Mythology, Cosmogonies, and Indian Science Fiction

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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
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

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
Churning of the milk ocean
Origin of eclipses: “nodes” resulting from the churning

- 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
Epics - Ramayana

Battle of Lanka, by Sahibdin (Wikipedia)
Mahabharat solar eclipse

Jayadratha was on a rampage and defeating Pandavas

Solar eclipse “ends” the day

The sun comes out and Krishna commands Arjuna to kill Jayadratha
### Table of jya (sines of half-chords)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Jya</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°</td>
<td>0.1</td>
</tr>
<tr>
<td>20°</td>
<td>0.2</td>
</tr>
<tr>
<td>30°</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**Notes:**
- Not a modern table.
- May have influenced later Greek work.
- Aryabhata's work is from the 7th/9th century.

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**Aryabhatiya c. 499**

\[
\begin{align*}
\text{K} & = 10, \quad \text{I} = 100, \quad \text{U} = 10000, \quad \text{O} = 1000000 \\
\text{M} & = 26 \\
\text{X} & = 2 \times 100 \\
\text{M} + \text{X} & = 285 (3 \text{ deg} 45')
\end{align*}
\]

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**Ganitapada Golapada**

- Many commentaries
- Greek influence?
I must gather more information for better astrology, and I shall share what I learn!

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

- Antariksham 9000 KMPH (Telugu, 2018)
- Koi... Mil Gaya (Hindi, 2003)
- Cargo (Hindi, 2019)
- Ra.One
- Brahmastra
- ...
Diwali Magazines
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 शरू

Moon and Mars have started featuring somewhat more frequently now.

Aliens have been common, but often not in fully thought out ways.
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
Trying to fill a niche [A -> Astro; M -> Mythology]

Stories published in Marathi

- Stuck in a hole (कुपमंडूक) [A+M]
- Bimba’s Revenge (बिबाचा 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 तबक्क्या) [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.

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