Mythology, Cosmogonies, and Indian Science Fiction

Made with Stable Diffusion

Ashish Mahabal
Cosmic Explorations (XI INSAP), Caltech, 21 Sep 2022

Mythology and Cosmogonies of India

- known/recorded history of a few thousand years,
- mix of many religions and sects,
- variety of cosmogonies (theories of how the Universe originated).

The polytheistic mythology has a rich tradition of astronomy (and astrology)
Various gods are said to reside in different worlds
Not directly connectible to specific planets, or stars

Constellations, and eclipses

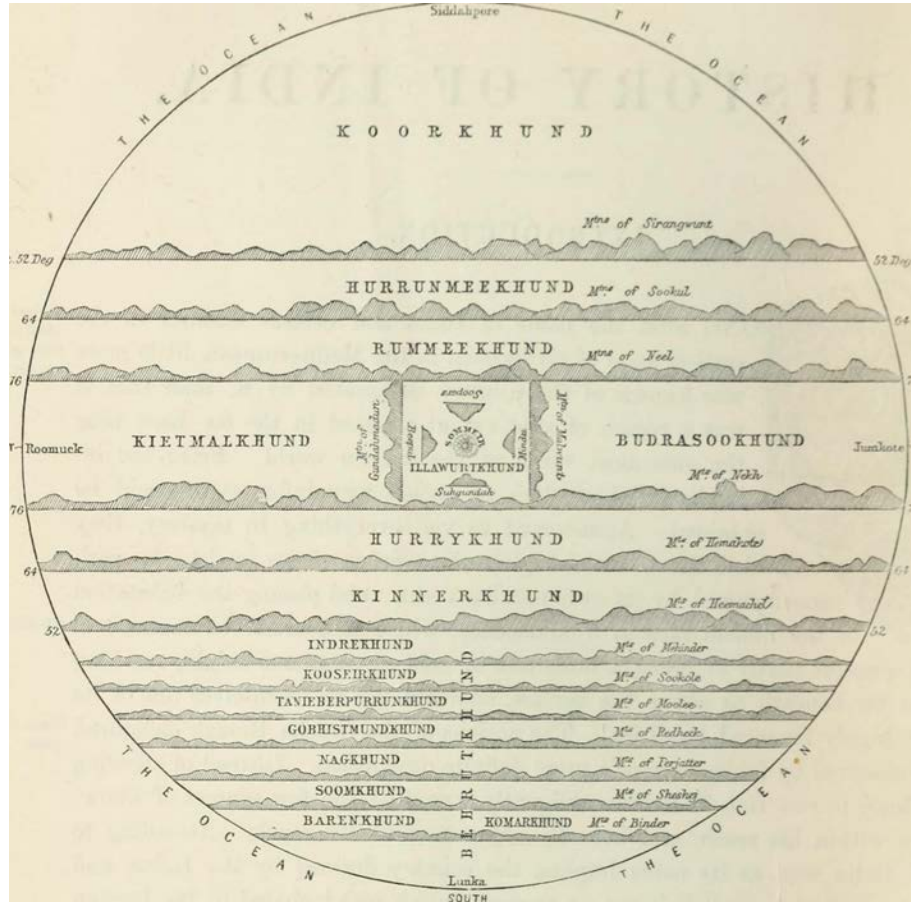# A few major traditions (very non-exhaustive)

Theist:

- Hindu
- Jain
- Buddhist

Atheist:

- Charvaka

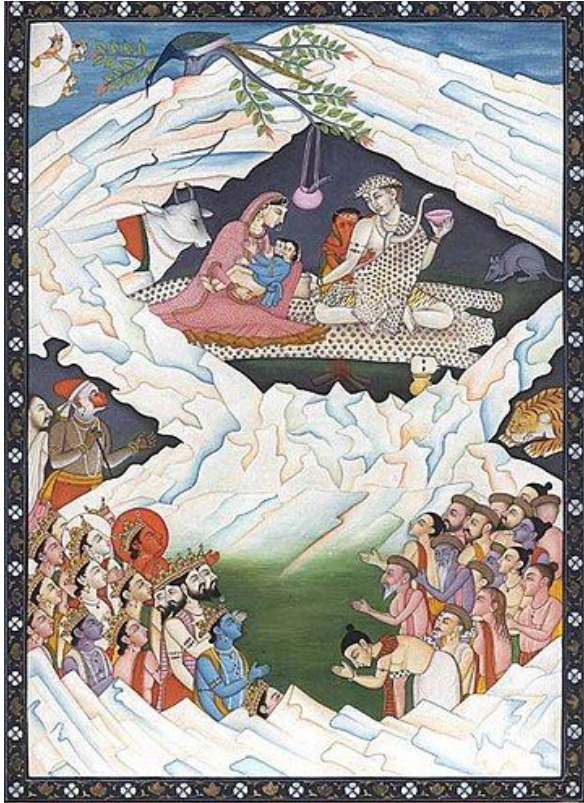- Ajiivika

Jambudwipa

Internet Archive Book Image, Wikipedia

Anishshah19, Wikipedia

Connections to heaven and the netherworld (plurality)

Mount Meru is the original axis

Mount Kailash as Axis Mundi; Shiva's adobe atop it.

Nag kund in Banaras is also considered to connect the Earth with the netherworld and the heavens.

Plurality

Courtesy: tourism of India

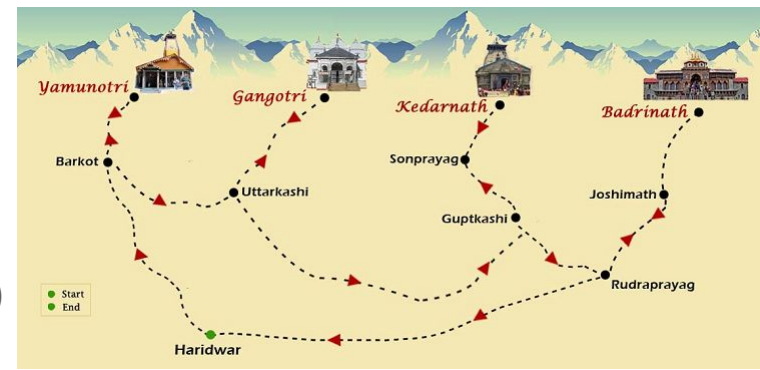Banaras = Kashi (from Sanskrit kaashate - to shine)

Mandi in Humachal Pradesh is Choti Kashi (smaller Kashi)

Char dham (India) versus char chota dham (North India)

Intricate connectivity and multiplication factors to get you across the world of maya

Tirthas: Movable, immovable, and maanas (mental)

Solar-Lunar calendar - almanacs ingrained

Vishnu reclining on Shesha; Brahma blooms on a lotus from his navel (palace of Bir Singh Dev, early 17th c.) (From Wikipedia)

Left: Brahma and Saraswati, **Middle:** Vishnu and Lakshmi, **Right:** Shiva and Parvati. (From Wikipedia)

Six darshanas stand out

Ami Gantara

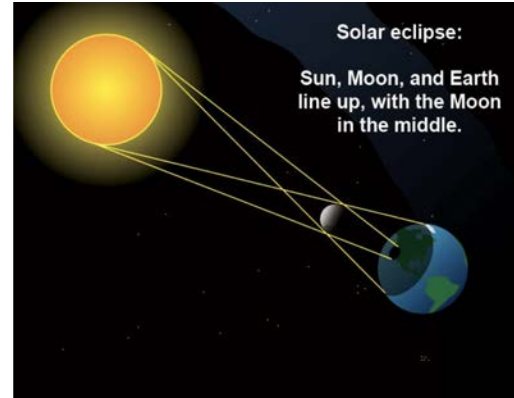Churning of the milk ocean

Origin of eclipses: "nodes" resulting from the churning

vedicfeed.com

- Amrit, elixir of life
- Asura taking it away
- sun/moon noticing
- Head decapitated but immortal due to a drop
- Head and body follow sun causing eclipses

Solar eclipse:
Sun, Moon, and Earth line up, with the Moon in the middle.

Epics - Ramayana

Battle of Lanka, by Sahibdin (Wikipedia)

Mahabharat solar eclipse

Jaydratha was on a rampage and
defeating Pandavas

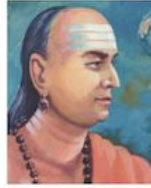Solar eclipse "ends" the day

pragyata.com

The sun comes out and Krishna
commands Arjuna to kill Jayadratha

With one little function, I'll give you the Moon!

ARYABHATA
476–550

Sines improve accuracy

Aryabhatiya c. 499

Ganitapada
Golapada

**Many commentaries
Greek influence?**

Table of jya (sines of half-chords)

मखि भखि फखि धखि णखि ञखि ङखि हस्झ स्ककि किष्ण श्घकि किघ्व ।
घ्लकि किग्र हक्य धकि किच सग झश ङ्व क्ल प्त फ छ कला-अर्ध-ज्यास् ॥

not कटपयादि - 7th/9th century

क ते म == १ ते २५ (१०^०, १०^२, १०^४, ...)
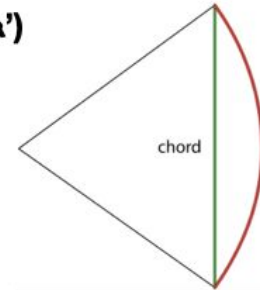य ते ह == ३० ते ९० (१०^१, १०^३, १०^५, ...)
अ = १, इ = १००, उ = १००००, ऋ = १०००००००
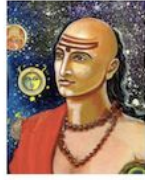मखि == म + खि
म = २५
खि = २ * १००
मखि = २५ २ == २२५ (३ deg ४५')

chord

I must gather more information for better astrology, and I shall share what I learn!

VĀRĀHAMIHIRA
505–587

Pancasiddhantika c. 575

Surya Siddhanta
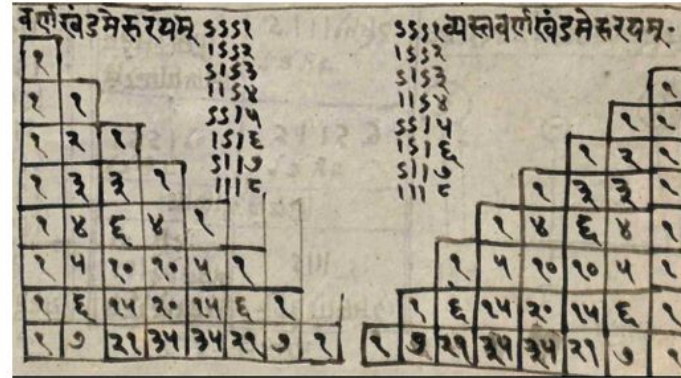*Romaka Siddhanta*
Paulisa Siddhanta
Vasishtha Siddhanta
Pitamaha Siddhanta

Roman, Greek, Egyptian elements

Tables of Sines (like Aryabhata)

Pascal's triangle (1654)

Based on Pingala's Chandashastra (2nd Cen BCE)

Raghunath temple library (1835)

Pingala also used binary for laghu/guru, but not zero.

Nasadiya sukta (Hymn of Creation), Rigved (10.129) [A L Basham 1954]

1. **Then even non-existence was not there, nor existence**,
There was no air then, nor the space beyond it.
What covered it? Where was it? In whose keeping?
Was there then cosmic fluid, in depths unfathomed?

2. Then there was neither death nor immortality
nor was there then the torch of night and day.
The One breathed windlessly and self-sustaining.
There was that One then, and there was no other.

3. **At first there was only darkness wrapped in darkness.**
All this was only unillumined cosmic water.
That One which came to be, enclosed in nothing,
arose at last, born of the power of knowledge.

4. In the beginning desire descended on it -
that was the primal seed, born of the mind.
The sages who have searched their hearts with wisdom
know that which is, is kin to that which is not.

5. And they have stretched their cord across the void,
and know what was above, and what below.
Seminal powers made fertile mighty forces.
Below was strength, and over it was impulse.

6. But, after all, who knows, and who can say
Whence it all came, and how creation happened?
the gods themselves are later than creation,
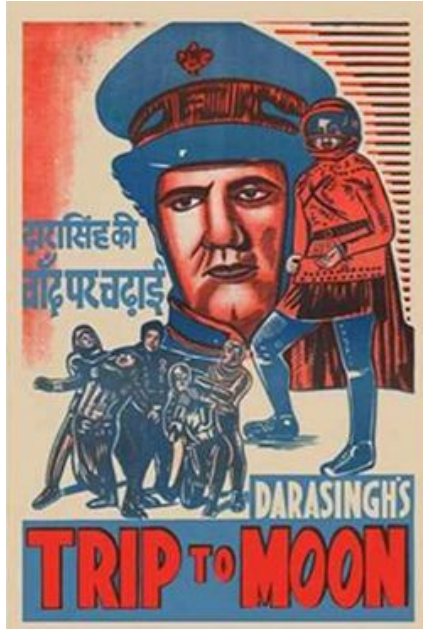**so who knows truly whence it has arisen?**

7. Whence all creation had its origin,

the creator, whether he fashioned it or whether he did not,

the creator, who surveys it all from highest heaven,

he knows — or maybe even he does not know.

More movies in recent years

Ra.One
Brahamastra
…

Chand pe chadhai
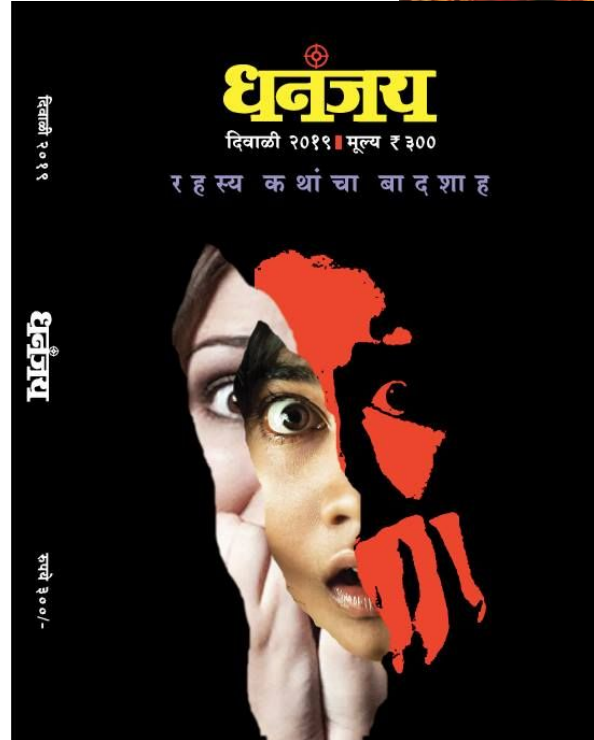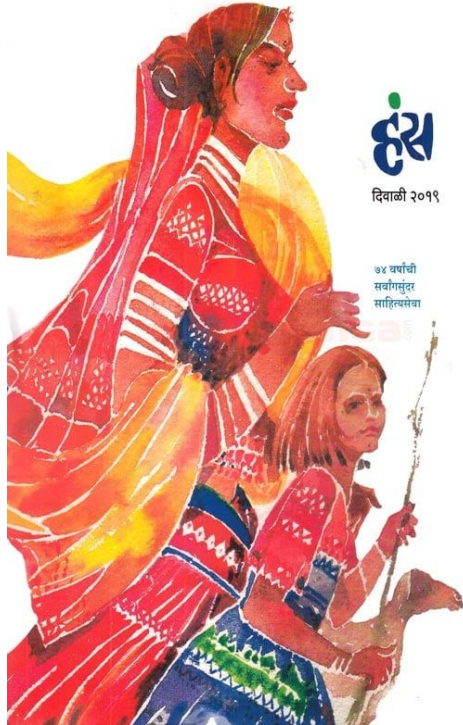(Hindi, 1967)

Koi… Mil Gaya
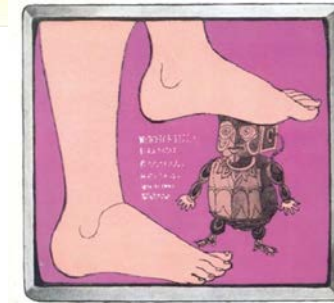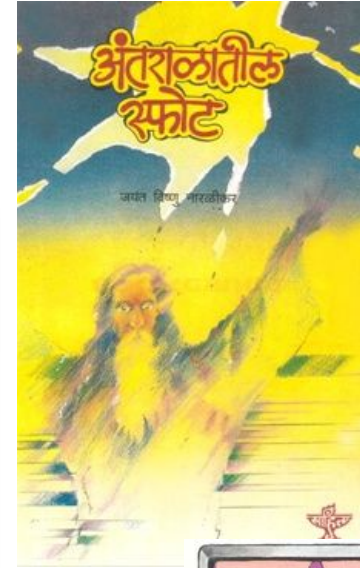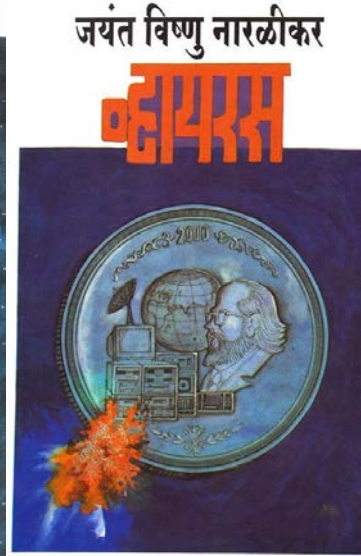(Hindi, 2003)

Antariksham 9000 KMPH
(Telugu, 2018)

Cargo (Hindi, 2019)

Diwali Magazines

Prof. Jayant Narlikar's Sci-Fi
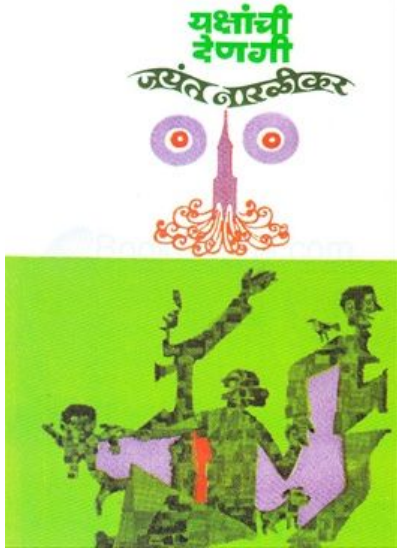
In mythology, Waman, a young Brahmin form of Vishnu takes over the Earth from a future tyrant. This story has an inverted parallel. Involves not directly interacting alien culture.

Other Marathi authors

- Niranjan Ghate
  - Spacejack (United Planets Organization)
    - Spacejack
    - अवकाशाचा अर्थ
    - अज्ञात शत्रु

Moon and Mars have started featuring somewhat more frequently now.

Aliens have been common, but often not in fully thought out ways.

Space Jack by Niranjan Ghate on Storytel

Other languages and regions

Bangla and Marathi have the most copious sci-fi

Hindi too has a tradition, but more involving fantasy
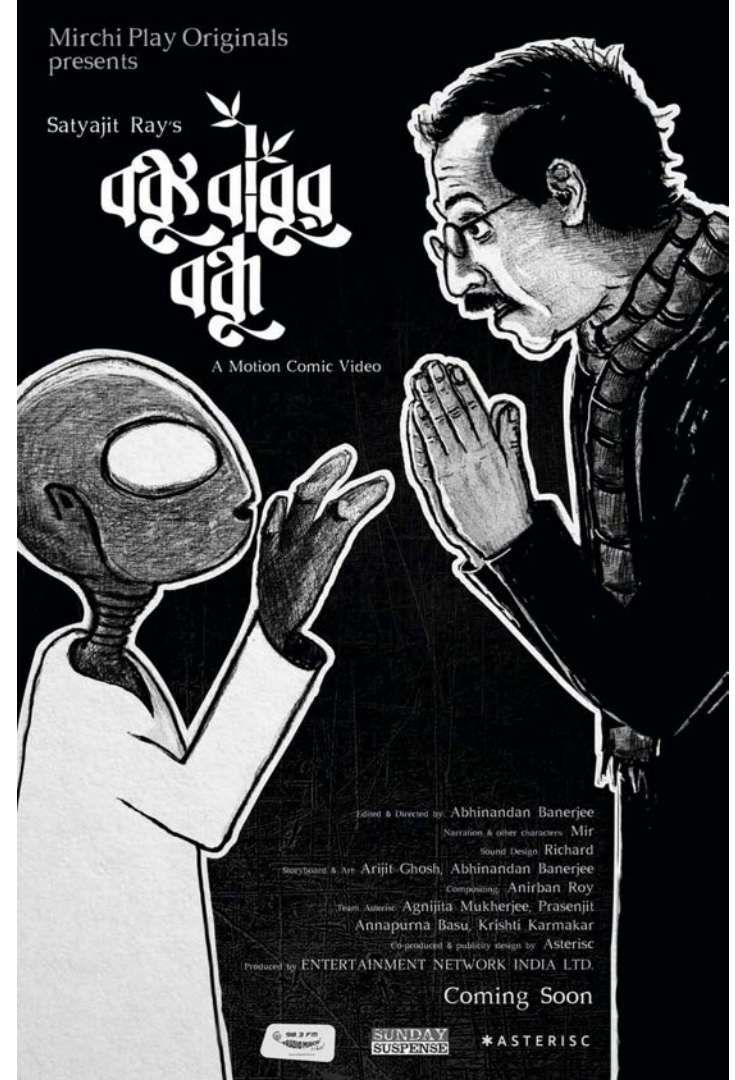
… and English (e.g. Sanghi on mythology)

Bankubabur Bandhu (Bangla, 2018)
[Original Satyajit Ray, 1960s]
Allegedly the inspiration behind ET

Mirchi Play Originals
presents

Satyajit Ray's

বঙ্কুবাবুর বন্ধু

A Motion Comic Video

Edited & Directed by: Abhinandan Banerjee
Narration & other characters: Mir
Sound Design: Richard
Storyboard & Art: Arijit Ghosh, Abhinandan Banerjee
Compositing: Anirban Roy
Team Asterisc: Agnijita Mukherjee, Prasenjit
Annapurna Basu, Krishti Karmakar
Co-produced & publicity design by: Asterisc

Produced by: ENTERTAINMENT NETWORK INDIA LTD.

Coming Soon

SUNDAY SUSPENSE * ASTERISC

Trying to fill a niche [A -> Astro; M -> Mythology]

Stories published in Marathi

- Stuck in a hole (कुपमंडूक) [A+M]
- Bimba's Revenge (बिंबाचा प्रतिशोध) [A+M]
- Dark fun (कृष्णलीला) [A]
- Now you see me (नाऊ यु सी मी) [A]
- Again? (पुनरागमनायच) [A]
- Memoirs of a Status Quo (ये रे माझ्या मागल्या) (English translation forthcoming in TechLit book) [A]
- A Prison Raid (रक्त तबकड्या) [A]

Summary

- The mythology space is vast and multi-dimensional.
- Enough elements relating to astronomy.
- Some amount of Indian Sci-Fi exists in that space, but huge scope for much more.

Ashish Mahabal
ashish@caltech.edu