणेन प्रमेयस्योपलब्धिः प्रमेयोऽपि प्रमाणतां पृथक्त्वाद्दुपैत्यात्मसम्बोधनार्थ-
 मित्येव ह्याह ॥ यावत्यो वै कालस्य कलास्तावतीषु चरत्यसौ यः कालं ब्रह्मेत्युपासीत
 कालस्तस्यातिदूरमपसरतीत्येव ह्याह ॥

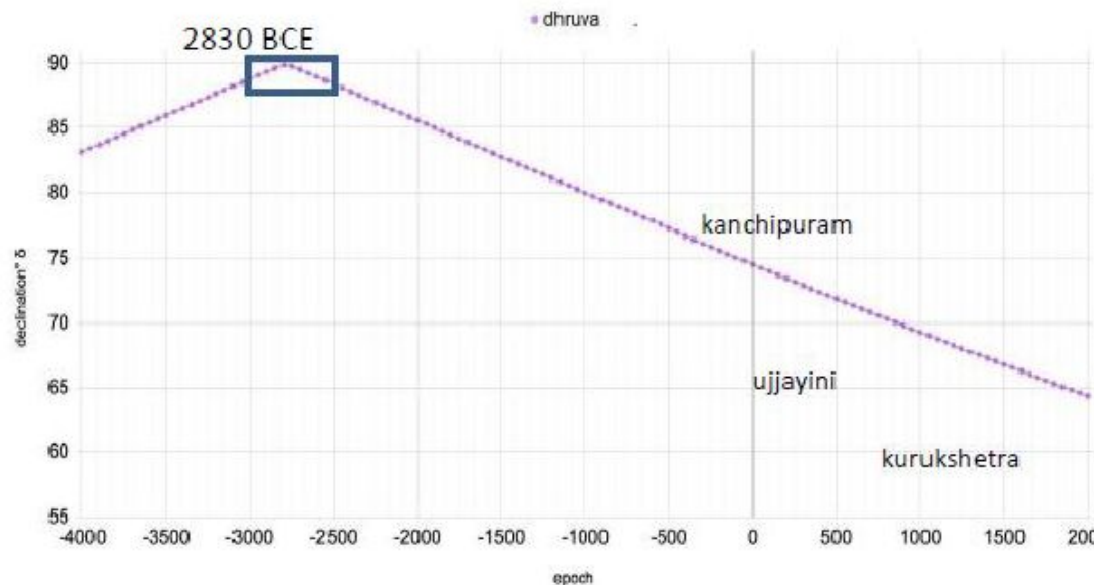
Maghadi epoch c 1800 BCE



Shishumara of T.Aranyaka c3000 BCE

Draconis was the Pole Star during 2000-2400 BCE. In this long period, the declination of this star varied from $87^{\circ} 5'$ to $87^{\circ} 36'$, reaching $89^{\circ} 53'$ in 2830 BCE

In the Maitrayaniya Aranyaka, king Prishadratha among several other questions, asks "why even Dhruva moves"



The above figure depicts the Śiśumāra when Dhruva was closest to the NCP during 2830 BCE. Anyone in the northern hemisphere would have seen the star as stable and fixed. However, with time, the star started circling the Pole and as king Bṛhadratha in MAU questions, Dhruva was not stable (c 1800 BCE). Still the star was circumpolar (without rise and set) and could have been seen all through the year if the Śiśumāra constellation was identified. This seems to have been the case for the *Ekāgnikāṇḍa* and *gṛhya sūtras* to prescribe the *dhruvadarśana rite* in Vedic marriages. But around 500 BCE for people in the south the star lost its circumpolar property, that is, *Dhruva* could not be seen in some seasons After 1000 CE in north India the Vedic star would have been visible, but at low altitudes and it is doubtful if common people could identify the star correctly.

Before Common Era astronomers were aware of the Śiśumāra constellation, which is mentioned in the Jaina *Bhadrabāhu Samhitā* and also in the *Vṛddhagārgīya Jyotiṣa* later chapters (c 500 BCE). Nevertheless, all over India Dhruva remained in the community memory more as an ideal through the Purāṇas, legends, marriage rituals and the Vedic oral traditions.

शिशुमारस्य व्यावृत्त्या तारामत्स्यस्य धीमतः ।
ज्योतिषां च गतिं विद्यादार्तवीं पूर्वदर्शनात् ॥
Vrddhagargiya Jyotisha

शिशुमारं¹¹ यदा केतुरुपागत्य प्रधूमयेत्¹² । तदा जलचरं¹³ तोयं ब्रह्मवक्षांश्च^(?) हिंसति ॥ २७
सप्रर्षीणामन्यतमो यदा केतुः प्रधूमयेत् । तदा सर्वभयं विन्द्यात् ब्राह्मणानां न संशयः ॥ २८
बृहस्पतिं यदा हन्याद् धूमकेतुरथार्चिभिः । विद्विद्याविदो¹⁵ वृद्धान्¹⁶ नृपांस्तज्ज्ञांश्च हिंसति ॥ २९

Alberuni (973-1048 CE) in his book on India mentions that devout Hindus held that the North Pole Star was in the constellation that looks like a four-footed aquatic animal called, *Śākvarā* and also as *Śiśumāra*. He further says that this name sounds similar to the Persian *Susumar*, which is the constellation of the Lizard, same as the modern Draco. He further adds that “the Hindus tell ludicrous tales about this figure.” By this, he alludes to the Purāṇas that praise people with correct knowledge of the 14 stars making up the constellation to be blessed with an extra 14 years of life.

Alberuni had admiration for Indian astronomers for their scientific approach to the subject. But, none of the *siddhānta* texts of the period described any constellation by the name *Śiśumāra*. Curiously enough, they were more interested in establishing the first visibility conditions for the southern star *Agastya* (Canopus). This should not be surprising, since there was no visible star at the North Celestial Pole (NCP) during the first millennium of the Common Era (CE) which was the prime period of mathematical astronomy in India. This situation perhaps prompted Alberuni not to take the Purāṇas seriously as having preserved ancient observations of the Vedic period, in the form of legends and cultural beliefs. However, common people carried in their collective memory the story of the child prince Dhruva, literally *one-who-is-fixed*, as the Pole Star.

The orthodox Vedic tradition of the *vedāntins*, cultivated in parallel also held that Dhruva the Pole Star was located in the constellation *Śiśumāra*. An example of how the Vedic facts were textually recorded other than in the Purāṇas, is available in the commentaries on the *Viṣṇusahasranāma*, which is a part of the *Mahābhārata*. All the three schools of Vedānta, namely Advaita, Viśiṣṭādvaita and Dvaita recognize this text as important for their philosophical traditions. The commentaries specific to the three schools interpret the 441st name *nakṣatranemi*, as a homonym for Viṣṇu, the controller of the *nakṣatras*, stationed at the heart-region of the (constellation) *śiśumāra*, quoting the Vedic and Purāṇic texts in differing details. Śaṅkarācārya explains that Dhruva sitting on the tail of this figure rotates the stellar circle. He quotes cryptically, the Vedic authority for his explanation as *viṣṇurḥṛdayam*, which is the Taittirīya Āraṇyaka hymn (II.19).

अनेन मन्त्रेणोदङ्मुखो भूत्वा ध्रुवमण्डलं पश्यन् शिशुमाररूपेण तमुपतिष्ठेत्(त) । हे
 शिशुमार त्वं ध्रुवोऽसि विनाशरहितोऽसि । तथा ध्रुवस्य जगत् आकाशादेः क्षितं

Sayana Bhashya on TA II.19
 14th century

Vishnu-sahasra-nama-Bhashya; on
the 441st name Nakshatranemi

पराशर भट्टार्यः भगवद्गुणदर्पणे 11
cent

(४४०) महामखः । (४४१) नक्षत्रनेमिर्,

ॐ महामखाय नमः । ॐ नक्षत्रनेमये नमः ।

भा०— “ कुयुभ्याञ्च ” इति पप्रत्ययः. बहुलवचनादीर्घश्च.

(२) “ धर्मो मूर्धानमाश्रितः ”

(३) “ तच्छिरो धर्मः ” इति च. ❀

शाङ्करभाष्ये 800
CE

नक्षत्रनेमिः

भाष्यम्

“ *नक्षत्रतारकैःसार्धं चन्द्रसूर्यादयो ग्रहाः ।

वायुपाशमयैर्वन्धैर्निबद्धा ध्रुवसंज्ञके ॥ ” इति ।

स ज्योतिषां चक्रं आमयंस्तारामयस्य शिशुमारस्य 'पुच्छदेशे
² व्यवस्थितो ध्रुवः । तस्य शिशुमारस्य हृदये ज्योति
श्चक्रस्य ³नेमिवत्प्रवर्तकः स्थितो विष्णुरिति— नक्षत्रनेमिः

शिशुमारवर्णने “ विष्णुर्हृदयम् ” (तै. आ. २-१९) इति

18TH CENT. BY RAGHAVENDRA SURI

महामखः यदधीना इत्यर्थः । महान्तो मखा यस्मादिति वा यं प्रतीति वा । नक्षत्राणां ज्योतिषां ने
मिश्चक्रं नक्षत्रनेमिः । शिशुमारवर्णने विष्णुर्हृदयमिति स्वाध्यायब्राह्मणे श्रूयते । नक्षत्री नक्षत्राधा
रः ॥१०॥ क्षमः क्षमते इति क्षमः । क्षामः कुराः । अणोरेणीयान् इति श्रुतेः । सृष्ट्याद्यर्थं सभी



Icon of Vishnu as
Shishumara with Dhruva
at the tail. 1500-1600 CE

There was no recognized Pole Star during CE and we do not come across reference to *dhruva* unambiguously as a star at the NCP till the 15th Century. But the terminology *dhruvaka* for polar longitude is derived from *dhruva*, interpreted as the Pole, an imaginary point on the sphere. Brahmagupta (598-670 CE) discussing the rotation of the celestial sphere uses the phrase *dhruvayoh nibaddham*, meaning the two geometrical north and south poles of the sphere. The group of stars near the Pole was named *dhruvamatsya* (Polar-fish) and not as *Śiśumāra*.

Bhāskarācārya (1114-1185 CE) in his *Siddhānta-śiromaṇi*, under *Bhuvanakośa* refers to the mouth and tail of this polar-fish and its synchronization with sun rise and sun set.

“ यदा भरणीस्थो रविर्भवति तदा तस्यास्तमयकाले ध्रुवमत्स्यस्तिर्यक्स्थो भवति । तस्य मुखतारा पश्चिमतः । पुच्छतारा पूर्वतः । तदा मुखतारासूत्रे रविरित्यर्थः । अथ निशावसाने मुखतारा परिवर्य पूर्वतो याति । पुच्छतारा पश्चिमतो याति । ततो मुखतारासूत्रगतस्यैवार्कस्योदयो दृश्यते” (सिद्धान्तशिरोमणिः)

In the 15th Century the present Polaris or α -U.Minor had reached close to the Pole at about 860 and a line connecting it to star *markaṭi* (β -U.Mi or Kochab) was recognized to rotate in the night sky. This fact was used by Padmanābha to develop his astronomical instrument *Dhruva-matsya-yantra* for finding time as in a clock.



Figure 2: *Dhruvabrahma-yantra*, made for Yado Joshi, resident of Ukala-grāma (Akola), latitude 20 degrees. Reverse side, with the sine quadrant. Raja Dinkar Kelkar Museum, Pune.

Siddhāntic astronomers were true to their empirical scientific observations, even though they must have been well versed in the ancient Vedic and Purāṇic lore. Kamalākara Bhaṭṭa the famous author of *Siddhānta-tattva-viveka* (1658 CE) addressed the question of which star to be seen by the bride in Hindu marriages. This was very relevant, since the prescribed Vedic hymns as per their meaning refer to the fixity of Dhruva. True to the spirit of the Vedic mantra but not to the letter, he gave the celestial coordinates of *Dhruva* along the ecliptic as 90° longitude and 66° latitude. Thus from his astronomical point of view the current Pole Star was to be taken as the *Dhruva* for religious purposes also.

चलेऽचलेऽपि ध्रुवभे स्वमेषा-

द्राशित्रयं तद्भ्रुवकः शरस्तु ।

षट्षष्टिभागाः ६६ परिणीतनार्या(२)

मदत् फलं दर्शनतोऽस्ति यस्य ॥ १८ ॥

(२) वि० श०—परिणीताया विषाहिताया नार्या ध्रुवावलोकनं
विषाहपद्धतौ प्रसिद्धमस्ति ।

Kamalakra Bhatta, 1658 CE Which Dhruva to be seen by the bride in her marriage?

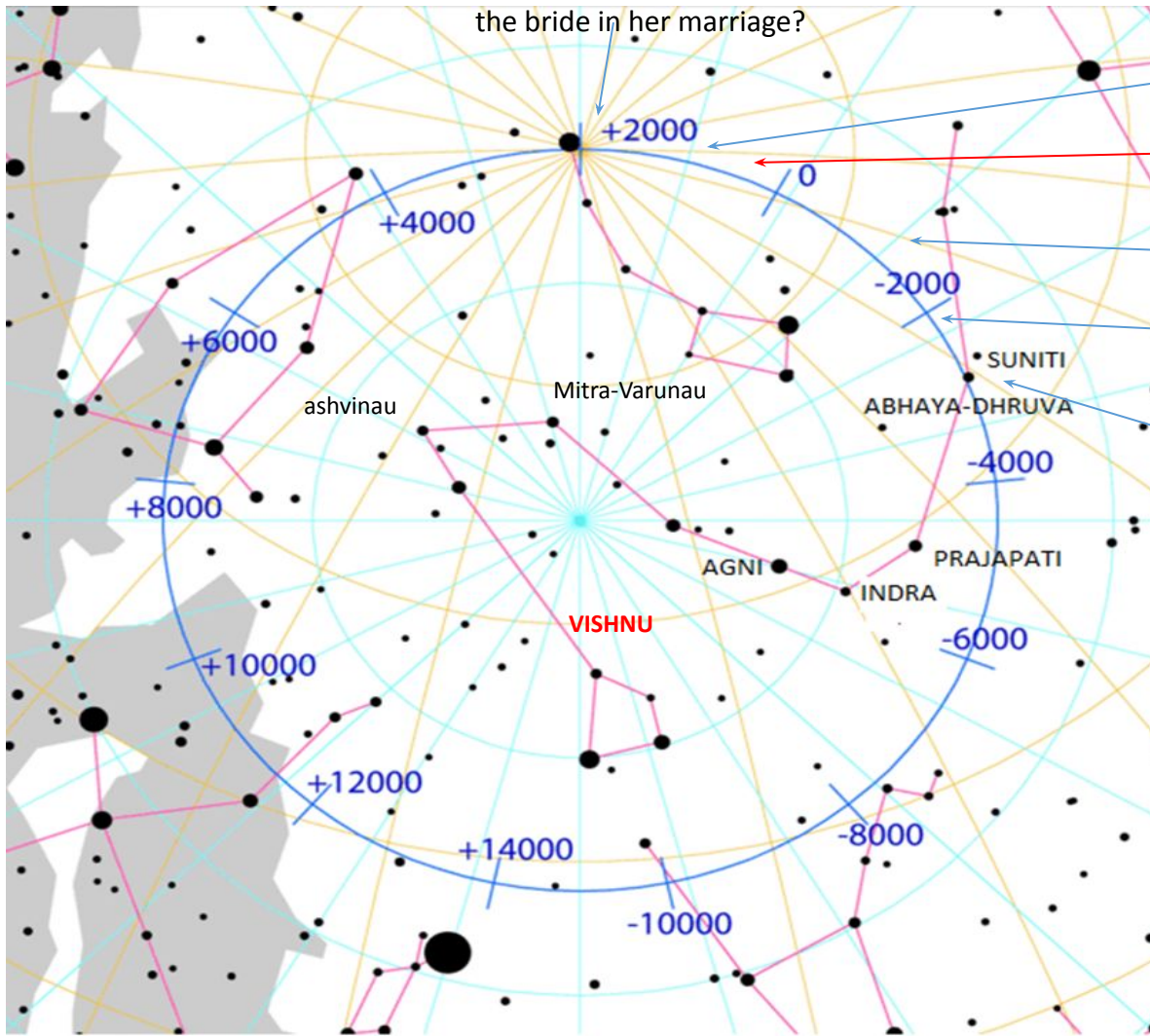
Alberuni 1025 CE, Hindus believe their Pole star to be in Shishumara

SHANKARACHARYA 800CE, Quotes, Tai. Aranyaka to locate Vishnu at the heart of shishumara

Maitrayaniya Aranyaka. 1800 BCE Why Dhruva moves?

Tai. Sam, KS, KKS; Dhruva Graha/sthali, Abhicara using Dhruva, to bring down leaders/kings

Taittiriya Aranyaka 3000 BCE

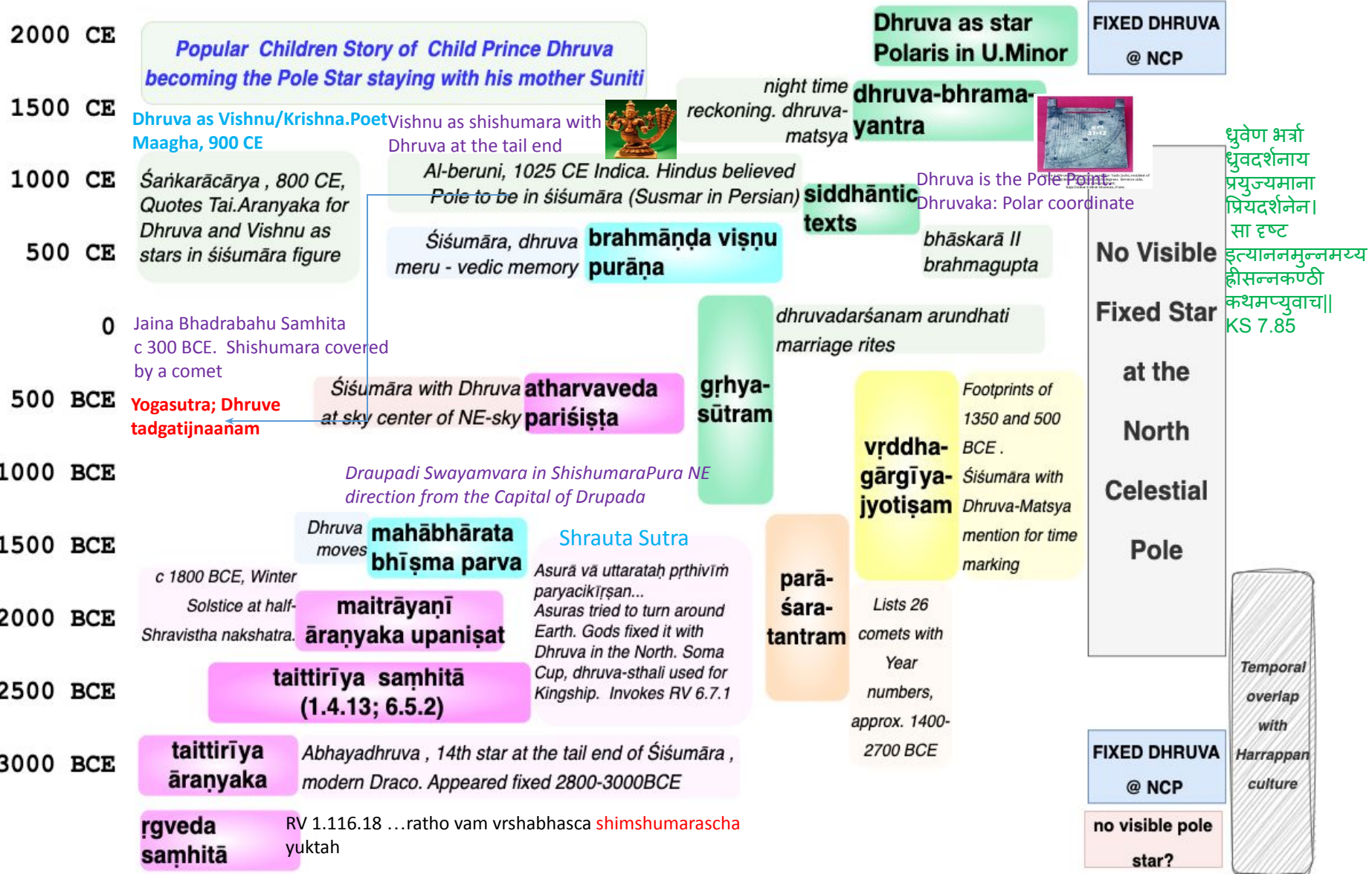


Taittiriya āraNyaka describes constellation Draco as Shishumara with 14 stars at the end of which Abhaya-Dhruva (α-Draconis or Thuban) was stationed. (2400-2800-3200 BCE) *Ekāgni of Krishna Yajurveda* pictures this as a Fixed Peg driven in ground around which animals go round.

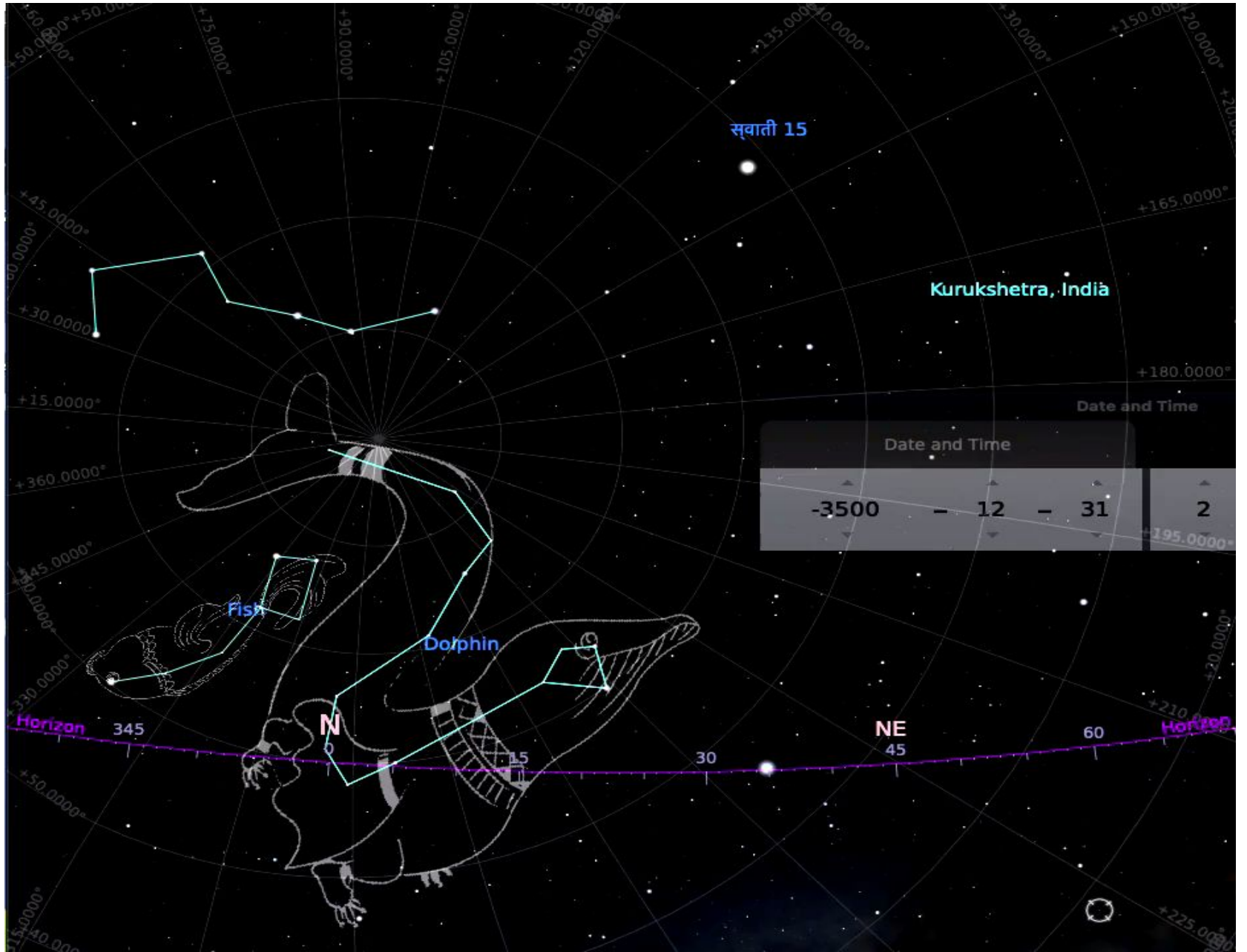
This Dhruva-mantra is used in Hindu marriages to show the bride the Pole Star Dhruva so that she is like the Fixed Star in her new home.

ध्रुवक्षितिः ध्रुवयोनिः ध्रुवमसि ध्रुवतस्थितम् । त्वं नक्षत्राणां मेथ्यसि स मां पाहि पृथन्यतः ॥ (१.९)

Stratigraphy of Dhruva as Fixed Pole Star in Sanskrit Texts



शिशुमारस्य व्यावृत्त्या तारामत्स्यस्य धीमतः ।
ज्योतिषां च गतिं विद्यादार्तवीं पूर्वदर्शनात् ॥ Vrddhagargiya Jyotisha



Vedic, Puranic and later siddhanta astronomy texts
have preserved knowledge of
Two Distinct Dhruva-Pole Stars Spanning ~5000 Years

First; *tail-end* star in constellation Shishumara (Draco-Thuban)

□ Tai.Ara.(~3000 BCE)

Second; *mouth* of Dhruva-matsya (Polaris) --> Siddhanta-tatva Viveka
(1658 CE)

This also demonstrates continuity of long term
Vedic astronomical tradition
that overlaps with the known time line of the
Indus-Saraswati civilization