

Swami Vivekananda as a Scientific Thinker

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Quest for Knowledge

One of the most popular Upanishads of the Indian scriptural literature is the Kathopanishad of the Yajurveda. This was the favorite Upanishad of Swami Vivekananda, mainly because of the character of the young boy Nachiketas. Swamiji used to hold Nachiketas up as a role model for our youth. The young lad was a brave, fearless seeker after Truth, who was prepared to undergo any kind of difficulty in his quest.

This Upanishad is basically a dialogue between Nachiketas and Yama, the Lord of Death. Yama has been depicted in our mythological literature as a terrifying figure, of whom the whole humanity and even the gods are afraid! But, he deserves to be considered, in fact, as the Lord Chief Justice of the Universal Court, dispensing justice to all evenly. In this Upanishad he is the ideal Guru.

There is an interesting passage (2.1.1) in this Upanishad. Yama tells Nachiketas that when the Creator created creatures, He endowed them with the organs of knowledge and the organs of action, all of them directed outwards. Hence it is that all creatures, including human beings, can observe only the external world, and not the inner world of the mind, the intelligence and the self. Once in a way comes along a wise person, who shuts all

doors pointing outwards, and turns the gaze inwards to discover the Self within.

Science and Spirituality

The above statement is of great significance to the growth of human cultures down the ages. Observation of the external world was the origin of Science, which is nothing but collating of observable data and drawing conclusions therefrom. This is the bread-and-butter of human existence, without which human life would be almost indistinguishable from that of animals and plants. But, this alone does not satisfy human beings. A human being is basically a thinking being, who lives not only in a physical world, but has also his own thought world. Just as he faces a lot of problems in the physical world, whose solution he seeks in Science, he also encounters problems in the mental world for which he cannot find answers in Science. He needs a separate method for their solution, which he finds in the inner world itself. This is the field of Spirituality.

It is thus obvious that Science and Spirituality are both essential for human beings to understand Existence. On the face of it these two appear poles apart, and do not appear to have anything in common. But, this is only apparent. A deeper study of



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either reveals that Science appears to need the support of Spirituality in understanding Nature, especially at the level of sub-atomic phenomena. This has been realized recently by many top-ranking scientists in fields like Quantum Physics and Theories of Relativity.

Spirituality, as a method of human quest of Truth, is the contribution of the Vedic Rishis. They boldly investigated their own Inner Self, and brought to the surface several hidden truths about the human psyche. These formed the backbone of the Vedas and Upanishads. They were truly the Scientists of the Spirit. But, just as a man in the street cannot understand or appreciate discoveries of Science, so also he could not understand the deep scientific thinking behind the revelations of these Rishis, and tried to dilute and adapt them to his intellectual level. Just as Science was sidetracked into mass production of destructive weapons, Spirituality also was corrupted into superstitions, priest craft and similar misuses.

It is only in recent times that practitioners of both Science and Spirituality have made serious attempts to restore their purity, and have shown that both of them need each other for their fulfillment. The foremost among them are Sri Ramakrishna and his star disciple, Swami Vivekananda.

Aspects of Scientific Temper

Can we consider spiritual practitioners, like the Vedic sages, Sri Ramakrishna and Swami Vivekananda, as scientific thinkers? After all they were not students or practitioners of Science. But all of them possessed that most important quality needed by scientists viz., an inquisitive mind, the courage to see truth face to face and not to accept anything unless it has been subjected to a critical test. In this sense, all of them

possessed what is called 'Scientific Temper'. As a matter of fact, Swami Vivekananda was even of the opinion that all religious beliefs should be subjected to the kind of rigorous tests to which all scientific hypotheses are subjected. He felt that any religious belief that failed these tests should be discarded, the earlier the better. This is what he practiced throughout his life, right from childhood. He had started demonstrating this characteristic right from his boyhood.

One can quote an instance from his childhood to illustrate this. He was a boy full of energy, which he would try to let out by engaging in strenuous physical activities. He used to swing from the branches of a huge tree in the compound of a neighbour. An old man living in that house used to admonish Narendra to stop this activity to avoid getting hurt. Nothing availed. One day, the old man tried to frighten Narendra by telling him that there is a ghost in the tree which would catch young boys swinging from its branches. Narendra did not desist. When one of his friends reminded him of the warning of the old man, the boy replied, 'Had there been a ghost on the tree, it would have caught me long ago! I do not believe in such superstitions.' Coming from a young boy, it showed a remarkable logical approach to the situation.

Narendra and Sri Ramakrishna

When Narendra later met Sri Ramakrishna, this was one of the qualities the latter appreciated in the former. Sri Ramakrishna himself was a person of that type, as can be witnessed from a study of his life. He encouraged Narendra and told him—'Do not accept anything as true just because somebody says so. Test everything and only after verifying that it is correct, accept it.' Narendra remembered this advice throughout his life.

Apart from Sri Ramakrishna, there was another person who had become aware of Narendra's potential. This was Dr. Mahendralal Sarkar. Dr. Sarkar was a medical practitioner, belonging to the very first batch of medical graduates of the Calcutta University. He later went to Germany and learnt Homeopathy. When he returned to Calcutta, he switched his practice from Allopathy to Homeopathy. He happened to be the family physician of Rani Rashmani and her family. He was engaged by the householder devotees of Sri Ramakrishna to treat his throat cancer, in Shyampukur Garden House as well as in Cossipore Garden House. He came into close contact with Narendra during this time and had several dialogues with him. These can be found in the pages of the *Gospel of Sri Ramakrishna*.

Dr. Mahendralal Sarkar, though not an active practitioner of Science, had a scientific bent of mind. Since Narendra displayed the same characteristic, he came to the notice of Dr. Sarkar, who almost came to regard him as his own son. Dr. Sarkar was also happy to notice that unlike many religious leaders Sri Ramakrishna encouraged among his disciples the quality of independent thinking. Swami Vivekananda was heard several times telling his brother monks and brahmacharis that just as their Guru was original, they should also be original.

An interesting fact about Dr. Sarkar is that he later went on to found an institution in Calcutta called the Indian Association for the Cultivation of Science. It was in this Institution that Dr. C.V. Raman was a researcher in Physics, and did his famous experiments on the Scattering of Light, which earned him the Nobel Prize. This Institution still exists, and is being maintained by the Department of Science and Technology, Government of India, New Delhi.

There was only one negative influence of this kind of scientific thinking on the mind of Narendra. From being a believer in God, he gradually became an agnostic. His deep study of Western Philosophy, especially of the agnostic and atheistic schools, also influenced his mind to some extent. But, unlike many people, he did not give up his quest for Truth. Had he wanted it, he could have become a great advocate for Atheism, and with his extraordinary brilliance he would have become a world-mover. If this did not happen, and if he became a world-mover in the field of Spirituality, it was because he would not accept on face value anything. He had to investigate if his agnosticism or atheism had firm foundations. This set him off on his real quest for the Divine. Till then, until he became an agnostic, he had taken for granted the existence of God. But, the time had come now to prove to himself logically and unequivocally the existence or otherwise of God.



Quest for God

Thus started his quest, which ultimately brought him to Sri Ramakrishna. Even though Narendra had met several important persons earlier and had asked them about the existence of God and whether they had seen God, he had received only vague replies. It was only Sri Ramakrishna from whom he received an unequivocal answer. It was his assertion that he had seen God and that too more clearly than he was seeing Narendra himself that took the young man aback. This happened during their very first meeting. But, the rational mind of Narendra refused to accept this immediately. It took a couple of more meetings before Narendra finally came to accept it. This was appreciated very much by the equally rational Sri Ramakrishna, who used to advise his disciples, 'Test your guru the way a money changer tests a gold coin.' Later, Swami Vivekananda was to discover the same rational spirit in his famous disciple, Sister Nivedita.

Sri Ramakrishna had a host of disciples, householders as well as college students. Most of them had been bowled over by the personality of Thakur [Sri Ramakrishna] and had accepted him wholeheartedly as their teacher. Then, why did Narendra hesitate to give Thakur his heart? He did not want to go by what others had said about Thakur. He wanted to ensure that Sri Ramakrishna was really what he was claimed to be. He got this assurance during their third meeting. This made Narendra say later, 'I am the slave of the slave of Sri Ramakrishna.' Such an admission coming from a highly rational person endowed with a true scientific temper is indeed remarkable.

Reference has been made earlier to Narendra's interaction with Dr. Mahendralal Sarkar in Cossipore Garden House in north

Kolkata. Two incidents happened during this period which highlight Narendra's logical and scientific mind. Some of the disciples of Thakur spread a rumour that the throat cancer he was supposed to have developed is only a pretext to bring together all his disciples, and once that was achieved the cancer would disappear. Narendra vehemently opposed this. He had studied several medical books in his college days and was convinced that Thakur was really suffering from throat cancer, as borne out by several diagnostic tests. He felt that more attention should be devoted to Thakur's service than on such wild unsupported speculations.

Another rumour was spread around this time that the cancer contracted by Thakur was contagious. This frightened his disciples so much that service became slack. Narendra tried to counteract this as much as possible. He was aware from his studies that this type of cancer was not contagious. One day he was sitting by the bedside of Thakur with some of his companions, arguing on these points. He saw a cup of porridge by the side of the bed. Thakur had drunk part of it. There was still some mucus sticking to the side of the cup. Narendra lifted the cup and drank the rest and told his companions 'If the cancer is contagious, I should also get it, since I have consumed the contaminated porridge.' This scotched the rumour once for all. The disciples could then devote their attention to the service of Thakur without such fears.

Swamiji and The West

It was this spirit of rational thinking that Narendra carried with him throughout his life. He was thus ideally suited to carry the message of his Master to the West. No wonder the men and women of the West took him to their hearts. The West was until then

used to religion as preached in the sermons of churches, especially the pulpit and table thumping variety, frightening the churchgoers with fire and brimstone.

But, in the World's Parliament of Religions, the congregation witnessed religion being taught in a rational and logical manner. This was seen especially in the speech of Swamiji, 'A Paper on Hinduism'. There is not even a whiff of dogma anywhere in this speech. All conclusions follow in a logical sequence from basic principles. A perusal of any scientific publication would indicate that Swamiji followed the same procedure in his presentation. It was the practice for a long time to end all research papers with the phrase '*Quod erat demonstrandum*' ('what had to be proved'), often shortened to Q.E.D. Any lecture of Swamiji on Jnana Yoga could end with this phrase! Is it any wonder that great scientists of that era like Von Helmholtz, Kelvin and Nikola Tesla considered Swamiji as one of themselves?

Religion and Science

In this age of Nuclear Science and Space Technology, humanity has literally abandoned religious dogma. Unfortunately, it has also thrown away the baby with the bathwater! But, fortunately we have people like Swami Vivekananda, who have demonstrated that even religion can be approached and understood on scientific lines. It is indeed remarkable that these days many well-known scientists have drawn inspiration from Vedanta or Spirituality, like Heisenberg,

Schrödinger, Bohm, Oppenheimer (father of the Atomic Bomb), Chandrasekhar (the Cosmologist who considered the Gita closest to Modern Astrophysics), and several others. Recent developments like the Dual Nature of Subatomic particles, the Einstein-Podolsky-Rosen paradox and its explanation and others have brought Science and Spirituality closer together. This was after all Swami Vivekananda's dream, which appears to be well on its way to fulfillment.

Conclusion

Swami Vivekananda is perhaps the first modern Eastern spiritual leader to have gone to the West to preach Spirituality, especially Vedanta. In a talk given to the student community of Indian Institute of Technology, Madras, Swami Chinmayananda said,

Swami Vivekananda laid such a solid foundation for Vedanta in the West through his logical, rational and scientific explanations that the path was smoothed for many other preachers to follow.

Swamiji firmly planted Yoga in the minds of the westerners, as witnessed by a large number of them coming to India to learn Yoga and the large number of Yoga Centers being opened there. Today, at the time the world is celebrating the 150th birth anniversary of Swamiji, it is our duty to start looking at Religion and Spirituality from the same scientific view-point as demonstrated by Swami Vivekananda. This would be the best tribute we can pay to the memory of this great Son of India. □

Science and religion are both attempts to help us out of the bondage; only religion is the more ancient, and we have the superstition that it is the more holy. In a way it is, because it makes morality a vital point, and science does not.

—Swami Vivekananda, CW, 7:103