AN INTERNATIONAL PHYSICIST AND A DEDICATED PROPONENT OF SIKHISM - PROF. HARDEV SINGH VIRK



Interviewed by

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Professor Hardev Singh Virk, born in 1942, at Kamo Ke, District Gujranwala (now in Pakistan) is an international Physicist cum academician. He is also a profound scholar of Sikhism. After receiving his M. Sc. (Physics) degree in 1963, from Aligarh Muslim University, Aligarh, he started his teaching career at G. N. E. College, Ludhiana. In 1965, he joined Punjabi University, Patiala, wherein he served till 1979. During 1970, he was selected for French Govt. Scholarship, to pursue his research interests in Nuclear Physics at Marie Curie University, Paris. Therein, for his outstanding research work, he was awarded Doctoral degree by the university in 1972.

On joining, as Head, Dept. of Physics, at Guru Nanak Dev University (GNDU), Amritsar in July 1979, he played a vital role in laying infrastructure for promotion of educational/research activities at the University, in many diverse fields, e.g., Radiation Physics, Geophysics, Geochemistry, Heavy Ion Physics, Thin Film Technology, Acoustics, and Plasma Physics. He retired from GNDU Amritsar in 2002, after serving as Founder Head, Dept. of Physics, and Dean (Academics). Later on he served as Director (Research) at DAVIET, Jalandhar (2008-11); Adjunct Professor at Eternal university, Baru Sahib (HP); Visiting Professor in SGGS World University, Fatehgarh Sahib (2013-17); and Professor of Eminence, Punjabi University, Patiala (2017-19).

In his long career as a Physicist, he is credited with the publication of about 425 research papers in national and international journals, 41 books in areas of science, religion and literature; 150 articles on science policy, education, and reviews of books. Besides, he has served on many national and international advisory boards. For almost five years (2011-15), he had the honour of working as Editor of Solid State Phenomena series, published by TRANS TECH Switzerland. During his long unblemished professional career, Professor Virk has travelled over 50 countries, to pursue his academic/research activities, and to promote science in many developing countries.

Having served as an educationist and administrator for over forty two years, at various prestigious educational institutions in India, he has also established himself as an eminent writer in the field of Sikh theology. Through his literary essays, as published in several reputed journals, magazines, books, and newspapers, he has been able to create an indelible mark of scholarship on the minds of his readers. Besides, he has published about one dozen books related to Sikhism. He has been honored for his services to the Sikh cause by several Sikh and non-Sikh organizations, e.g., SGPC, Amritsar; ICCR, Govt. of India; and Templeton Foundation, USA. He has also been honoured with Shiromani Award for Scientific Literature in Punjabi (1993) by Govt. of Punjab.

A renowned Physicist and a noted Sikh theologian, Prof. Virk, is a founder member of the School of Scientific and Logical Interpretation of Gurbani. He is committed to bringing out the truth of Gurbani, logically, rationally and scientifically. With his scientific training and devotion to Gurbani, he is eminently qualified to do so. Prof. Virk adheres that Sikh Gurus' Philosophy is perennial and universal in its approach to understand Cosmology, Nature, life and human behavior in the present scientific era. His scientific background and professional life as a scientist have undoubtedly influenced his choice of paradigm and perspective. Prof. Virk asserts that Sikh Gurus', theirs philosophy, their bani, their Sikhi, and Sri Guru Granth Sahib delineate the basics for global society of the 21st century. His views on various aspects of Sikh Philosophy are presented here for the benefit of readers:

Dr. Singh: You are a scientist by training and a teacher cum researcher by profession, then how have you become so interested in theology?

Dr. Virk: In my biography "My Journey in Science", I have given details of my devotion to Sikh way of life. My mother was a devout Sikh lady who took me to village Gurdwara early morning as her daily routine. I started reading Guru Granth Sahib (Sahaj Path) during my school days. My faith in Sikh way of life and teachings of Gurus got strengthened after my journey in Science. I may borrow a quote from Dr SS Bhatti, a holistic scholar of Chandigarh, to explain my faith in Sikh theology: "I have repeatedly proven to myself that the deeper I know of Science, its methods, and findings, the profounder my understanding of and deeper my faith in Gurbani gets".

Dr. Singh: What is Sikh Gurus' Philosophy, and what are its authentic sources?

Dr. Virk: I believe that Sikh Gurus' Philosophy can be discussed under the ambit of Indian Philosophy. Prof. Puran Singh is highly critical of those who want to dig up any metaphysics or Philosophy out of Sikh Gurus' teachings, which are meant to create a new way of life. The authentic source of Sikh Philosophy, just for sake of discussion, is Sri Guru Granth Sahib (SGGS), the living Guru of the Sikhs.

Dr. Singh: What makes Sikh Gurus' philosophy original and unique?

Dr. Virk: In view of my answer in para supra, the origin of Sikh Philosophy can be traced back to Indian Philosophy. But its implementation as a practical way of life is unique as it contradicts superfluous rituals and other rigmaroles of Hindu Philosophy.

Dr. Singh: As per Sikh Gurus' Philosophy, what is the meaning or purpose of our presence in this Universe?

Dr. Virk: To lead the life of a Gurmukh (as directed in Gurbani) and get liberated while living (*Jeevan Mukta*) in this Universe.

Dr. Singh: Is Sikh Gurus' Philosophy in conflict or harmony with science? How can Sikh Gurus' Philosophy help in the cultivation of scientific temper in society?

Dr. Virk: The answer to this question is available in my edited book "*Harmony in Science and Sikh Religion*" and in your book "*Science and Sikhism: Conflict or Coherence*". Sikh Gurus' life and Philosophy contradict myth and dogma, and inculcate the scientific temper in society.

Dr. Singh: Some scholars emphasize that Sikh philosophy depicts a way of life, not a religion. What is your opinion about it?

Dr. Virk: My answer is both Yes and No. Guru Nanak brought a revolutionary change in Indian society by his teachings. Later Gurus strengthened the mission of Guru Nanak. Guru Arjun prepared the unique holy book "Sri Guru Granth Sahib" and the Guru Gobind Singh created "The Khalsa" for transformation of the Sikh society. Ultimately, all these steps led to creation of a new and vibrant religious tradition, "The Sikh Religion".

Dr. Singh: What is the relevance of Gurmukh (as envisioned by Sikh Gurus in Sri Guru Granth Sahib) in the modern context?

Dr. Virk: The foundations of Sikh society are based on a working principle: "*Kirt Karo, Vand Chhako and Naam Japo*". The Gurmukh (as envisioned by the Sikh Gurus in Sri Guru Granth Sahib and Bhai Gurdas in his Varan) is an ideal person envisaged by the Sikh Gurus for the global society in the modern context.

Dr. Singh: Different Sikh scholars emphasize one or the other versions of the Three Pillars of Sikhism e.g. (i) Kirat Karo, Naam Japo, Vand Chhako (2) Naam, Daan, Isnaan (3) Sat, Santokh, Vicharo (4) Deg, Teg, Fateh, etc. Based on Sikh doctrines, what do you think is the most apt version?

Dr. Virk: All these versions are derived from the Sikh scriptures and hence relevant to the Sikh way of life.

Dr. Singh: What is the perspective of Sikh Gurus' Philosophy about the existence of God? Can faith in God be justified?

Dr. Virk: Sikh Gurus are the firm believers in the existence of God, both as *Nirguna* (Transcendental) and Sarguna (Immanent) forms of Reality:

ਨਿਰਗੁਨ ਆਪਿ ਸਰਗੁਨ ਭੀ ਓਹੀ ॥ (SGGS, M.5, P.287)

He Himself is absolute and unrelated; He Himself is also involved and related. Faith in God is an inviolable and the foundational principle of Sikhism.

Dr. Singh: Do scientists believe in God?

Dr. Virk: My answer is again: Yes and No. Professor Abdus Salam, a Punjabi Nobel Laureate from Pakistan, was a strong believer in God but Stephen Hawking and the likes, pride in calling themselves atheists. I will like to add that Scientific GOD Journal (March 2010, Vol. 1, Issue 3, Pages 143-273) has published quotes from "50 Nobel Laureates and Other Great Scientists Who Believe in GOD".

Dr. Singh: Can rational inquiry and Gurbani convictions co-exist?

Dr. Virk: Yes to that extent when rationality and logic do not destroy or create dichotomy in the Faith of the followers.

Dr. Singh: What is the Sikh Gurus' perspective about spirituality?

Dr. Virk: I will not elaborate too much. It is well documented in SGGS. Spirituality is considered as the *summum bonum* of human life. The message of the Sikh Gurus has been summed up in SGGS by the Gurbani quote:

ਨਾਨਕ ਕੈ ਘਰਿ ਕੇਵਲ ਨਾਮੁ ॥ (SGGS, M.5, P.1136)

Nanak's home is filled with the Naam, the Name of the Lord.

According to GS Talib: "Guru Nanak described five progressive stages of spiritual ascent in his *Japji*. Through these five realms called *khands*, the ultimate goal of all spiritual endeavors is to transcend the experience of Righteous Action (*Dharma*,) Illumination (*Gian*, *Jnan*) Grace (*Karam*) Spiritual Endeavor (*Sarm*) and to enter Sach Khand (The Realm Eternal) eternally to abide in the Divine presence". *The ultimate exhilarating spiritual experience is* the ultimate *union or immersion of human soul with God*.

Dr. Singh: What is the perspective of Sikh Gurus' about society?

Dr. Virk: There is no explicit document about the perspective of Sikh Gurus about Society as found in the holy Quran for the Muslim society. However, readings from SGGS reveal some guidelines for the truthful conduct of life. The most famous quote:

ਸਚਹੁ ਓਰੈ ਸਭੂ ਕੋ ਉਪਰਿ ਸਚੂ ਆਚਾਰੂ ॥ (SGGS, M.1, P.62)

"Truth is higher than everything; but higher still is truthful living"

clearly shows that Sikh Gurus do not give importance to abstract metaphysical realities but lay stress on the practical aspects of human life. They stress on purity of conduct and the life of dignity. Guru Nanak in *Raag Majh* elaborates:

ਸੋ ਜੀਵਿਆ ਜਿਸੁ ਮਨਿ ਵਸਿਆ ਸੋਇ॥ ਨਾਨਕ ਅਵਰੁ ਨ ਜੀਵੈ ਕੋਇ॥ ਜੇ ਜੀਵੈ ਪਤਿ ਲਥੀ ਜਾਇ॥ ਸਭੁ ਹਰਾਮੁ ਜੇਤਾ ਕਿਛੂ ਖਾਇ॥(SGGS, M. 1, P. 142).

They alone are truly alive, whose minds are filled with the Lord. O Nanak, no one else is truly alive; those who live in dishonour and without dignity; everything they eat is impure.

Dr. Singh: Do Sikh doctrines drive towards the sustainability of living beings on the earth?

Dr. Virk: Sikh Gurus preach about a balanced way of life with no excesses in eating, drinking, wearing, riding, and other domains of life (as elaborated in Sri Raag of SGGS).

ਬਾਬਾ ਹੋਰੂ ਖਾਣਾ ਖੁਸੀ ਖੁਆਰੂ ॥ ਜਿਤੂ ਖਾਧੈ ਤਨੂ ਪੀੜੀਐ ਮਨ ਮਹਿ ਚਲਹਿ ਵਿਕਾਰ ॥ (SGGS, M. 1, P.16).

O Baba, the pleasures of other foods are false. Eating them, the body is ruined, and wickedness and corruption enter into the mind.

They also preach about the sanctity of air, water, earth and life in the universe. That shows their concern and commitment towards the sustainability of living beings on the earth.

Dr. Singh: Based on Sikh Gurus' Philosophy, what can be done to stop humans fighting each other for race, religion, caste, color or creed?

Dr. Virk: Sikh Gurus' Philosophy preaches and promotes liberty, equality and universal love among all human beings irrespective of race, religion, caste, colour or creed. It is easier said than done.

Dr. Singh: In your opinion, Why do Sikh doctrines and Sikh practices appear to be at loggerheads during contemporary times?

Dr. Virk: I am working on this crucial issue and my articles appeared on Sikh Net and Sikh Review. I feel concerned that Sikh doctrines and Sikh practices are at loggerheads during contemporary times. My paper: "Why Sikhism Fails to Impact at Global Level? Some Random Thoughts" published in the Sikh Review (Feb. 2019) is a pointer to the general malaise permeating the Sikh society. The next article "How and Why the Message of Guru Nanak got distorted?" appearing in April 2020, further elaborates the causes of disparity existing between the Sikh doctrines and Sikh practices.

Dr. Singh: Recently, 'The Wire', New Delhi has reported that Sikhs in the US will be counted as a separate ethnic group for the first time in the 2020 census. What is your opinion; "Are Sikhs an ethnic group?

Dr. Virk: I know this problem is global. In Canada, where Sikhs have been living for more than a century and now wield a lot of political power, they were classified under various denominations, for example, "South Asians" etc. etc. There is no harm if US Govt. has accepted the Sikhs as an ethnic group. I consider it as a first step before they will be classified under the category of a distinct religious group.

Dr. Singh: What is the perspective of Sikh Gurus' on life, soul, death, and reincarnation; karam and *nadir*?

Dr. Virk: A new breed of Sikh scholars want to establish that Sikh Gurus' do not believe in Indian perspective regarding soul and reincarnation. This is just one-sided view. If we look for holistic view and perspective of Sikh Gurus' in SGGS, it is obvious that they believed in transmigration of soul, evolution of human species after a cycle of eighty-four *lakh* life forms (even if metaphorically), *karma* theory and *nadir*, the grace of God (as in Christianity). Both *karam* and *nadir* are interlinked in the Sikh way of life. It is clearly mentioned in SGGS that without *nadir*, nothing is attained in the spiritual domain. So many instances are given in SGGS, where the life of a believer is transformed from a sinner to saint by transmutation of past *karmas* by His *nadir*.

Dr. Singh: Do Sikhs believe in an afterlife? Do they believe in Heaven/Hell, salvation?

Dr. Virk: Yes, there are so many references in SGGS about origin of life on this earth and eightyfour *lakh junis*.

ਲਖ ਚਉਰਾਸੀਹ ਫਿਰਿ ਫਿਰਿ ਆਵੈ ਬਿਰਥਾ ਜਨਮੁ ਗਵਾਇਆ॥ (SGGS, M.3, P.69)

Through 8.4 million lifetimes, they wander over and over again; they waste away their lives in vain.

ਲਖ ਚਉਰਾਸੀਹ ਫੇਰੂ ਪਇਆ ਮਰਿ ਜੰਮੈ ਹੋਇ ਖੁਆਰੂ ॥ (SGGS, M.3, P.88)

They go through the cycle of 8.4 million reincarnations, and they are ruined through death and rebirth.

I believe Heaven and Hell are used as metaphors in SGGS. The Sikh idea of Salvation (*mukti*) is different than Hindu religion; it is to be attained during this life, hence the Sikh aims to get liberated as 'jeevan mukt':

ਮਾਨ ਮੋਹ ਦੋਨੋ ਕਉ ਪਰਹਰਿ ਗੋਬਿੰਦ ਕੇ ਗੁਨ ਗਾਵੈ ॥ਕਹੁ ਨਾਨਕ ਇਹ ਬਿਧਿ ਕੋ ਪ੍ਰਾਨੀ ਜੀਵਨ ਮੁਕਤਿ ਕਹਾਵੈ ॥ (SGGS, M.9, P.831)

One who lays aside both pride and attachment, sings the Glorious Praises of the Lord of the Universe. Says Nanak, the mortal who does this is said to be 'jivan mukta' - liberated while yet alive.

ਨਾਨਕ ਸਤਿਗੁਰਿ ਭੇਟਿਐ ਪੂਰੀ ਹੋਵੈ ਜੁਗਤਿ ॥ਹਸੰਦਿਆ ਖੇਲੰਦਿਆ ਪੈਨੰਦਿਆ ਖਾਵੰਦਿਆ ਵਿਚੇ ਹੋਵੈ ਮੁਕਤਿ ॥(SGGS, M.5, P.522)

O Nanak, meeting the True Guru, one comes to know the Perfect Way. While laughing, playing, dressing and eating, he is liberated.

Dr. Singh: What are the barriers to the logical and rational interpretation of Gurbani?

Dr. Virk: Gurbani is not Science. Scientific method has its own limitations. Guru Nanak used inductive logic to preach his message at Hardwar and Mecca. Our preachers (*Kathakars*) must adopt this method instead of narrating cock and bull stories to interpret Gurbani. Hence, the tools of logic and rationality are competent to interpret Gurbani, which is a revealed Truth about nature of Reality (God). The only barrier seems to be the traditional method based on the use of hagiographical accounts to interpret Gurbani.

Dr. Singh: In 2007, you have published your book titled: "Scientific Vision in Sri Guru Granth Sahib and Interfaith Dialogue". In this book, you have proclaimed that the spiritual / mystical vision in SGGS is compatible with modern science. Can you share a few salient features of your thesis?

Dr. Virk: Yes, you have caught me on the wrong foot. When I wrote this book, I was overwhelmed by the Cosmological ideas of Sikh Gurus, especially Guru Nanak, and proclaimed that mystical vision in SGGS is compatible with modern science. But in the same book (Chapter 3), I wrote: "The realm of mystic experience is a Reality beyond the comprehension of our senses (I may add, *Science*). There is a clear evidence in SGGS regarding the transcendental nature of Reality:

ਅਖੀ ਬਾਝਹੁ ਵੇਖਣਾ ਵਿਣੁ ਕੰਨਾ ਸੁਨਣਾ ॥ਪੈਰਾ ਬਾਝਹੁ ਚਲਣਾ ਵਿਣੁ ਹਥਾ ਕਰਣਾ ॥ਜੀਭੈ ਬਾਝਹੁ ਬੋਲਣਾ ਇਉ ਜੀਵਤ ਮਰਣਾ ॥ਨਾਨਕ ਹੁਕਮੂ ਪਛਾਣਿ ਕੈ ਤਉ ਖਸਮੈ ਮਿਲਣਾ ॥ (SGGS, M. 2, P. 139)

In this realm, one sees but without the eyes; one listens but without the ears; One walks but without the feet; one works but without the hands; One speaks but without the tongue; thus attaining life in death. O Nanak, one meets the God after realisation of the divine law".

Dr. Singh: In your book "Scientific Vision in Sri Guru Granth Sahib and Interfaith Dialogue", you proclaims that to promote world peace and harmony two types of dialogues e.g. (i) Science-Religion dialogue and (ii) inter-faith dialogue, are need of the hour. Can you explain how Sri Guru Granth Sahib can play a leading role in both these dialogues?

Dr. Virk: I am a strong votary of both these dialogues: SGGS promotes inter-faith dialogue in a manner no other religious scripture does in this world. It propagates Universal values and if put into practice at global level can be a harbinger of Peace in this world. SGGS contains sacred writings of Sikh Gurus as well Saints of other religious traditions of Indian sub-continent. Science-Religion dialogue is also supported by SGGS as there is no conflict between Sikh religion and Science. I may again refer to my book "*Harmony in Science and Sikh Religion*".

Dr. Singh: In 2018, during one of your lectures at San Jose Gurudwara, USA, you have enunciated on "Why Sikhism fails to impact at the global level?" Would you like to share a few of your insights about this issue?

Dr. Virk: You can find the contents of this lecture published in The Sikh Review of Feb. 2019. I called these as my random thoughts. Loudly thinking, I may refer to some of my concerns as follows: (1). Mis-interpretation of Sabad Guru concept of Guru Nanak and promoting worship of Granth Guru as an idol.

- (2). Mis-interpretation and misuse of Miri-Piri concept to capture power in Sikh institutions.
- (3). Exegesis (Katha-Vichar) of Sri Guru Granth Sahib using outdated techniques.
- (4). A glaring difference between Sikh praxis and practice.

Dr. Singh: What is the Sikh Gurus' perspective on religious/spiritual experience as reported by various religious devotees/scientists? Can you share any of your unique religious/spiritual experiences?

Dr. Virk: Sikh Gurus practiced what they preached. They were in tune with supreme Reality. Guru Nanak sums up his spiritual experience and views on Reality in the opening stanza of SGGS, called *Mulmantar*. The unique feature of Sikh religious experience is that it is not otherworldly but related to mundane realities of life in this world. I cannot lay claim to any spiritual experience but I have enjoyed some sort of spiritual bliss during days of adversity in my life. I may recount the power of prayer: During my doctoral research in Paris, I was feeling frustrated to reveal the truth which could topple the research of my own Supervisor. I took a plunge after deep meditation on my problem and was awarded a degree with highest citation of Paris university.

Dr. Singh: Karl Marx, the German philosopher, and economist, once said that "Religion is the opium of the people." Is Sikh Philosophy a new variety of this opium?

Dr. Virk: The Sikh Philosophy does not belong to this genre. But blind faith in Babas, Deras and not using *bibek-budhi* as advised by the Sikh Gurus renders Sikhism amenable to the views of Karl Marx.

Dr. Singh: Sikh Philosophy is 550 years old, do we need it in the twenty-first century? Why should scientists care about Sikh Philosophy?

Dr. Virk: I feel this question needs to be reframed: Why should the world care about Sikh Philosophy? Chardi Kala Foundation, California, USA invited me to deliver a talk at San Jose Gurdwara on 11th August on the theme "Relevance of Guru Nanak in Modern Scientific Era". I believe, the conclusions derived from my presentation are relevant to answer your query:

- Guru Nanak's philosophy of interfaith understanding through dialogue is the only way to attain peace, progress, and unity in the world.
- It is imbued with a modern spirit, which finds its best expression in such values as democracy, pluralism, freedom, and individuality.
- Guru Nanak deals primarily with truths transcending the scientific or secular. It speaks of natural and supernatural truths, God and His creation, humanity and community, and social-cultural life.
- Guru Nanak used a logical and scientific approach based on bibek buddhi (intellect), revolted against futile rituals, superstitions and dogmas, and authoritarian rulers.

Dr. Singh: In comparison to other religious schools of thought, where do you place Sikh philosophy?

Dr. Virk: Sikh Philosophy deserves to be placed at the top of hierarchy of global religious schools of thought provided we Sikhs adopt it in our life by our deeds and actions. We have wonderful theory but miserably fail in practice.

Dr. Singh: Thanks, Prof. H. S. Virk! for sparing your time to share your incisive views on Sikh theology and Sikh doctrines.
