

Science and Hindu

Religion

Madhuri Bapat

Eastern Arizona College,
Thatcher, AZ, 85552

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Lederman and Democrites

- **Just don't interrupt me with tedious musings about parallels between physics and Hinduism - Democritus**
- **God Particle page 34**

What is Religion?

- The word Religion is made up of two words
- **re-back**
- **Ligate-to bind**
- **Reconnect what to what?**
- **That we left behind or lost by being born.**
- **Which is the supreme power also part of all living/non living materials and energy.**

Comparison of Religions Eastern and Western

- **Way of life**
- **Open ended**
- **What is said, heard and practiced**
- **Personal preference and decision**
- **Organized**
- **Structured**
- **What is written in the book**
- **Do's and don'ts set by hierarchy**

What is God?

- **A zillion dollar question!**
- **Conceptual model!**
- **Supreme power(?)**
- **Combination of four fundamental forces? Plus something more..(Capra)**

I Comparison of Principles

Hindu

- God (*Ishwar*) exists everywhere, in everything. (Meaning of '*Vishnu*'- the one that has entered even an atom) Vish= to enter, anu = atom. God also doesn't have definite size, shape, material properties. (Is *Nirgun*, *Nirakar*)

Science

- God may be defined as the combination of four fundamental forces - gravitational, electromagnetic, strong and weak which exist even in an atom and plus something more.

II Comparison of Principles

Hindu

- Trinity-
- *Brahma* (creator),
- *Vishnu* (protector)
- *Mahesh* (Shiva-destroyer) controls the operation of universe.

Science

Brahma, the creator, Vishnu, the protector and Shiva, the destroyer- are three separate forms of four fundamental forces combined together plus something more .

III Comparison of Principles

Hindu

- Nothing is permanent. Everything (Maya) is destructible (*Nashwar*). Maya is manifestation of *Brahman* (Supreme power).

Science

- Material and energy form go back and forth into each other. Material form '*Maya*' is the manifestation of energy and is destructible.

IV Comparison of Principles

Hindu

- Ultimate goal of living thing (animal kingdom-human being) is to escape the cycle of birth and death to achieve '*Moaksha*' – to reunite with supreme power. (Geeta)

Science

- Achieving *Moaksha* is escaping from material form permanently into energy form.

Y Comparison of Principles

Hindu

- To achieve '*Moaksha*' one has to conquer six enemies: anger, greed, lust, pride, jealousy and sorrow, which may be achieved by meditation. One needs to become 'detached' from life (*Sthitapradnya*) like a leaf of lotus, which may be accomplished by meditation. (Geeta)

Science

- Conquering six enemies is rearranging forces in your body-mind to tune into the natural form of four fundamental forces plus more. Basically controlling the chemical balance in your brain. Because every emotion e.g. anger, sorrow, jealousy etc. has its own chemical formula as proven by neurobiologists.

VI Comparison of Principles

Hindu

- Four *Yogas* (way of life): *Jnyan* yoga, *Dhyan* yoga, *Bhakti* yoga, *Karma* yoga, are four paths to reach God or achieve *Moaksha*.
- *Raaj* yoga is while pleasing all five senses, keeping desire out of it.

Science

- Four *Yogas* are four ways one can achieve the chemical balance. (*Jnyan* yoga) Logical-using brain, (*Bhakti* yoga) emotional using heart, *Dhyan* yoga psychological-using mind, (*Karma* yoga) physical practices-duty, service, rituals etc.

VII Comparison of Principles

Hindu

Science

- One can not change destiny:
Prayers/rituals will only prepare you to face the reality. They may also provide the way to connect to the supreme being.
- Entropy-disorder from order- is inevitable. You may find it decreased locally on microscopic level but on macroscopic level it is always increasing.

VIII Comparison of Principles

Hindu

- **Good and bad are two sides of the same coin; one cannot eliminate bad completely. (Similar to yin-yang in Chinese culture)**

Science

- **Science and technology are not at fault. It is the responsibility of whoever is using it to use it for goodness of humanity. E.g. Nuclear power or stem cell research has good and bad sides.**

IX Comparison of Principles

Hindu

Science

* 'Swadharma' (as described by Saint *Dnyaneshwar*) or personal duty can be a combination of four *Yogas*. Through practicing *Swadharma* one may seek

Universal Unity. (*Vishwa Bandhutwa*)

- For any common person it is the combination of all four paths at any time, means using brain, heart, mind, and body.

X Comparison of Principles

Hindu

- **Duty is the essence of Hindu religion.**

Science

- **Motion is vital for existence.**



- **People do criticize and ask about caste system, vegetarianism, and worshiping idols of gods.**
- **Caste system is just a social structure for better functioning of society.**
- **Vegetarian diet came in to picture after *Ahimsa* adopted from Buddhism. You are what you eat or you are what you think!**
- **Any idol of god does not represent true '*Nirgun Nirakar*' Brahman-they are simply models.**

Evolution Vs. Creation

- Although both possibilities are addressed in original Vedas, evolution is followed through *dashavtars* (ten reincarnations) of Vishnu
- 1-fish- life in water
- 2-turtle-life in water and on land
- 3-bull-life on land
- 4-*nrusinha*-half man half animal (lion)
- 5- *vaman*-complete man

Remaining five of the Dashavatar

- 6-Parashuram (human)
- 7-Ram (human)
- 8-Krishna (human)
- 9-Buddha (human)
- 10-Kalaki (?)

Models in Religion and Physics

- Various Gods
- **Ganesh**-lowest energy-likes red color-low frequency
- **Vishnu**-likes yellow-medium frequency
- **Goddess**-likes green color
- **Shiva**-highest energy-likes blue or purple color-high frequency
- Various concepts such as
 - Force
 - Momentum
 - Energy
 - Potential
 - Electric charge
 - Field
 - Flux

Comparison

- **Science/physics**
- **Evolution of brain**
- **Why ask why?**
- **Journey from Classical to Quantum to watered down physics**
- **Hindu religion**
- **Evolution of mind**
- **Upanishads are result of answers to question why?**
- **Vedas, Upanishads, Bhagavad-Gita and *Puranas***

What and Why?

- **Factual - biology, geology, astronomy**
- **Philosophical- physics and chemistry partially**
- **Western religions
Answers to what?**
- **Eastern religions-
answers to why?**

Three Schools of Thought

- **Cause and effect
(Karma-fruit)**
- **Everything is pre
determined-God
doesn't play dice!**
- **Game of chances**
- **Reality**
- **Newtonian
(European)**
- **Einsteinian
(Eastern)
(evolution)**
- **Heisenbergian
(Native American)**
- * **Mixture of all**

Effect of Religion on Science Education

- **Teaching evolution or creation?**
- **Apathy or curiosity about science.**
- **Acceptance/non acceptance of scientific ideas, concepts.**
- **Choosing major or career.**
- **?**

A BIG THANK YOU!

- **AAPT**
- **EAC**
- **AND ALL OF YOU!!**

धन्यवाद !