

GOD VS. SCIENCE

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*We revere faith and scientific progress, hunger for miracles and for MRIs.
But are the world views compatible ?
David Van Biema*

Recently David Van Biema [16] held a debate, GOD VS. SCIENCE, between Richard Dawkins, an atheist Biologist, who occupies the Charles Simonyi Professorship for Public Understanding of Science at Oxford University, and a Christian Geneticist, Francis Collins, the Genome pioneer and Director of the US National Human Genome Research Institute since 1993. The cover of the *Time* [16] shows a rosary starting with cross and the beads ending in a double helix DNA (the thread of life) indicating its basic unit as beads. Inside the magazine is shown a figure of man with wings (may be representing God) and a man with heavy white beard (may be representing Darwin) facing each other arguing.

The discussion is based on the best seller, *The Language of God: A Scientist Presents Evidence for Belief*, of Francis Collins (Free Press).

Some of the points, related to the topic of discussion, reported by Biema are as follows:

- A Yale Psychologist, Paul Bloom has written bluntly, “*Religion and Science will always clash.*” The market seems flooded with books by scientists describing a caged death match between science and God – with science winning, or at least chipping away at faith’s underlying verities.
- Brain imaging (MRIs – Magnetic resonance Imaging) illustrates – in color- the physical seat of the will and the passions, challenging the religious concept of a soul independent of glands and gristle. Brain chemists track imbalance that account for the ecstatic states of visionary saints or, some suggest, of Jesus.
- Most Americans occupy the middle ground, wanting it all: to cheer on science’s strides and still humble the self on the Sabbath; access to both MRIs and miracles: debates about issues like stem cells without conceding that the positions are so intrinsically inimical as to make discussion fruitless. And to balance formidable standard bearers like Dawkins,

most Americans seek those who possess religious conviction but also scientific achievements to credibly argue the widespread hope that science and God are in harmony – that, indeed, science is of God.

- In recent years, creationism took on a new currency as the spiritual progenitor of “Intelligent Design: (ID), a scientifically worded attempt to show blanks in evolutionary narrative are more meaningful than its very convincing totality. The Federal Judge declared Intelligent Design as pseudoscience unsuitable for teaching in Pennsylvania schools during December 2005.

I have been mentioning for the last 20 years that for authentic understanding of Sikhism it is necessary to interpret Gurbani as is, keeping the mind off from old prevailing myths and keeping in view the present knowledge of science and use of logic. But many stalwart Sikh theologians and scholars failed to understand my views and refused to publish my articles in the proceedings of their conferences. It was until 1992 when S Saran Singh, the Editor of *The Sikh Review* accepted my first article for publication [2]. The second article [3] was published in the following year in 1993 in response to the criticism of my first article by Col. Mehar Singh Grewal in *The Sikh Review* of July 1993 with editorial remarks by S. Saran Singh as follow: “... *Few would question Dr Chahal’s sincerity in exploring Gurbani with the tools of science. His argument is appealing, his logic compelling. But in case of Col. Mehar Singh Grewal, as we knew him, neither reproach nor anger is justified, much less the imputation of Brahministic or other obscurantist tendencies...*”

It is not difficult to understand that if religion is of God then Science is also of God. Therefore, both cannot clash with each other if religion is taught in its real perspective [2-9]. I do not know about other religions but I can vouch for that Sikhism, based on Nanakian

Philosophy [5], has no clash with science. In fact Sikhism is a religion of logic and science.

It can be easily asserted that the following arguments about God by both the scientists are very similar to that proclaimed by Guru Nanak (1469-1539).

Richard Dawkins says: “Close reading of the physical evidence should lead towards atheism.” And Francis Collins says: “Material signs point to God but that God also exists out side of space and time.”

Let us first discuss the following statement of Dawkins, the protagonist of atheism:

“My mind is open to the most wonderful range of future possibilities, which I cannot even dream about, nor can you, nor can anybody else. What I am skeptical about is the idea that whatever wonderful revelation does come in the science of the future, it will turn out to be one of the particular historical religions that people happen to have dreamed up. When we started out and we were talking about the origins of the universe and the physical constants, I provided what I thought were cogent arguments against a supernatural intelligent designer. But it does seem to me to be a worthy idea. Refutable – but nevertheless grand and big enough to be worthy of respect. I don’t see the Olympian gods or Jesus coming down and dying on the cross as worthy of that grandeur. They strike me as parochial. If there is God, it’s going to be a whole lot bigger and whole lot more incomprehensible than anything that any theologian of any religion has ever proposed.”

I appreciate Dawkins’ comprehension about God: “I don’t see the Olympian gods or Jesus coming down and dying on the cross as worthy of that grandeur.”, since that is very cogent to that proclaimed by Guru Nanak in the Commencing Verse of the Aad Guru Granth Sahib (AGGS) [1] that God is ਅਜੂਨੀ (Ajuni) - does not take birth or die. And ਜਨਮਿ ਮਰਣਿ ਨਹੀ ਧੰਧਾ ਧੈਰੁ ॥ AGGS, M 1, p 931 [1 & 8]. (Birth and death are not the God’s attributes; God is free from birth and death cycle.). It means exactly the same when Einstein proclaimed that: “God does not come to this earth in anthropomorphic form.” [8].

Again I feel proud to compare Dawkins’ other statement, “If there is God, it’s going to be a whole lot bigger and whole lot more incomprehensible than anything that any theologian of any religion has ever proposed.” with that of Guru Nanak, who had declared it consistently in his Bani that God is whole lot bigger and whole lot incomprehensible more than 500 years before Dawkins could realize these attributes of God. A typical verse of Guru Nanak in this respect is cited as follows:

koit kotI myrI Awrjw, pvxu pIAxu AipAwau]
 cMdu sUrju duie guPY n dyKw, supnY saux n Qwau]
 BI qyrI kImiq nw pvY hau kyvfu AwKw nwau]1]
 swcw inrMkwru inj Qwie]
 suix suix AwKxu AwKxw jy BwvY kry qmwie]1]
 rhwau]
 kusw ktIAw vwr vwr, pIsix pIsiw pwie]
 AgI syqI jwlIAw, Bsm syqI ril jwau]
 BI qyrI kImiq nw pvY, hau kyvfu AwKw nwau]2]
 pMKI hoie kY jy Bvw sY AsmwnI jwau]
 ndrI iksY n AwvaU nw ikCu pIAw n Kwau]
 BI qyrI kImiq nw pvY hau kyvfu AwKw nwau]3]
 nwnk kwgd lK mxw piV piV kIcY Bwau]
 msU qoit n AwveI lyKix pauXu clwau]
 BI qyrI kImiq nw pvY hau kyvfu AwKw nwayu]4]2]
 Aggs, m 1, p-14-15.

If my life is millions of millions years and air is my food and drink; If by living in cave and not seeing moon or sun to know whether it is day or night and never slept even in dream; still I cannot evaluate that how great you are and how could I say (repeat) God’s Name?

God is Formless and is of Its own. People hear again and again to repeat God’s name, if God is pleased with this system I will instill so in our minds. Pause.

If I slash my body and cut it into pieces and then put it into the grinding mill to grind it into paste (flour); if I burn myself into ashes even then I could not evaluate your greatness and could not figure out how to say (repeat) your name. 2.

If I were a bird soaring (flying) through hundreds of skies without drinking and eating and go far away to become invisible; even then I could not evaluate your greatness and how to say (repeat) your name. 3.

Finally Guru Nanak says:

If I read and try to comprehend already written about God’s greatness on hundreds of kilograms of paper; if I have thousands of kilograms of paper to write with infinite quantity of ink and my pen writes at the speed of wind even then I would not be able to write your greatness and would not know how to say (repeat) God’s Name. 4. 2.

AGGS, M 1, p 14-15 [1].

Handler [10] reports his comments on ‘God vs. Science’ on CBC on October 28, 2006 that God recently made the cover of Time Magazine once again, proving He is not yet dead. God wouldn’t be God if He couldn’t make it into the headlines, once in a while. Handler [10] while commenting he ridiculed Dr Hawkins but praised Dr Collins. Besides he supported Collins with following quotes about God:

“The British physicist and Christian Sir John Houghton told interviewer Bill Meyers something very similar on PBS. For the longest time we saw the universe as having only three dimensions. Then Einstein added time, a

fourth, actually called space-time. And God is the fifth dimension, in Houghton's view, though the more esoteric string theorists are starting to come up with a bunch more.”

Here again I would like to quote Guru Nanak, who defined God as ‘ਅਕਾਲ ਮੂਰਤਿ (Akal Murat) in the Commencing Verse (commonly called as Mool Mantra) of the Aad Guru Granth Sahib (AGGS). Here the word ‘Murat’ is a metaphor for the body since there is no body or form for God. Therefore, the ‘Akal’ is that metaphoric body on which there is no effect of time and it does not need any space to exist [8]. Although it is true that universe has the ‘Fourth Dimension’ but according to Guru Nanak God is beyond this so-called ‘Fourth Dimension’ since God does not need space-time to exist.

Now let us discuss how does Guru Nanak describes God’s existence according to the space-time concept?

ਆਦਿ ਸਚੁ ਜੁਗਾਦਿ ਸਚੁ ॥

ਹੈ ਭੀ ਸਚੁ ਨਾਨਕ ਹੋਸੀ ਭੀ ਸਚੁ ॥

AGGS, Jap, p 1.

It is important to understand the meanings of ਸਚੁ (sach). ਸਚੁ (sach) and ਸਤਿ (sat) are commonly used in the Gurbani and both means ‘true’ or ‘truth’ and/or ‘exist’ or ‘existence’ depending on the context these words have been used. Here the word ‘sach’ means ‘exists’. Prof Sahib Singh [13] and Giani Harbans Singh [12] also interpreted ‘sach’ as ‘exists’. This ‘sach’ represents that Entity, which has no descriptive/specific name, but exists. Therefore, it is interpreted as follows [8]:

Was in existence² before the beginning of the time and space¹;

Was in existence in the past³; Is in existence in the present⁴;

Will remain in existence forever⁵ (in the future)."

AGGS, Jap, p 1.

Since according to Guru Nanak God was in existence before the beginning of time and space (before the Big Bang) and was in existence in the past time, and is in existence in the present and will remain in existence forever in the future, therefore, God is beyond the ‘Fourth Dimension’ of Einstein and even the so-called ‘Fifth Dimension’ of Houghton. God is beyond any dimension as is further explained according to Nanakian Philosophy as follow:

It is well established theory that this universe was in highly concentrated form of energy in a very minute size almost to ‘Nothingness’ when it exploded (Big Bang) and everything was created thereafter as we see the universe today. About this Guru Nanak says: ਕੀਤਾ ਪਸਾਉ ਏਕੋ

ਕਵਾਉ ॥ ਤਿਸ ਤੇ ਹੋਏ ਲਖ ਦਰੀਆਉ ॥ *The universe exploded with one sound² (big bang) and started to expand¹, hereafter appeared many things³. AGGS, Jap 16, p 3. On the other hand it is also established theory that this universe may go back into the ‘Black Hole’ – again into the highly concentrated form of energy as ‘Nothingness’ ready to explode again. Here again according to Nanakian Philosophy Guru Arjan says: ਕਈ ਬਾਰ ਪਸਰਿਉ ਪਾਸਾਰ ॥ ਸਦਾ ਸਦਾ ਇਕੁ ਏਕੰਕਾਰ ॥ *The universe came into existence many times but the God remained One and Only all the times. AGGS, M 5, p 276. This ‘Nothingness’ is the ਸੁੰਨ (Sunn) according to Guru Nanak and God existed in this ‘Sunn’ before Big Bang [9]: ਆਦਿ ਕਉ ਬਿਸਮਾਦੁ ਬੀਚਾਰੁ ਕਈਅਲੇ ਸੁੰਨ ਨਿਰੰਤਰਿ ਵਾਸੁ ਲੀਆ ॥**

AGGS, M 1, p 940.

It can be contemplated³ only in wonder² that before the beginning of time and space¹ (before Big Bang) the Oneness⁵ (God) existed⁶ in the Sunn⁴ (Nothingness) – the highly concentrated form of energy.

Therefore, the Akal (God) of Guru Nanak does not come into any anthropomorphic form; does not need space-time to exist since It exists everywhere and is beyond the concept of space-time.

“God is dead or disappeared because of the image of him that the church used for many, many ages,” says Dominican Theologian Edward Schillebeeckx [15]. At its worst, the image that the church gave of God was that of a wonder worker who explained the world’s mysteries and seemed to have somewhat more interest in punishing men than rewarding them. Life was a vale of tears, said the church; men were urged to shun the pleasure of life if they would serve God, and to avoid any false step or suffer everlasting punishment in hell. It did little to establish the credibility of this "God" that medieval theologians categorized his qualities as confidently as they spelled out different kinds of sin, and that churchmen spoke about him as if they had just finished having lunch with him [15].

Almost the same above philosophy about God is being taught in Gurdwaras, on TVs, in Media and in Sikh literature. Most of the Sikh theologians have failed to represent God [5, 8] in its real perspective because of the reasons discussed later under ‘OBSERVATIONS AND SUGGESTIONS’. It is evident that unless God is represented according to Nanakian Philosophy it will remain either dead for many atheists or revengeful for the whole lot of the faithful.

Although according to Guru Nanak God is *Inaccessible, Unfathomable, Invisible and Infinite* (Agm, Agocr, AIK,

Apwrw) but still we pray to God *to takes care of us - all living beings* (icMqw krhu hmwrI) (AGGS, M 1, p 795). How does God take care of us? Guru Nanak further explains that God is ਨਿਰਵੈਰ (without enmity) and is ਗੁਰ (Enlightener – Who has given us enough intellect to think) and is ਪ੍ਰਸਾਦਿ (Bounteous – has provided us every thing in nature) [8]. Therefore, according to Nanakian Philosophy “*Although God is Inaccessible, Unfathomable, Invisible and Infinite, still God is without enmity and has provided us enough intellect to think how to use the bounties provided in nature.*”

CONCLUSIONS

- Had the Sikh theologians and the custodians of Sikhism (Shiromani Gurdwara Parbandhak Committee, Amritsar) represented God in Its real perspective as explained above then Dr Richard Dawkins, the atheist scientist, and Dr Francis Collins, the Christian Geneticist, would have quoted God according to the philosophy of Guru Nanak during this debate, ‘God vs Science’.
- The irony is that Sikhism is still being represented as a mythical and ritualistic religion even during this Current Science Age.

OBSERVATIONS AND SUGGESTIONS

- My critical analysis of Bani of Guru Nanak, which is incorporated in the AGGS, indicates that it is scientific and logical provided it is interpreted by applying science and logic [2-9].
- The irony is that misinterpretation of Bani of Guru Nanak started right after him. It was first ‘Udasi School of Thought’ started by Baba Sri Chand. It is not known at what stage misinterpretation of Bani of Guru Nanak was started by Udasis, however, it became apparent only on reading the interpretation of **Jap** (1825) by Udasi Anad Ghan that was found to be in the tune of Vedas and Puranas. On the other hand *Vaaran* of Bhai Gurdas became very important after the compilation of Granth by Guru Arjan in 1604. Although a lot of Vedantic philosophy has been introduced in explaining Gurbani, however, many stalwart Sikh theologians accept his *Vaaran* as the ‘Key’ to understand Gurbani. Thereafter, misinterpretations of Gurbani under the influence of Vedantic philosophy continued by the ‘Meharbaan School of Thought’ (1650-1654). After Guru Gobind Singh (1708) further amalgamation of Vedantic philosophy and mythology into Gurbani was carried on by ‘Nirmala School of Thought’ especially by Bhai Santokh Singh, Pandit Gulab Singh, Pandit Ishar Singh, Pandit Tara Singh, and Giani Gian Singh. The Nirmalas have emphasized strongly that that Vedas are the ultimate truth and Gurbani explains the Vedantic philosophy in *Desi* (rural)

language and Sanskrit is the language of *Devtas* (gods); Gurbani does not contradict Vedantic philosophy; *Tirth* and *Vrat* (pilgrimages and fasting) are not condemned; idol worship is not contradicted; *Naam Japna* is accepted; and Brahma, Atma, Karama, transmigration and *mukti* systems are accepted. Later Bhai Badan Singh prepared a *Teeka* (annotation) of Guru Granth with some improvement but still interpretation was fully loaded with Vedantic philosophy and mythology. This *teeka* became very common and important piece of work and it is commonly called as ‘*Farid Kote Wala Teeka*’. Moreover, the contemporary scholars are still translating the AGGS on the lines of *Farid Kote Wala Teeka* with little improvement [8, 11, 14].

- To bring out the philosophy of Guru Nanak in its real perspective it is absolutely necessary to interpret Bani of Guru Nanak by applying science and logic for further studies by the philosophers, theologians and rest of the humanity of the Current Science Age.
- I hope some steps toward this aspect of representation of philosophy embodied in the Gurbani incorporated in the AGGS will be taken up by the Shiromani Parbandhak Committee, Amritsar before the celebration of the Tercentenary of the ‘Reiteration of Guru-ship onto the Granth - Sikh Scriptures) in 2008.
- In this respect I would like to quote Albert Einstein, the Nobel Laureate as follows:

"After religious teachers accomplish the refining process indicated, they will surely recognize with joy that true religion has been ennobled and made more profound by scientific knowledge." Albert Einstein

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scripture. For a scientist who believes in God and in the inerrancy of the scriptures of his faith it becomes a matter of reinterpretation of the scriptural verses to ‘fit’ into the current scientific knowledge or thought. Equally, a scientist who is an atheist will interpret the verses to prove that the scripture is in error. The non-scientist believer will take another route: explain the verses in some abstract, metaphysical terms and expect them to be believed, often using phrases akin to ‘God works in mysterious ways’.

Does all this mean that scientific explanations for scriptural verses should be abandoned, or that spiritual matters are outside the realm of scientific studies? No; not at all. If a scientific interpretation of scriptural verses is reasonably acceptable, and does not require too convoluted an argument, it cannot hurt. Science (a scientist) is not averse to accepting spiritual ‘truths’; it simply demands evidence. That evidence, unfortunately, is currently lacking (and religion / scripture remains faith-based), but should evidence for it (for example the ‘soul’) become available in the future science will have no problem embracing it. Therein lies the value of the calls by scientist-theologians (like Prof. Devinder Singh Chahal) “...that the theologians and scientists should get together to study Gurbani and try to represent the truth embodied in the Gurbani...” [2]

CONCLUSION / OPINION

For my part, I do not think that science and scripture (religion) will ever be reconciled. Any accurate reference to scientific fact in scripture is purely incidental. Attempts at fitting in scientific facts into revelation, via reinterpretations, even if plausible, cannot have been intended as such when the scriptural verse was first uttered or written.

Scientists with an interest in theology, knowing that science has made it possible for natural phenomena to be directly and immediately comprehensible to our way of thought, are tempted to merge (or at least cause to converge) their scientific facts into the metaphysical verses of the scriptures of their religion, and in the attempt run the risk of error and/or objections from the faithful. Niels Bohr, the famous physicist, was widely acclaimed for his ‘Principle of Complementarity’ (which together with Werner Heisenberger’s ‘Uncertainty Principle’ was to lead to the “Copenhagen interpretation” of quantum mechanics). Later in life Bohr thought that his complementarity principle applied to the problem of determining the material structure of living organism. He was completely wrong (and would be so proven). Heinz Pagels, another famous physicist, cites this example to show “...that even if you are as smart as Bohr, extending principles of science beyond their usual domain of application may lead to spurious

conclusions.” [4] This little story is just to remind ourselves to exercise caution when introducing science into interpretation of scripture.

Must, then, scientists abandon religion, or must religious men abandon science? Mercifully neither is either done or demanded. Many scientists are religiously devout, and all religious people use science with nary a thought about it, and so do not call for abandonment of either science or religion. Even though the two are, in my opinion, irreconcilable and will ever remain, many successfully manage to go about their lives keeping the two in separate “compartments” of their intellect, and that, perhaps, is the way it has to be.

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