

## Rabindranath Tagore's Views on Science and Spiritualism

**Dr. Kiran Sharma**  
Asst. Professor  
Dept. of English  
Govt.College Bawal

### ABSTRACT

This article attempts to explore the scientific discourses of Rabindranath Tagore, to whom science did not signify a mechanistic analysis of facts, but rather a broader interpretation, a wider perception of the universe. Having his beliefs firmly rooted to the preaching's of the ancient Hindu Upanishads and the Vedas, he conceived Nature not merely as a physical phenomenon, but a living spirit, which could help man to realize the essential Truth of Life.

A close study of the intellectual renaissance which occurred in India during the second half of the nineteenth century, flowing into the twentieth is vital in order to understand Rabindranath Tagore (1861-1941), one of the makers of Modern India. It was within this renaissance that a creative synthesis of the best of the East and the West took place in science, art, literature and culture. Rabindranath was the symbol of that great synthesis. Rabindranath is the personification of supreme intellect, his name being synonymous with genius. The first Nobel Laureate in Asia and Africa in 1913 (in Literature for his book: "Gitanjali" -'Offering of Songs') was not only a poet, a philosopher, an artist, but also an ardent propagator of popular science in order to eradicate age-old irrational superstition among his people.

Rabindranath is India's greatest modern poet and the most brilliant creative genius produced by the Indian Renaissance. As well as poetry, he wrote songs, stories and novels, plays, essays, memoirs and travelogues. He was both a restless innovator and a superb craftsman. His poetry has an impressive wholeness: a magnificent loving warmth, a compassionate universal humanism, a delicate sensuousness, an intense kinship with nature and a burning awareness of man's place in the universe. He moves with effortless ease from the literal to the symbolic, from the part to the whole, from a tiny detail to the vast cosmos. His sense of science. And its spirit is thematically reflected in his writings.

**Keywords:** scientist, poet, Nature, truth, life, renaissance, creative, humanism

### INTRODUCTION:

The inherent power of civilization is rarely discovered extempore with the emergence of specially equipped souls. Some instances in India's long history prove the above statement beyond doubt. At the times chaos, confusion, ambiguity, tense, and deplorable, unexpected and

very special humans had come forward and infused fresh blood into the nation's veins using their amazing leadership skills and spiritual insights.

The Buddha, Shankaracharya, Swami Vivekananda and Swami Paramahansa, emerged in crucial periods of Indian history and gave novel direction to the then nation to sustain the indigenous Indian life and culture. All of a sudden people were inspired by them by knowing the technique to be happy physically, spiritually and also socially. In this way becoming socializers, they actively decided to take part in strengthening the nation as a whole.

At the very dawn of the Indian Renaissance, Rabindranath came in close contact with the rising scientists of India [Acharya Jagadish Chandra Bose (1858-1937), Acharya Prafulla Chandra Roy (1861-1944), Chandrasekhara Venkata Raman (1888-1970)-the first Asian to win the Nobel Prize in Physics in 1930 for his Raman Effect and also Professor of Physics in the University of Calcutta, Meghnad Saha (1893-1956) Acharya Satyendranath Bose (1894-1974), Dr Mohammed Kudrot-e-Khuda, Professor of Chemistry, Presidency College, Calcutta, and so on.

Being a poet, and not a specialist in the field of science, though Tagore had always been conscious about his lack of competency in science, he nevertheless acknowledged his keen interest in scientific knowledge and discoveries. In the introduction to his only scientific book, *Vishva Parichay*, published in 1937, (*Our Universe*), Tagore wrote: "Needless to say, I am no devotee of science, but since childhood I have always been curious about it, deriving endless pleasure from it."<sup>1</sup> This scientific mind of the Poet had been also appreciated by his friend, Jagadish Chandra, as Tagore himself said: "I remember often having been assured by my friend that I only lacked the opportunity of training to be a scientist but not the temperament."<sup>2</sup>

Rabindranath's interest in science can be traced to his early teens. He loved astronomy, and when in England many years later, visited the Greenwich Observatory. Eminent astrophysicist, Meghnad Saha, persuaded him to write a book-rather a booklet-in Bengali ("VISHVAPARICHAYA"-'Introducing the Universe', 1937) which he dedicated to Satyaendranath Bose, Father of Boson and of Bose-Einstein Statistics-Bose-Einstein Condensate (BEC) fame. He collaborated with one of his very close family friends-Prashanta Chandra Mahalanobis, Professor of Physics and Statistics, Presidency College, Calcutta, who became General Secretary of Vishva Bharati University in 1921. He had encounters with European scientists and scientifically minded philosophers, such as Bertrand Russell (1872-1970), Nobel Laureate in Literature, 1950. The German physicist, Arnold Johannes Wilhelm Sommerfeld (1868-1951), met him in Calcutta in 1928. The famous German physicist and philosopher, Werner Karl Heisenberg (1901-1976), Nobel Laureate in Physics 1932 (for his Uncertainty Principle) met him in Calcutta at his Jorasanko house in 1928. He is reported to have said in 1972 that Rabindranath's philosophical ideas had been of help to him as a physicist. Heisenberg (the young scientist of 27 then) had several conversations with the mature poet (then 67) about relativity, incommensurability, inter-connectedness and impermanence as fundamental aspects of

physical reality. After the conversations he said: "Some of the ideas that had seemed so crazy, suddenly made much sense. That was of great help for me." His enduring fascination with the relationship between Man and Nature, notably in his Hibbert Lectures "The Religion of Man" at Manchester College, Oxford University on May 19, 21, & 26, 1930, -brought him close to Albert Einstein (1879-1955), Nobel Laureate in Physics, 1921. The Russian-Belgian scientist-Ilya Prigogine (1917-), Nobel Laureate in Chemistry, 1977, remarked in 1984 that "Curiously enough, the present evolution of science is running in the direction stated by the great Indian poet."<sup>3</sup> A magnificent tribute indeed! In India Santiniketan School (Established 1901-first as Brannma-Charya School) is the first institution where learning of science by direct practical experimentation was introduced at primary school level. In one of his essays-"SHIKSHA" (1906) he wrote: "In order to teach science to youngsters, their eyes need to be opened up first and power of observation enriched."<sup>4</sup>

"Allusions and references of things scientific and medical fascinated both William Shakespeare (1564-1616) and Rabindra-nath. There are plenty of them in their writings. Shakespeare was interested in health and sickness in his time (allusions in King Lear, Macbeth, Julius Caesar, Twelfth Night, and so on). Rabindranath's interest was in contemporary sciences-astronomy, astro-physics, biology, etc.allusions are spread in his novels, short stories, poems, essays, etc., written from his teens to almost the end of his life."<sup>5</sup>

Eminent Bengali writer and linguist, Syed Mustaba Ali, one of the closest students (1921-1926) of Rabindranath at his Santiniketan School recorded in one of his articles that he used to read books on science, physics, anthropology, chemistry, astronomy, regularly, and sent them to the school library regularly.

All of Rabindranath's writings containing references to things scientific are in his mother tongue-Bengali. This is a serious limitation to non-Bengali readers. Bengali, in terms of numbers of Speakers, is the seventh most-spoken language in the world (about 200 million in India, Bangladesh and in several countries outside India—United Kingdom, United States of America, Germany, France and Gulf countries). In order to get the real flavour and beauty of Rabindranath's writings, one needs to read them in original; translations in other languages are no substitute. Bertrand Russell appreciated Rabindranath's poems, but wished he could have read them in Bengali.

## FIRST WRITING ON SCIENCE

It was written at the age of 13. It was about planets and their inhabitants (its Bengali title: "Grahagan Jiber Abashbhumi—Planets are the home of things living). It was published in their family periodical-"TATTABODHINI PATRIKA" in 1874. The periodical was established and edited by his father-Debendranath Tagore (1817-1905). This article shows his keen interest in astronomy, which stayed with him till the end of his life.

“In 1885, a children's journal-'BALAKA'- was started in the Tagore family at Jorasanko by Jnandanandini Devi, wife of Rabindranath's elder brother, Satyaendra-nath Tagore. It was short-lasting-only eleven issues were published. Rabindranath also took an active part in its editing and publication. The aim was to encourage literary activities among the children of the family. Rabindranath himself wrote in the 6th issue.”<sup>6</sup> In fact, he wrote on science news from the very first issue.”

Rabindranath edited five periodicals (SADHANA, BHARATI, BANGADOR-SHAN, BHANDAR, TATTABODHINI) at different times of his life. News and articles on science got prominence in all those periodicals.

Rabindranath edited "BANGA-DARSHAN" [established by Bankirn Chandra Chatterjee (1838-1894)] for five years (1901-1905), when it came out again after Bankim's death. Bankim also wrote a book on popular science ("Vignan Rahasya", "Mystery of Science"); science also got prominence in his journal-Bangadarshan O Rabindranath, during his editorship, encouraged people to regularly write on science in Bangadarshan.

Rabindranath was primarily in charge of the science section of SADHANA (1901). He himself wrote many articles on science [Gatinirnayaner Indriya (Indicators of Motion), Iccha Mrityoo (Suicide), Utpakhir Lathi (Leg of Camel bird), Vugarvastha Jal (Underground Water), Bayuprabaha (Force of Wind) 1894].

Inquisitiveness for scientific knowledge and information made him a prolific reader and thinker-their reflection is scattered limitlessly in his literary works. He meant what he thought and put them into words wherever relevant.

Rabindranath Tagore (1861-1941) is the most eminent Bengali renaissance poet, philosopher, essayist, critic, composer and educator who dreamt of a harmony of universal humanity among the people of different origin through freedom of mind and spiritual sovereignty. He became the first-ever Asian writer to be awarded a Nobel Prize in 1913 for translated version of his cycle of song-poems, *Gitanjali*. His literary works transcend race, gender, religion, politics and geographic territory. From

Love to Nature, from social questions to religion and mysticism were revealed in most themes of his work. He wondered with his sensitivity the meaning of life and the universe. Tagore had resected on the inner essence of Reality in many poems. For him, it was of the highest importance that people being able to live, and reason, in freedom. Nothing, perhaps expresses his values as clearly as a poem in *Gitanjali*:

“Where the mind is without fear and the head is held high;  
 Where knowledge is free;  
 Where the world has not been broken up into  
 fragments by narrow domestic walls;  
 Where words come out from the depth of the truth;  
 Where tireless striving stretches its arms towards perfection;  
 Where the clear stream of reason has not lost its

way into the dreary desert sand of dead habit;  
 Where the mind is led forward by thee into ever widening  
 thought and action  
 Into that heaven of freedom, my Father, let my  
 country awakes”7.

The element of mysticism is distinctly present in the religious writings of Tagore. He was considerably influenced by the thoughts and ways of life of different mystics like Kabir, Guru Nanak, Ravidas, the 'Bauls' and the Sufi saints. It was as a young man that Tagore had “his first deeply felt spiritual experience which burst upon him as a vision so vivid and authentic that its impression lasted all his life”8. On that very day of his extraordinary experience he wrote his famous poem 'Nirjharer Swapnabhanga' ('The Fountain Awakes'). “When I was eighteen, a sudden spring breeze of religious experience for the first time came to my life and passed away leaving in my memory a direct message of spiritual reality. The waterfall, whose spirit lay dormant in its ice bound isolation was touched by the sun, and bursting into a cataract of freedom, it found its finality in an unending sacrifice in a continual union with the sea”9.

Describing this experience, Tagore wrote, “one day while I stood watching at early dawn the sun sending out its rays behind the trees, I suddenly felt as if some ancient mist, had in a moment lifted from my sight and the morning light on the face of the world revealed an inner radiance of joy. That which was memorable in this experience was its human message, the sudden expansion of consciousness in the super-personal world of man”10. This kind of mystic experience has been described insight into the depths of truth. It is an illumination, a spiritual revelation full of significance and meaning. The main philosophical thoughts of Rabindranath Tagore consist in them is the concept of ultimate reality, concept of world or nature, concept of soul, death and immortality and concept of liberation. Along with his philosophical thoughts one has to see how humanism is a dominant note in his concept of God which has already been discussed. Rabindranath Tagore says, ‘God’ as the idea of perfect being in men’s mind. The imperfection of the world leads one to have an idea of perfectness in his mind. In *Sadhana* he says that the idea of God that man has in his being in the wonder of all wonders. He has felt in the depth of his life that what appears is the manifestation of the perfect. And “To know him in the life is to be true: not to know him in this life is the desolation of death” 11 .

Science expands one’s physical strength and abilities through locomotion, steam, electricity, and other forces. In an incredible statement, especially for 1913, he says that there is no limit to man’s powers, for we are not outside the universal power which is the expression of universal law. Many of the maladies and limitations of human existence ‘are not absolute. “Returning to the flower analogy, Rabindranath Tagore details its many constituent parts and biological functions in leading to the fruit of a plant. Science argues a flower has no relation to ‘the heart of men,’ nor is the notion that it is the emblem of something else anything but imaginary. ‘Beauty,’ responds Rabindranath Tagore ‘becomes its only qualification.’ Why do modern human beings choose to believe in a flower’s practical nature and yet reject its human influence? They observe the outer truth but not the inner one? In *Sadhana*, the Upanishads provide his text: ‘Verily from the everlasting joy do all objects have their birth” 12.

Rabindranath Tagore's spirituality is often akin to that of more primordial religions, such as the Poet's Religion of Rabindranath Tagore American Indians, that God imbues nature with transcendence and oneness. "Science collects facts' and statistics, creating 'mental pictures' which are not stable and are in fact 'evanescent.' The picture of the struggle for existence leaves out reciprocity, love for others, and the sacrifice of self, inspired by love, "the 32-positive element in life," none of which gainsays the laws of science, for the laws are "not something apart from us." They are "our own." Rabindranath Tagore argues again that the "universal law is one with our own power." Through science "we come to know more of the laws of nature" and "tend to attain a universal body," "worldwide"<sup>13</sup>.

Through man's progress in science the wholeness of the world and his oneness with it is becoming clearer to his mind. When this perception of the perfection of unity is not merely intellectual, when it opens out his whole being into a luminous consciousness of the all, then it becomes a radiant joy, an overspreading love. His spirit finds its larger self in the whole world, and is filled with an absolute certainty that it is immortal. It dies a hundred times in its enclosures of self; for separateness is doomed to die, it cannot be made eternal.

But it never can die where it is one with the all, for there is its truth, its joy. In *Personality*, another set of lectures delivered in the United States in 1916, several times at Unitarian Churches, Rabindranath Tagore further explains that a flower is nothing when one analyses it, but it is positively a flower when one enjoys it. Again, his point highlights the wholeness of one's personal experience of a flower and the joy it gives. One believes Rabindranath Tagore's emphasis on unity and the role of science in expanding man's awe before its discoveries and results are all the more insightful as men have progressed further along in one's scientific advancement in understanding creation and the cosmos. Yet Rabindranath Tagore rightly criticized the West for being mainly concerned with the extension 'outwards,' to the neglect of 'inner consciousness which is the field of fulfilment.' His interest and dialogue with science runs throughout his books, unexpectedly resulting in a textbook, in 1937, *Our 33 Universe*, surveying scientific knowledge from the world of atoms to the world of stars. Rabindranath Tagore has often been criticized for a failure to appreciate the extent to which he was deceived and duped by Mussolini and then by the communist state.

Rabindranath Tagore is certainly bold enough to declare that the infinite would have been vain if he didn't have come down to man to manifest himself. In this state of development of personality, man realizes that the entire universe is a real creation of the infinite, who being immanent in the finite establishes a spiritual unity, a bond between man and man, man and nature and the man and his supreme person or the Almighty.

## Conclusion

Hence, from this perspective it could be said that, science, in the discourse of both Bose and Tagore, did not remain confined to a particular territory, but rather through its assimilation of all

the branches of knowledge, it acquired a new spiritual cosmology. Through their contemplation of Nature as a living spirit, Bose and Tagore had at once critiqued the extreme materialistic aspect of Western scientific methodology and simultaneously reiterated the essence of ancient Indian spirituality which is manifested in the belief of the Unity of Life. Some of the other serious defects from which Rabindranath Tagore's essays and letters suffer are prolixity and repetitiousness. He has the tendency of explaining something over and over again, somewhat in the manner of an anxious teacher talking to a class of rather dull student. Many of his essays were in fact addresses delivered on various occasions somewhere. One obvious result is that the reader feels that he is speaking from a high pedestal and that he is not one of many frail blundering humans. He seems to be so sure of himself and the righteousness of his point of view that one does not see him struggling with doubts and fears and conflicts. One does not see the process; one is made to look at the point of arrival. This is particularly true of his essays, speeches and letters. When one wants to summarize a Rabindranath Tagore's essay, one is often disappointed to find that he has actually little to say and that he has taken a long period to say that. It is not that he is comprehensive and hence has to discuss a thing threadbare from every single point of view; he is rhetorical and repetitive.

## References

1. Rabindranath Tagore, *Our Universe*. Translated by Indu Dutt. Bombay: Jaico Publishing House, 1969, p. 2
2. *EWRT*, Vol. III, p. 826.
3. *Ibid.*, p. 826.
4. Jagadish Chandra Bose, *Sir Jagadish Chandra Bose: His Life, Discoveries and Writings*. Madras: G. A. Natesan & Co., 1921, pp. 60-61. Henceforth referred to as *Life, Discoveries and Writings*.
5. Pratik Chakrabarti, *Western Science in Modern India*. Delhi: Permanent Black, 2004, p. 182. Henceforth referred to as 'Chakrabarti'.
6. J. Lourdasamy, *Science and National Consciousness in Bengal 1870-1930*. New Delhi: Orient Longman Private Limited, 2004, p. 102. Henceforth referred to as 'Lourdasamy'.
7. *Collection of Nine Upanishads*. Gorakhpur: Gita Press, 2012. Print.p.51.
8. Krishna Kripalani, *Tagore: A Life*. London: Oxford University Publication, 1961. Print. p.49.
9. Rabindranath Tagore, *The Religion of Man*. Boston: Beacon press, 1961, p.18.
10. *Ibid.*, p.18.

11. Rabindranath Tagore, *Sadhana (The Realization of Life)*. op. cit., p. 288.
12. Chatterjee, Satishchandra & Dutta, Dharendra nath. *Indian Philosophy*. Kolkata: University of Calcutta, 1984. Print.p.28.
13. Sisir Kumar Das, *The English Writings of Rabindranath Tagore* , Vol-111,New York, MacMillan,1927.p.65.