Complete harmony between Brahman and the Doctrine of Buddhism

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Abstract

Many hymns of Rig Veda allude at the unchanging supreme reality that underlies the existence and the functioning of the physical universe and beyond. Lord Buddha **gave his vital doctrine** of universal decay. The unchanging reality of Brahma and changing conditioned phenomena linked with decay appears contradictory but in reality, they are complementary to one another. Proper understanding of the universal laws helps to establish harmony between the science of micro domain and macro domain. Again, understanding the matter values of so-called massless particles gives rise to a new materials science having scope of accessing into the spiritual domain. The concept of Brahman and the concept of impermanence doctrine of Lord Buddha is helpful in augmenting the existing concepts of nature and developing a unified understanding of the reality/truth. Any existence in the universe is a mass-space integral system having name, form and form-based properties (conditioned phenomena). All existences are subject to decay by radiation, thereby the conditioned phenomena of all existences are changing with time. On the other hand, Brahman relates to the formless interaction of the basic constituents i.e. mass and space of the universe which is invariant. All existences in different forms are subject to decay thereby the conditioned phenomena change always but the universal formless interaction of mass and space (Brahman) is unchangeable.

Key words: *Brahman, Buddha's doctrine, Universal decay, micro-domain, macro-domain, Spiritual domain, Formless interactions, Concept of nature, Unified understanding of truth.*

Discussion

The unchangeable supreme reality/ultimate truth was conceptualized by Rishis through their experiences in the state of deep-meditation (a state of super consciousness). This truth comes from direct realization of reality therefore it is free from any possible error associated through the assumptions, axioms and theoretical models as adopted in scientific understanding of reality. Thus, the consciousness-based truth is close to reality. The ultimate truth is the cause of all existences and all events of nature. The experimental truths of modern science are also direct reading of truths of

nature in different local frames of reference. However, deviations from reality of nature are introduced by making unnatural assumptions in the process of developing theoretical models in unseen domains. Most scientific laws are range-specific/domain-specific. Therefore, modern science faces limitations in converting the domain-based laws to domain free universal law or even identifying the universal component from the local laws.

The supreme reality (Brahman) described in Vedas and Bhagavat Geeta, refers to the unchanging, eternal reality that exists in the ever-changing physical universe and beyond. The doctrine of **Anicca** (Pali) or **Anitya** (Sanskrit) is one of the core teachings of Buddhism, emphasizing the principle of **impermanence**. It asserts that all conditioned phenomena (physical and mental) are transient (subject to change). This concept alludes to the universal decay of matter as the natural processes of transformation and dissolution in the universe. There is an apparent contradiction between the **unchanging supreme reality of Brahman** and **the principle of impermanence** (the changing nature of conditioned phenomena) which is linked to decay of matter.

This author interprets the significance of Brahman in the physical world as referring to the formless interaction of the mass and space, the only two basic constituents of the universe [1]. All existences of the universe having different form and name are mass-space integral systems [2]. While the basic formless interaction of mass and space remains invariant in all existences in all domains of the universe, the different form-based specific interaction properties of different systems are subject to change due to natural decay of matter. With the above interpretation of the significance of Brahman and the significance of the doctrine of Buddhism, the apparent contradiction disappears. Both universal truths/doctrines are valid in their respective frames of reference.

All phenomena in science are linked to interaction between specific objects/particles or a particle with the field. The law of universal gravity remains unchanged. The attraction phenomena between the sun and the earth is subject to change with decay of the sun and the earth. The sun loses mass through radiation and the solar wind, with **approximately 4.3 million tons of mass lost every second** due to radiation and an **additional 1.5 million tons per second due to the solar w**ind. The **earth loses mass roughly 100,000 tons (90,700 metric tons) per year** [3]. The mass loss of planets with lapse of time is shown in Table-1. The rate of mass loss of different classes of stars is shown in Table-2. There may be some degrees of uncertainties in the evaluation of the rate of mass loss of celestial bodies. However, these mass losses are insignificant compared to the mass of the celestial body. The relative change of the mass of the sun can be ignored in a shorter time scale but the phenomena of solar

radiation and the solar wind cannot be denied because we observe these facts. The phenomenon of mass loss is common to all celestial bodies and complements the doctrine of lord Buddha on decay.

Table-1

Estimation and Mechanism of Mass Loss of Celestial Bodies

Celestial Body	Estimated Mass Loss (kg/year)	Primary Mechanisms of Mass Loss
Mercury	~1,000	Solar wind, micrometeorite impacts
Venus	~1.6 × 10^7	Atmospheric escape (hydrogen loss)
Earth	~9.5 × 10^7	Atmospheric escape (hydrogen, helium)
Mars	~2.5 × 10^7	Atmospheric escape (solar wind stripping)
Jupiter	~1,000	Atmospheric escape (minor), magnetospheric processes
Saturn	~1,000	Atmospheric escape (minor), ring material loss
Uranus	~1,000	Atmospheric escape (minor)
Neptune	~1,000	Atmospheric escape (minor)
Moon	~300	Micrometeorite impacts, outgassing
Sun	~1.5 × 10^17	Solar wind, radiation, and coronal mass ejections

Table-2

Estimation and Mechanism of Mass Loss of Celestial Bodies

Celestial Body	Mass Loss Mechanism	Approximate Mass Loss Rate	Notes
Sun (Star)	Solar wind, radiation, and coronal mass ejections	~10^{-14} solar masses per year (~2 x 10^{9} kg/s)	The Sun loses mass primarily through the solar wind and radiation.
Red Giant Star	Stellar winds and radiation	~10^{-8} to 10^{-5} solar masses per year	Red giants lose mass at a much higher rate due to strong stellar winds.
White Dwarf	Radiation and minor stellar winds	Negligible (unless accreting or in a binary system)	White dwarfs lose mass very slowly over time.
Neutron Star	Radiation and gravitational waves	Negligible (unless accreting or merging)	Neutron stars lose mass primarily through radiation and gravitational waves.
Black Hole	Hawking radiation (for very small black holes)	Extremely slow (e.g., ~10^{-20} kg/year for a stellar-mass black hole)	Hawking radiation causes mass loss, but it is negligible for large black holes.
Earth (Planet)	Atmospheric escape (e.g., hydrogen loss)	~10^{5} kg/year	Earth loses a small amount of mass due to atmospheric escape.
Mars (Planet)	Atmospheric escape	~10^{4} kg/year	Mars loses mass due to its thin atmosphere and solar wind interactions.
Comet	Sublimation of ices and outgassing	~10^{9} to 10^{12} kg per orbit (highly variable)	Comets lose mass rapidly when close to the Sun due to sublimation.

Asteroid	Collisions and minor outgassing	Negligible (unless undergoing collisions)	Asteroids lose mass primarily through collisions.
Moon	Micrometeorite impacts and minor outgassing	Negligible	The Moon loses mass very slowly over time.

There is another class of short-lived stars with a high rate of mass loss. Eruptive mass loss of massive stars prior to supernova (SN) explosion is key to understanding their evolution and the end fate. An observational signature of pre-SN mass loss is the detection of an early, short-lived peak prior to the radioactive-powered peak in the light curve of the SN. These classes of stars with radioactivity and rapid decay may be grouped under radioactive stars whose decay rate is significant. In micro domain science, the atoms without associating decay of nuclei are classified as non-radioactive atoms and the atoms associating rapid decay of their nuclei are grouped under radioactive atoms. The non-decaying nuclei of non-radioactive atoms are assumed non-radiating which is a violation to the doctrine of Lord Buddha on decay. The phenomenon of decay and radiation of non-radioactive atomic nuclei are denied. But this is not so in reality. The sun is radiating photons hence the atomic nuclei in the micro domain (one domain below macro domain) is expected to radiate micro-photons for uniformity of nature [4]. The existence of micro-photons is unknown therefore we cannot comment whether the nuclei of non-radioactive atoms are radiating micro photons or not. By accepting the phenomenon of radiation of micro photons from the nucleus of an atom we have the following advantages.

1) It leads to uniformity of structure and features of systems in different domains which is a requirement to promote the super-force operating in all domains of nature thereby making us to understand the omni presence of Brahman in every component matter in any domain.
2) The nuclei of non-radioactive atoms are also subject to decay which agrees well with the principle of **impermanence, the doctrine of Lord Buddha.**
3) The doctrine of uniform decay helps to unify the sciences of micro domain and macro domain.
4) Universal decay helps to understand **how the redshift of light coming from distant galaxies occurs due to decay of photons by radiating particles of micro-micro photons.**
5) The mass values of material particles of finer domains below the micro domain fall below the detection level of modern science where such particles become massless in atomic mass units and any structure made up of massless particles

also becomes massless. This opened up new science under the name of spiritual science or the science of consciousness of mind. The supreme reality, Brahman, has omni presence in the material universe and beyond (spiritual domain). Brahman, the ultimate-truth/supreme-reality as the basic formless interaction of mass and space is satisfied by identifying the matter value of so-called massless particles [5].

6) The basic formless mass-space interaction remaining as the supreme reality/truth there could be infinite forms with infinite variation of internal structure giving rise to infinite form-based properties. This provides adequate room for slow gradual decay of any existence/matter in any domain. The decay of matter makes the condition phenomena changing.

A space pocket may belong to the extranuclear space structure of the nucleus of a galaxy, stellar or substellar body, atom or subatomic particle, light particle or field forming particles where the said space pocket can have different space density (space content per unit volume), the size and number density of space matter particles and different mass-space ratio in neutral state depending on its location in the structure [6] [2]. The space matter particles of finer domain in neutral state do not reveal their existence due to weak mass-space interaction in neutral state. Any space matter particle in neutral state if combines with mass rich radiation particle or space rich radiation particle then it changes the charge neutral state of the particle where the particle reveals its existence. Lack of perception to the existence of space matter particles, made us to conclude assume that the space created different mass bearing particles from high energy radiation following the mass equivalence of energy. It is well-known that the extranuclear space structure of a celestial body contains molecular, atomic and subatomic particles as the space matter particles in the extranuclear space structure of the celestial body. The space matter particles belong to finer domain (one domain below the domain size of celestial body) [4]. Following the uniformity of nature, one can anticipate the light particles and the field forming particles are space matter particles in the extranuclear space structure of atoms [7]. The existence micro-photon radiation from nucleus of atom and the existence of photons as space matter particles in the extra-nuclear space structure of atom reveals similarity between the atomic structure and the structure of celestial bodies.

One can understand the state property of an atom by partial replacement of space and space matter particles and understand the thermodynamic property of gas from the state property of atoms and molecules. The new planetary atomic model [7] has scope of explaining the laws of gas from the state property of molecules without entertaining the kinetic theory of gas.

Key Aspects of Anicca and the Decay of Matter

1. **Impermanence of All Phenomena**:
   - According to the Buddha, everything in the material and mental world is impermanent. This includes physical objects, living beings, thoughts, emotions, and even the universe itself.

2. **The Three Marks of Existence**:
   - Anicca is one of the **Three Marks of Existence** (Trilakshana), alongside **Dukkha** (suffering or unsatisfactoriness) and **Anatta** (non-self). These three characteristics describe the nature of all conditioned phenomena.
   - The decay of matter illustrates Anicca, as it shows that nothing remains the same over time. Even solid objects eventually erode, decompose, or transform into other states.
3. **Dependent Origination (Paticca Samuppada)**:
   - The Buddha taught that all phenomena arise and cease due to causes and conditions. This principle, known as Dependent Origination, explains that the decay of matter is a natural result of interdependent processes.
   - For example, a tree grows due to conditions like soil, water, and sunlight, but it will eventually decay and die when those conditions change or cease.
4. **Reflection on Impermanence**:
   - The Buddha encouraged his followers to meditate on impermanence as a way to develop insight (vipassana) and overcome attachment. By observing the decay of matter—such as the withering of leaves, the aging of the body, or the crumbling of rocks—one can understand the transient nature of existence.
   - This reflection helps reduce clinging to material possessions, relationships, and even one's own body, leading to greater peace and liberation (Nirvana).
5. **Scientific Parallels**:
   - The Buddhist concept of Anicca aligns with modern scientific understanding. For instance, the Second Law of Thermodynamics states that entropy (disorder) in a closed system tends to increase over time, leading to the decay and breakdown of matter.
   - Similarly, biological processes like aging and decomposition reflect the impermanence of living organisms.
6. **Practical Implications**:
   - Understanding Anicca helps individuals cultivate **non-attachment** and **equanimity**. By recognizing that everything

is subject to change and decay, one can avoid excessive grief over loss and excessive craving for permanence.
- It also fosters a sense of urgency (samvega) to practice the Dharma and seek liberation before the opportunity is lost.

Conclusion

The newly proposed radiation of micro-photons from the nuclei of radioactive and non- radioactive atoms and presence of space matter particles (photons) in the extra-nuclear space structure of atoms has a matching similarity with the Pinda-Brahmanda analogy. The radiation of micro-photons from atomic nuclei reveals the decay of atomic nuclei. Again, the radiation of micro-micro-photons from photons justifies the redshift of light coming from distant galaxies. When all existences in the universe, the formless mass-space interaction remains invariant implying the qualities of Brahman. Finding similarity of phenomena in different domains is a great move towards unification of materials science and spiritual science. The doctrine of Anicca, particularly as it relates to the decay of matter, is a profound teaching that underscores the transient nature of all existence. By embracing this truth, one can develop wisdom, reduce suffering, and move closer to the ultimate goal of Nirvana—a state beyond the cycles of birth, decay, and death.

Reference

1. https://philosophyofnature.org.in/basic-constituents-of-universe-and-their-interactions.
2. https://philosophyofnature.org.in/mass-space-structure-of-centrally-organized-systems.
3. https://www.astronomy.com/science/is-the-earth-gaining-or-losing-mass.
4. https://philosophyofnature.org.in/different-domains-of-nature.
5. https://philosophyofnature.org.in/towards-a-new-comprehensive-universal-science.
6. https://philosophyofnature.org.in/similar-state-of-matter-of-nuclei-in-different-domains.
7. https://philosophyofnature.org.in/modelling-atomic-system.