

THE RELIGION OF SCIENCE

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It is rather curious of how a permutation of words can alter meaning or suggest new perspectives. We have, as students of Vedanta, heard the expression “science of religion,” and we understand, to some extent, what that means. Namely, the science of religion refers to a scientific approach to religion. That is, the opposite of a traditional, dogmatic or sectarian approach to religion, which is commonplace today, and was commonplace in the past. But what does the expression “religion of science” refer to? Does it mean that science can be thought of as a religion? Or is there some deeper underlying principle that is being referred to? And if we are to view science as a religion, does this view also run the risk of becoming dogmatic or sectarian? Is there a “priestcraft” of science and if so, how can we prevent ourselves from becoming engulfed by it? These are some of the questions I would like to explore in this lecture.

Whether we want to discuss the “science of religion” or the “religion of science,” first and foremost: we must be clear about the meaning of these two words: ‘science’ and ‘religion’. The word ‘religion’ is derived from the latin root ‘religio’ which means ‘that which binds us together.’ The world would become a more peaceful place if it understood this simple thing. “Religion” is “that which binds us back together.”

If ‘religion’ means this, then what does ‘science’ mean? The word ‘science’ is derived from the latin word ‘scire’ which means ‘to know.’ Recall that the word ‘vedanta’ is derived from the Sanskrit word ‘vid’ which also means ‘to know.’ Thus, ‘science’ and ‘vedanta’ have the same etymological roots. However, upon closer examination. the origin of ‘science’ can be traced to the latin word ‘scindere’ which means ‘to cut.’

This is an exciting find. If the word ‘religion’ can be traced to the word meaning ‘to join’, ‘science’ can be traced back to the word meaning ‘to cut.’ This would seem to imply that ‘religion’ and ‘science’ are at opposite etymological ends. However, closer reflection shows a deeper meaning. Science seeks to understand by ‘cutting’, by ‘analysing’, by seeking the constituent parts. The method of science is ‘analysis’ and the method of religion is ‘synthesis.’ Both of these methods are needed for a total understanding.

Einstein, referring to the historical conflict between science and religion said, “science may claim that it does not need religion; religion may claim it does not need science. But the human being needs both to comprehend this world and live properly in peace.”

From the standpoint of analysis and synthesis, we can understand what this means: the human race needs both, science and religion. Another well-known quotation of Einstein in this context is “Science without religion is blind and religion without science is lame.”

Why would ‘science without religion’ be blind? The power of science, as we have said, is derived from its analytical process. By understanding one thing minutely, it gains penetrative power. But then, this analysis must be fused with other departments of knowledge. It must be related to human well-being. If science unleashes unbridled power, that energy

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may lead us to destruction, if we do not know how to use it properly. That awareness, that impulse to use things properly, comes from religion, comes from the larger vision of human welfare. This is why Einstein said, ‘science without religion is blind.’

At no time is the danger great as it is today in this age of specialization. Science has subdivided itself into a million parts. Each one is going along in its own happy way without having any knowledge of what the other is doing, or what it all means, or what the consequences will be for human society. The Indian philosopher, Sarvepalli Radhakrishnan warned us of this: “This is the age of specialization,” he said, “where each one of us knows more and more about less and less.”

If science cannot lift itself from its department of knowledge and see the larger picture, the unified view, the moral and spiritual dimensions that religion points to, it becomes blind.

Einstein also said, “religion without science is lame.” What does this mean? The march of ideas comes from critical thinking which is the main tool of science. Thus, human society cannot advance if it does not apply the methods of science to problems facing it. Since the basic problem addressed by religion is the one of interpersonal relationships, it is to these questions that the scientific temper must be applied. If we don’t do it, we get stuck in the quagmire of dogma, of opinion, of tradition, and never march forward. This is why religion without science is lame.

But now that we have understood the root meanings of the words ‘religion’ and ‘science’, how can it be that science can be thought of as religion? If we understand ‘religion’ as ‘that which unites’, we can ask union with what? The ultimate goal of every individual is to achieve union within, union without, and union with the ultimate ground.

We recognize four faculties of the human mind: thinking, feeling, willing and restraining. At present, we think in one way, feel in another, act in a third, and restrain in a fourth. The discord within manifests in the external world as conflict between individuals. This is the fundamental problem confronting the human being. The four-fold yoga of Vedanta says that all of the four faculties can be sharpened, purified and given a higher direction for the purpose of achieving the union within.

But what does this have to do with science? A basic prerequisite for the study of science is what has often been called the scientific mood. In his book, ‘An Introduction to Science,’ J. Arthur Thompson quotes Francis Bacon, who said centuries earlier, “For myself I found that I was fitted for nothing so well as for the study of truth; as having a mind nimble, and versatile enough to catch the resemblance of things and at the same time steady enough to fix and distinguish the subtler differences; as being gifted by nature with desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to reconsider, carefulness to dispose, and set in order and as being a man that neither is attached to what is new nor admires what is old, and that rejects every kind of imposture. So I thought my nature had a kind of familiarity and relationship with truth.”

These words resonate the qualifications of the jnani, the seeker of knowledge in the Vedanta tradition. In his essay, “Steps to Realisation,” Vivekananda outlines the prerequisites for the seeker of Truth. “First comes sama and dama, which means keeping the

organs in their own centers without allowing them to stray out ... to restrain the mind from wandering outward or inward ... is what is meant.” This corresponds to Bacon’s steadiness of mind. Next on Vivekananda’s list is “uparati” which means “not thinking of things of the senses.” “Most of our time is spent in thinking about sense objects, things which we have seen or we have heard, which we shall see or shall hear, things we have eaten or are eating, or shall eat, places where we have lived and so on. We think of them or talk of them most of our time. One who wishes to be a jnani (or a seeker of knowledge) must give up this habit.”

This quality corresponds to Bacon’s non-attachment to what is new or old and “the rejection of every kind of imposture.” Next on Vivekananda’s list comes “titiksha” or “forbearance.” This is not on Bacon’s list. Why not? Because Bacon is thinking implicitly of a dualism where Nature is before him and his mind is the instrument of knowledge. The jnani, on the other hand, sees himself as trying to understand the very essence of life. He strives to gain a unity within as well as a unity without. Thus, he is also alert not only to nature outside, but nature within as well as the multitude of beings with whom he interacts.

Here we come to a fundamental point of difference between science and religion. Through its analytical process, science has unleashed tremendous powers and placed them in the hands of human beings, without giving them the wisdom to use it properly. This is a point I want to return to reconsider.

The next qualification in Vivekananda’s list is sraddha or faith. “The ideal of faith in ourselves, ” he writes, “is of the greatest help to us. Throughout the history of mankind, if any motive power has been more potent than another in the lives of all great men and women, it is that of faith in themselves. Born with the consciousness that they were to be great, they became great.”

A scientist must have a two-fold faith. First, he must believe that the universe is orderly, that there are patterns, laws and principles hidden behind the manifold phenomena. Second, he must believe that he can find these principles. If he lets traditional thinking overwhelm him, he may never be able to make a discovery. Without faith, he can never discover new ideas. Thus, he must have faith to “catch the resemblance of things,” and a faith that he has a “relationship with Truth.”

But in Vivekananda’s vision, this aspect of faith goes deeper and touches the very core of personality. “He is an atheist who does not believe in himself. The old religions said that he was an atheist who did not believe in God. The new religion says that he is an atheist who does not believe in himself. But it is not selfish faith, because Vedanta is the doctrine of oneness. It means faith in all, because you are all. Love for yourselves means love for all, love for everything, for you are all one ... You know but little of that which is within you. For behind you is the ocean of infinite power and blessedness.”

After faith comes samadhana, or constant practice, steadiness of mind to keep it fixed on an idea. This is a prerequisite for all creative endeavour. We cannot jump about from idea to idea randomly. Knowledge can come only if the mind is trained in concentration. This is best understood if we watch a child learning to write. Even to hold the crayon

takes some effort. And even after learning to hold it, only scrawls come out on paper. It is the same with the mind. The mind must be trained in concentration, in holding to an idea so that it may give its secrets to us and that we gain knowledge. When Isaac Newton was asked how he made his discoveries, he said, “by learning to keep my mind fixed on an idea.” This is the essence of concentration.

“Mumukshutva” or the desire to be free is next on Vivekananda’s list. Here is where religion diverges from science. Though etymologically, ‘science’ signifies analysis, the way it is used is in regard to external nature. The aim of science is to understand the external universe. The purpose of religion, it seems to me, is to understand the internal universe of the mind, one’s own inner being and thus find harmony within.

Sometimes, the attitude of science in this regard reminds me of the drunk who was searching for his keys under a streetlamp. When he was asked where he had lost them, he pointed to a dark alleyway. “Then, why are you looking here?” he was asked. “Because the light is better here,” he replied. This is the way of science. Since the realm of the mind seems to be impervious to the methods of science, it chooses to ignore it. There are several dangers in this position.

The foremost danger is that the intellect is cultivated at the expense of feeling for our fellow beings. The discoveries of science have been exploited to dominate and rule over others. Vivekananda writes, “Intellect has been cultured with the result that hundreds of sciences have been discovered, and their effect has been that the few have made slaves of the many. ... Artificial wants have been created and every poor man, whether he has money or not, desires to have those wants satisfied, and when he cannot, he struggles and dies in the struggle. Through the intellect is not the way to solve the problem of misery, but through the heart.”

I believe it was Lao Tsu who said the longest journey that man can undertake is the journey from the head to the heart.

Before I dismiss this aspect of science, I should point out that many confuse technology with science. In fact, we can say that technology is the new god, the new religion and we see all around how countries are rapidly ‘converting’ to this new religion. The fundamental idea to keep in mind is that science and technology are tools. We must have the wisdom to know how to use them.

That wisdom comes from the impulse of true religion. The Beatitudes, the Ten Commandments, the Eight-Fold way of Buddha, the yamas and niyamas of Patanjali, all teach us how to use things properly. And as we have said earlier, until we have learned to look within, integrated our personality, we cannot claim to be religious.

Vivekananda explains, “It is easy to concentrate the mind on external things, the mind naturally goes outwards, but not so in the case of religion ... the object is internal, the mind itself is the object, and it is necessary to study the mind itself - mind studying mind. We know that there is the power of the mind called reflection ... The powers of the mind should be concentrated and turned back upon itself and as the darkest places reveal their secrets before the penetrating rays of the sun, so will this concentrated mind penetrate its own innermost secrets. Thus will we come to ... the real genuine religion.”

One virtue of science is that it teaches the individual the method of concentration. But as Vivekananda points out, the concentration of mind on external things is only preliminary; for the mind must be trained to concentrate on internal things; it must be refined into the art of reflection.

But it must be understood that the instrument of concentration in science has not been randomly applied. It had been joined to reason. Reason is the goddess of worship in science. The knowledge gained from concentration must adhere to the principles of reason. Concentration is the tool to discover the “hidden resemblance of things,” to find the underlying patterns and to formulate universal laws. Science has gained its power through the worship of reason.

And what is reason? It is the conscious, coherent correlation of facts. Thus, we must observe carefully, arrange the facts, and in that arrangement, principles emerge.

Vivekananda elaborates upon this idea in his essay “Reason and Religion.” “The first principle of reasoning,” he says, “is that the particular is explained by the general, the general by the more general, until we come to the universal ... The mind, ... has stored up numerous classes of such generalisations. It is, as it were, full of pigeonholes where all these ideas are grouped together, and whenever we find a new thing the mind immediately tries to find out its type in one of these pigeonholes. If we find it, we put the new thing in there and are satisfied, and we are said to have known the thing. That is what is meant by knowledge, and no more ... Knowledge is more or less classification.”

There is a second principle of reason. This is that the explanation must come from the internal structure of the object. And once this is understood, the observations are verifiable. Believe it or not, in the ages before the scientific revolution, the demon theory was in vogue. To the question: why do things fall? it replies, “because a demon pulled it down.” Why is person sick? Because a demon has power over that person. These explanations are not verifiable, nor do they explain the phenomena from the nature of the thing in itself. The day this demon theory was scrapped, and explanations were sought from the internal nature of the thing in itself, that was the day science was born.

Vivekananda amplifies this idea. “What is meant by science is that the explanation of things are in their own nature, and that no external beings or existences are required to explain what is going on in the universe. The chemist never requires demons, or ghosts, or anything of that sort to explain his phenomena. The physicist never requires any one of these to explain the things he knows, nor does any other scientist. ... Every science wants its explanations from inside, from the very nature of things.”

And it is here that many religions are found wanting. In the same essay, Vivekananda continues his analysis of why religions seem to be crumbling. “There is an ancient theory of a personal deity entirely separate from the universe, which has been held from the very earliest time. The argument in favour of this has been repeated again and again, and how it is necessary to have a God entirely separate from the universe, an extra-cosmic deity, who has created the universe out of his will and is conceived by religion to be its ruler. We find, apart from all these arguments, the Almighty God, painted as the All-Merciful, and at the same time, inequalities remain in the world. These things do not concern the

philosopher at all, but he says the heart of the thing is wrong, it is an explanation from outside, and not inside. And just as it was found insufficient in science, it is insufficient in religion. And religions are falling to pieces because they cannot give a better explanation than that.”

In this modern age of science, a bearded God sitting up in the clouds surveying humanity is insufficient. It does not adhere to the principles of reason outlined above by Vivekananda. The concept of ‘Brahman’ of Vedanta, which means the vast, all-pervasive, underlying principle of all existence fulfils it. It is the substratum of all existence.

Just as the sun illumines and animates all existence on this planet so does the universal consciousness, Brahman, animate all existence. Just as the sun gives us heat and light, Brahman radiates love and consciousness. It is by the light of Brahman that we are able to see, to feel, to think. This is what the ancient sages meant when they discovered this and said that the “kingdom of heaven is within you,” or “Tat tvam asi,” “That thou art.” Our true nature is Pure Awareness. When that light percolates through the mental world, we perceive thoughts and feelings. When it percolates through the physical world, we see objects around us. Thus everywhere is the manifestation of Brahman. “Sarvam khalvidam Brahman”

Science has long preoccupied itself with the observed, with manifestation, with phenomenon, with change. But who is the observer? What is the changeless? What is the substratum of all manifestation? It is this “Universal Awareness,” or the “Brahman” of Vedanta. This concept fulfils the scientific principle of explanation from the nature of the thing in itself. This is the notion of God that we find in the Upanishads.

And how shall we reach that goal? Not by reading books, not by sharpening the intellect, and not even by a scientific study of the external universe. It is by journeying to the heart. As I mentioned earlier, the saying of Lao Tsu that the longest journey is the journey from the head to the heart. “Blessed are the pure in heart for they shall see God.” A pure heart can transcend the intellect, and can see beyond.

In “Steps to Realisation,” Vivekananda writes, “It is not at all necessary to be educated or learned to realize God ... Are you pure? If you are pure, you will reach God. ... If you are not pure, you may know all the sciences of the world, that will not help you at all. You may be buried in all the books you read, but that will not be of much use. It is the heart that reaches the goal. Follow the heart. A pure heart sees beyond the intellect. It becomes inspired; it knows things that reason can never know. Whenever there is a conflict between the pure heart and the intellect, always side with the pure heart, even if you think what your heart is doing is unreasonable. When it is desirous of doing good to others, your brain may tell you that it is not politic to do so, but follow your heart and you will find that you make fewer mistakes than by following your intellect. The pure heart is the best mirror for the reflection of truth.”

How to purify the heart? This is where reflection comes in. We must reflect upon what we do. We must examine the consequences. Mind studying mind, as Vivekananda puts it. We have stored many impressions, some good, some bad. Now we are automatons in the hands of these impressions. We must learn, therefore, to pull ourselves from the

influence of these impressions, and reflect upon them before we act. And in this regard, there is nothing like responsibility to steer us on the right course. We alone are responsible for what we are and what we shall be. Parents can help, teachers can help, society can help, but in the final analysis, the work is our own. We must fix a goal and work steadily towards that goal. Thus, we act responsibly, by having the goal as the guiding light.

Responsibility and reflection: these two go hand in hand. And when we think and act according to these guiding principles, our life, our mind get elevated into the higher dimension of meaning. We must hold onto meaning if we are to understand. We must ask: what does this mean? What does it mean to me? How can I apply it in my daily life? When we put these questions, we are learning to reflect.

In Sanskrit, the word for learning is 'svadhyaya.' 'Adhyaya' is study, 'svadhyaya' is learning; that is, the study must be applied to our life. When we train our mind to take this attitude, our life is transformed into spiritual life. Sri Ramakrishna would say, "As long as I live, so long do I learn." His psychological attitude was that of a child, and the universe was the Divine Mother, and he was always learning from Her. Our attitude determines the rate of our learning to a large extent.

We must distinguish knowledge and wisdom. Knowledge is what is studied. It becomes wisdom only when you reflect upon it, reason it out and ask how you can apply it in your own life. Then only things become meaningful. When we have done this, it is like touching the hem of God. True to the Christian hymn, we find that 'God is Love, God is Wisdom.'

In my view, the greatest discovery of science is the scientific method. And what is this method? It is the very process of learning we spoke about. It is contained in the passage of Francis Bacon quoted earlier. But as I already stated, Bacon's scientific attitude is only a subset of the spiritual attitude of the jnana yogi, as amplified by Vivekananda.

In life, we often jump to conclusions without verifying facts. We are carried away by our impressions. We must put a stop to this. We must learn to reflect. If anything science has taught us, it is this. Observe carefully, arrange the facts, reflect upon them and out of that comes new knowledge and new wisdom.

But today, science has come to be confused with technology. No doubt, this has brought its blessings; but with that, it has brought its curses as well. If before the average human being used only ten percent of his brain, he now uses only five percent. We want the TV to do the thinking for us; we want the newspapers to think for us. Science has given us new forms of energy without telling us how to use them properly and apply it for our spiritual growth, to the common well-being of human society.

Science has distanced itself from ethics for too long. It is time that it takes up this responsibility. With new forms of genetic engineering that have now surpassed from the plant stage to the animal stage, this issue becomes all the more urgent.

Science, ethics and religion: what are these ? Science is the search for unity, but in the external world. What is religion? It is also a search for unity but in the internal world. And ethics? Its goal is responsible behaviour to unify the human community. If we analyse ourselves, our mental peace is disturbed if we have wronged someone; ethics deals with

proper behaviour in the realm of interpersonal relationships. Thus, these three, science, ethics and religion achieve unity within, unity without and unity with the ultimate ground.

It was not more than three centuries ago that chemistry was confused and mingled with alchemy and it took scientists of the 17th century quite a long time to extricate the subject and study it on a scientific basis. The same was the case with astronomy, wedded as it was with astrology. In my view, Vivekananda was struggling to put religion on the same scientific basis and extricate it from myth and superstition.

The reasoning faculty must be applied to the study of ethics, to the study of religion. As we cultivate the reasoning faculty, it develops into inspiration. In the essay, “The Ideal of a Universal Religion,” Vivekananda writes, “It is reason that develops into inspiration and therefore inspiration does not contradict reason.” And he later elaborates, “The field of reason, or conscious working of the mind is narrow and limited. There is a little circle within which human reason must move. It cannot go beyond ... Yet it is beyond this circle of reason that there lies all that humanity holds dear. ... All our ethical theories, all our moral attitudes, all that is good and great in human nature, have been moulded by answers that have come beyond this circle.”

To summarise, the “religion” of science has done much to unify our vision of the material universe, but little to unify the internal nature of the human being or the human community. What it has given is the gift of the scientific method, a boon awarded us by the Goddess of Reason. The scientific method, when applied in the domain of ethics and the domain of religion, we will get a universal religion, free of superstition and dogma. This is the gateway to higher realization, to a higher evolution of the human race. May humanity hasten towards this goal.