



SCIENCE & SPIRITUAL QUEST

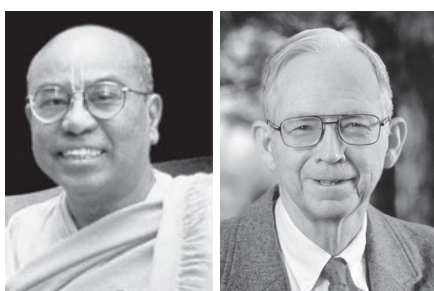
BHAKTIVEDANTA INSTITUTE

STUDENTS' EZINE

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आ नौ भद्राः कर्तव्यो यन्तु विश्वतोऽद्भ्यासो अपर्रीतास उद्भिदः । (RgVeda) *Let noble thoughts come to us from every side*

Science-Spirituality Dialogue Every Living Being Has a Soul



A Discussion between
Prof. Holmes Rolston III (Right)
Templeton Laureate and Professor of
Philosophy at Colorado State University,
USA &
Dr. T. D. Singh (left),
Physical Organic Chemist,
Founding-Director of
Bhaktivedanta Institute

Dr. T. D. Singh: I would like to ask you about the concept of the soul in Christianity, especially from the scientific perspective. Most of my Christian friends, priests and scholars, say, according to the Bible – if not misinterpreted (as some of them also suggest) – only humans have souls, other forms of life don't have. This has troubled me, as all forms of life have souls according to the Vedantic tradition. You are also a professor, and I would be glad to hear your opinion.

Holmes Rolston: I don't think that even Hindus think that plants, trees have souls, so there are living things that don't have souls. I don't know what you think about insects? I don't think you think that insects have souls.

Dr. T. D. Singh: We think insects have souls; all organisms have. ... Plants and trees also have.

Holmes Rolston: Well, I was beginning to make the point that various living things might be valuable, worthwhile, and not have souls. There could be levels of life, and so it doesn't have to be the case that every good thing, everything that's worthy of being respected, has to have any soul or spirit, in that sense. It may be then that humans are the only beings that have certain kinds of achievements. I think, only humans are the self-reflective moral agents. So I have a world-view that permits many different kinds of levels of value and achievement and worth and respect, in that sense. I'm not particularly inclined to think that all the insects, birds, or trees or whatever, have to be eternal to be worthwhile. Maybe they can be good things even though they come and go. In that sense I'm not particularly inclined to populate the world with a soul attached to everything that goes in. Maybe the birds have no soul but are still to be respected.

Dr. T. D. Singh: Our Vedanta says that every living being has a soul, a spiritual

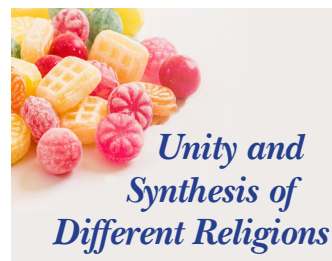
INSIDE

► *On the*
SHOULDERS of
— GIANTS —



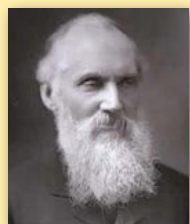
James Clerk Maxwell

► **VEDANTA and**
— SCIENCE —



► **NEWS BIRDS**

Announcement
Symposium
(Online)
December 9th, 2021



"It is impossible to understand either the beginning or the continuance of life without an overruling creative power."

— Lord Kelvin (Sir William Thomson)
Founder of Thermodynamics and Energetics

To Know about Life, Matter, and their Interactions, is called Knowledge

entity, from microorganisms up to human beings. But they are conditioned differently because of association. There are three modes of the material nature called *gunas* in the Sanskrit language: the mode of goodness or harmony (*sattva*), the mode of passion or creation (*rajas*), and the mode of ignorance or inertia (*tamas*). These are the cosmic elements that force the spirit soul to associate to the material nature at different degrees. According to the proportion of association with the mode of goodness, the mode of passion and the mode of ignorance, they have different levels of consciousness. Take, for example, the plant; although a plant is alive and has a soul, its consciousness is very minimal, at a very low level. The human form of life has a much more developed intelligence and consciousness. Therefore, there is no doubt that the human being is most qualified to sustain and develop himself and also to help others. This principle of all living entities having a soul is the foundation principle of the Vedantic tradition. If we observe some birds, and especially the swan, we acknowledge their intelligence and their feedback. Why wouldn't they have a soul? You train a bird, establishing a relationship with the bird, the bird also responds. It seems to me to be an area to be explored, common elements in the dialogue between East and West could be useful. Once this is resolved scientifically, personally I think it will be much easier to relate to different cultures.

[Excerpt from the book, *Savijnanam* vol-8— *Scientific Exploration for a Spiritual Paradigm*, Bhaktivedanta Institute, Kolkata]

On the Shoulder of Giants

James Clerk Maxwell

A Profound Genius With a Sacred Devotion

James Clerk Maxwell, the greatest theoretical physicist of the 19th century, is best known for his classical theory of electromagnetism. His chief contribution is the monumental theoretical deduction predicting the existence of electromagnetic waves whose behavior was like that of light waves. Thus, he opened a new epoch of science with the first profound unification of nature's fundamental forces -- electricity, magnetism, and optics. Maxwell combined an exceptional intuition with a formidable mathematical capacity to gain insights into physical phenomena and deduce an explanation from theoretical reasoning alone. One such remarkable work was to show that the rings of Saturn could not be solid and continuous. His other areas of investigation include heat, kinetic theory of gases, statistical mechanics, color, vision, and color blindness.

James Clerk Maxwell was born on November 13 in 1831, in Edinburgh (Scotland, UK) to Frances Cay and John Clerk. Jamesie, as the boy was called, passed his early childhood on the family estate at Glenlair, near Edinburgh. His natural curiosity displayed itself at an early age. Throughout his childhood, Maxwell's constant question "how it doos" and "What's the go of that?" He was fond of making things with his hands. Jamesie's first creation was a set of figures for a "wheel of life," a scientific toy that produced the illusion of continuous movement. He was often seen engrossed in reading books, or drawing, or inventing curious combinations of colors.

Young Maxwell's formal education began at Glenlair under a private tutor who opined Maxwell as a slow learner. So Maxwell was sent to the Edinburgh Academy at the age of ten. Maxwell's queer country-style clothes and speech attracted the unfavorable attention of his fellow pupils, giving him a nickname, "Dafty". However, he soon won the respect of his classmates with his outstanding academic performance. In his 14th year, he won



James Clerk Maxwell (1831 – 1879)

the Academy's mathematical medal and published his first paper on a method for constructing perfect oval curves with pins and thread. He entered the University of Edinburgh in 1847 and in 1854 obtained a mathematics degree from Trinity College, Cambridge. He held professorships of natural philosophy at Marischal College, Aberdeen (1856–60), and King's College, London (1860–65). In 1871 he accepted an appointment as the first Cavendish Professor of Experimental Physics at Cambridge. Throughout his career Maxwell published four books and 100 papers on diverse topics. Charles Coulson, who in 1947 took on the same chair that Maxwell had held at King's College London, remarked: 'There is scarcely a single topic that he touched upon which he did not change almost beyond recognition.' Maxwell's works laid the groundwork for Einstein's theory of relativity and provided a foundation for the whole array of contemporary communications technologies. Maxwell's ideas had applications in many fields, such as information theory, cybernetics, fluid theory, and optics.

Besides his scientific eminence, Maxwell was noted for his grand simplicity and extraordinary gentleness. His tenderness for all living things was deep and instinctive; from earliest childhood, he could not hurt a fly. Maxwell's religion influenced all his life. While his father cheered Maxwell's scientific pursuit, his mother encouraged him to "look up through Nature to Nature's God." His knowledge of Scripture, from his earliest boyhood, was extraordinarily extensive and minute; and he could give chapter and verse for almost any quotation from the Psalms. Not surprisingly, Maxwell sought both scientific reasoning and theology to unravel the workings of nature. He says, "I think men of science ... whose minds are scientific are bound ... their view of the glory of God may be as extensive as their being is capable of." He opined that orderliness and design in nature could account for the wonderful attributes of the creator. In his article on the atom, in the ninth edition of the *Encyclopedia Britannica*, he writes, "They (the atoms) continue this day as they were created, perfect in number and measure and weight, and from the ineffaceable characters impressed on them we may learn that those aspirations, after accuracy in measurement, truth in the statement, and justice in action, which we reckon among our noblest attributes as men, are ours because they are essential constituents of the image of Him Who in the beginning created not only the heaven and the earth, but the materials of which heaven and earth consist."

Maxwell's faith was not disturbed at the near approach of death but, on the contrary, seemed strengthened. During those last days, he expressed, "...I have looked into most philosophical systems, and I have seen that none will work without a God.' Thus, he is remembered as an unparalleled genius with a heart of sacred devotion.

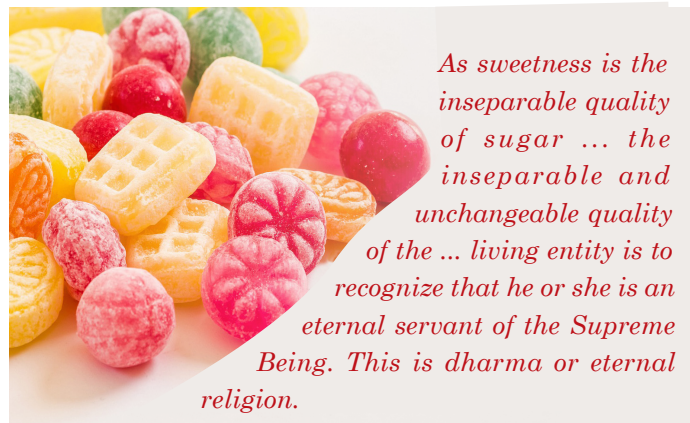
Vedanta & Science

Unity and Synthesis of Different Religions

True religion is beyond any sectarian concept. A true religious principle is a gift of the Supreme Being, God, to humanity revealed through saintly persons. Such a gift will enable a sincere person prepare himself or herself to revive his or her original spiritual identity. Thus this is a priceless gift. A gift is something which comes out of deep love from someone for the other. Hence a true "gift" cannot be chosen although faith can be chosen. One has to simply receive it. By receiving this divine gift as true religion and using it properly one will be happy, will be free from all troubles in life's journey and will reach the final destination. Religion, therefore, is a divine gift of God to humanity. In the *Bhāgavatam* (6.3.19) the definition of *dharma* or a true religion is given as, "*dharmaṁ tu sākṣād bhāgavat-praṇītaṁ*", meaning "Real religious principles are enacted by the Supreme Personality of Godhead".

In the Vedantic understanding, the essence and ultimate significance of religion is *dharma*. *Dharma* is not religion in an ethnical, ritualistic or esoteric sense. *Dharma* ultimately means the spiritual and universal function of life. As sweetness is the inseparable quality of sugar, *dharma* is the inseparable and unchangeable quality of the transcendent and conscious self. In a similar way, the natural and inherent function of the living entity is to recognize that he or she is an eternal servant of the Supreme Being. This is *dharma* or eternal religion. As mentioned earlier, when all human activities including science and religion acknowledge the existence of God, there will be a common ground. In this way, synthesis of all religious traditions including *Advaita-Vedanta* and *Vaiṣṇava-Vedanta* in Hindu religious traditions can also be achieved.

Srila Prabhupada, the founder Acharya of Bhaktivedanta Institute, describes the basis of unity of all religions as, "All the great acaryas, like Ramanuja, Madhva, Caitanya, Sarasvati Thakura or even, in other countries, Mohammed, Christ and others, have all extensively glorified the Lord by chanting always and in every place. Because the Lord is all-pervading, it is essential to glorify Him always and everywhere. In the process of glorifying the Lord there should be no restriction of time and space. This is called *sanātana-dharma* or *bhāgavatadharma*. *Sanātana* means eternal, always and everywhere. *Bhāgavata* means pertaining to *Bhagavān*, the Lord. The Lord is the master of all time and all space, and therefore the Lord's holy name must be heard, glorified and remembered everywhere in the world. That will bring about the desired peace and prosperity



As sweetness is the inseparable quality of sugar ... the inseparable and unchangeable quality of the ... living entity is to recognize that he or she is an eternal servant of the Supreme Being. This is dharma or eternal religion.

so eagerly awaited by the people of the world."! So, in this way, great thinkers and philosophers of the world reveal that a synthesis of scientific knowledge and religious wisdom will be able to solve many problems in our day-to-day life.

Human life is very precious in God's sacred creation. We should respect one another and should cultivate unity while allowing for diversity. We are all eternal spiritual beings in temporary material bodies and the ultimate goal of human life is to achieve love of the Supreme Lord. The *Vaiṣṇava* scriptures of Hinduism teach us that when we misidentify ourselves with our temporary body instead of with our true eternal self (the spirit soul), our material desires cause us to have feelings like, 'this is mine', 'my religion', 'my country', 'my property'. These secular mentalities are however, not helpful for realizing the brotherhood and sisterhood of all people. The essence of Hindu theology is that we should completely transcend the bodily concept of life and develop our innate love of God. Through spiritual education we should all come up to the consciousness that we are all pure spirit souls. In that consciousness we can see the brotherhood and sisterhood of all people and that we are all spiritual children of God. Actually, all genuine religious traditions teach us to love God in brotherhood. If this were truly practiced by every religious person in each tradition, he or she would never fight with anyone in the name of God.

The dawn of the new millennium has arrived. It would be a great gift to humanity if religious leaders of all traditions could truly imbibe the spiritual understanding of all religions, "We are all children of God, the Supreme Father" in order to cultivate a true culture of peace and harmony among all religions of the world. We should all agree not to commit any crimes against creation in the name of God.

[Excerpt from the book, *Thoughts on Synthesis of Science and Religion*, Bhaktivedanta Institute, Kolkata]

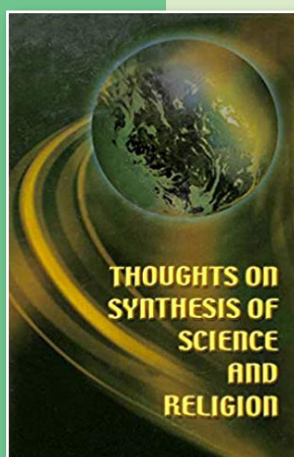
BOOK

Online Store:

<https://store.bhinstitute.org/product/thoughts-on-synthesis/>

THOUGHTS ON SYNTHESIS OF SCIENCE AND RELIGION

Hardbound; Rs. 1,150;
Bhaktivedanta Institute, Kolkata



This book is a compilation of papers by several distinguished authors, representing several disciplines of Science, as well as very prominent religious thinkers, including:

- ▶ **Charles Townes**; Nobel Laureate in Physics. Graduate School, University of CA, Berkeley
- ▶ **Betty Williams**; Nobel Peace Laureate, President, World Centers for Compassion for Children
- ▶ **Freeman Dyson**; Templeton Laureate (2000), Professor Emeritus of Physics, Princeton University
- ▶ **Gregory Benford**; Professor of Physics, Univ. of California, Irvine
- ▶ **Amit Goswami**; Senior Researcher at the Institute of Noetic sciences, University of Oregon.
- ▶ **Dr. Robert Muller**; recipient, Albert Schweitzer International prize for the Humanities.

Announcement



SYMPOSIUM

(ONLINE)

December 9th, 2021
IST 16:00 - 20:00

Celebrating Life & Works of

His Holiness Bhaktisvarupa Damodara Swami

Dr. T D Singh

Founder Director, Bhaktivedanta Institute

Dr. T. D. Singh represents for me a perfect role model how citizens and in particular academics should think, feel, and behave: He has been building bridges between groups of society and between different schools of thought.

He has bridged the gaps between science and philosophy. He showed to us what true humanness is; he showed to us what wisdom and compassion really mean.

— Richard R. Ernst
Nobel Laureate in Chemistry

Zoom Meeting ID: 847 1946 0918

Free Registration: <https://forms.gle/2gZ6pc2gi6NDriwh6>

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